

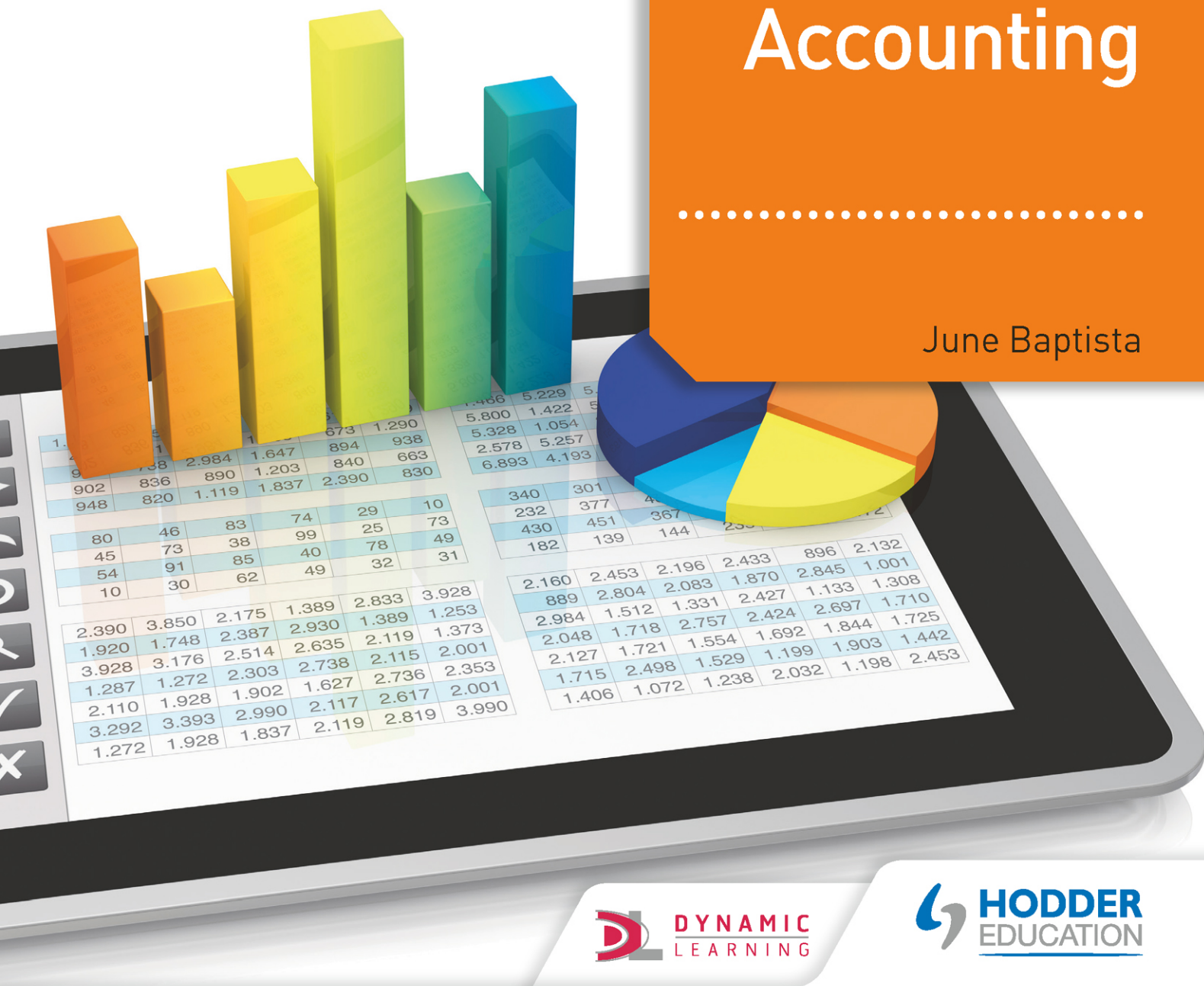


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# Cambridge IGCSE® and O Level

## Accounting

June Baptista





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# Accounting

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June Baptista

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# Introduction

This book has been written for students studying the Cambridge IGCSE® Accounting (0452) and Cambridge O Level Accounting (7707) syllabuses. It carefully and precisely follows the syllabus structure from Cambridge Assessment International Education. It provides the detail and guidance that are needed throughout the course and to help you prepare for your examinations. It will also prove to be of great use to anyone who wants to learn more about the key concepts of accounting.

This book will prove to be valuable to students of Accounting whether you are:

- » studying the subject for the first time through your school or college and need a comprehensive and clearly written textbook
- » revising the subject before your examinations and need a study guide to help you with key definitions, techniques and examination support
- » learning the subject on your own through distance or open learning and need a complete programme of supportive questions, activities and suggested answers to these.

This new edition has been written specifically for the latest syllabus, and contains up-to-date examples of applications of accounting in the real world.

## How to use this book

To make your study of Accounting as rewarding and successful as possible, this Cambridge International endorsed textbook offers the following important features:

### Learning objectives

Each chapter starts with the objectives from the syllabus to be covered in that chapter and ends with a checklist summarising the important points covered.

### Organisation

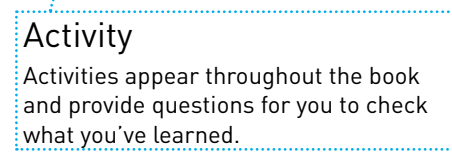
The content is in the same order as the syllabus: chapter titles and chapter section headings match the headings in the syllabus.

### Approach

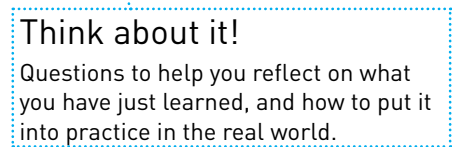
The subject material is written in an informative yet lively way that allows for complete understanding of each topic to be gained.

Definitions of the key words you need to know are given, with terms highlighted in the text.

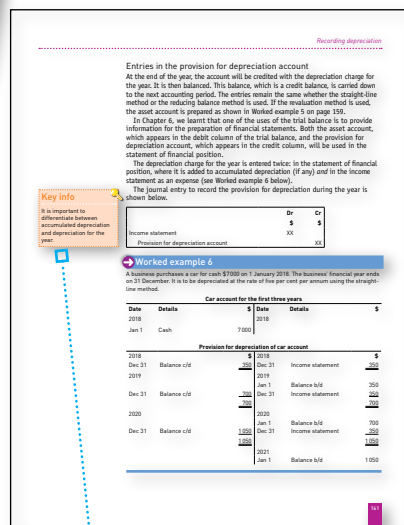
Questions at the end of each chapter allow you to check what you've learned.



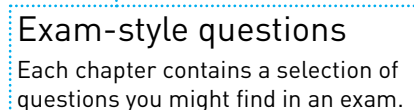
Study tips provide extra explanation and clarify common misconceptions to help you get to grips with the key concepts and answer questions in an exam.



This checklist lists the key concepts and topics you have covered in the chapter and the key points you'll need to know for an exam.



Key info boxes provide further explanation of the key concepts you need to know with real world examples.



# Exam preparation and technique

## Revision

You should be able to perform to the best of your ability if you:

- » ensure that you have worked through all of the activities and examination-style questions in this book
- » revise thoroughly before the examination – allow plenty of time for this and avoid leaving it until the last minute.

You can also help yourself greatly if you take the following steps:

- » Obtain a copy of the syllabus. You could use the syllabus content as a checklist for your revision. You should also be able to obtain past examination papers.
- » Make sure that you know the number and length of each of the examination papers you will have to sit. The style and nature of the questions often differ between papers so you must be quite clear about the type of questions likely to appear on each paper.

For Cambridge IGCSE® and O Level Accounting the examination papers are:

	Length	Type of paper	Type of questions
Paper 1	1 hour 15 mins	Multiple choice	35 multiple-choice questions based on content from the entire syllabus
Paper 2	1 hour 45 mins	Structured written paper	Five structured questions all based on a case study/stimulus

## In the examination

Make sure you check the instructions on the question paper, the length of the paper and the number of questions you have to answer. In the case of Cambridge IGCSE® and O Level Accounting examinations you will have to answer every question as there will be no choice.

Allocate your time sensibly between each question. Good students may let themselves down by spending too long on some questions and too little time (or no time at all) on others. You will be expected to spend longer writing an answer to a question worth 12 marks than you would when writing an answer worth 8 marks.

## Key command words you need to know

**Advise:** write down a suggested course of action in a given situation

**Analyse:** examine in detail to show meaning, identify elements and the relationship between them

**Assess:** make an informed judgement

**Calculate:** work out from given facts, figures or information

**Comment:** give an informed opinion

**Compare:** identify/comment on similarities and/or differences

**Consider:** review and respond to given information

**Contrast:** identify/comment on differences

**Define:** give precise meaning

**Demonstrate:** show how or give an example

**Describe:** state the points of a topic/give characteristics and main features

**Develop:** take forward to a more advanced stage or build upon given information

**Discuss:** write about issue(s) or topic(s) in depth in a structured way

**Evaluate:** judge or calculate the quality, importance, amount or value of something

**Examine:** investigate closely, in detail

**Explain:** set out purposes or reasons/make the relationships between things evident/provide why and/or how and support with relevant evidence

**Give:** produce an answer from a given source or recall/memory

**Identify:** name/select/recognise

**Justify:** support a case with evidence/argument

**Outline:** set out main points

**Predict:** suggest what may happen based on available information

**Prepare:** present information in a suitable format

**State:** express in clear terms

**Suggest:** apply knowledge and understanding to situations where there are a range of valid responses in order to make proposals

**Summarise:** select and present the main points, without detail

## From the author

As long as money makes the world go round, accountants will be needed. No matter where you live, businesses, not-for-profit organisations and individuals will need accountants to manage their taxes and budgets and help with financial decision making and reporting ... the list goes on. This textbook will not only guide you through your Cambridge course, but will also give you the knowledge and skills to help you take your first step towards playing an important role in assisting those in need of accounting services, in your country and perhaps internationally. The textbook will, hopefully, ignite a passion for this very useful, lucrative and vital body of knowledge that fuels the business world. We are confident that this book will give you all the support you will need for the duration of your course and beyond.

June Baptista

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# SECTION 1

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## The fundamentals of accounting

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### Chapters

- 1 The purpose of accounting
- 2 The accounting equation

This section of the syllabus introduces you to what accounting is, the purpose it serves and the important role it plays in the world of business and finance. Accounting is also the foundation on which modern-day record keeping – the double-entry system – is based. This section explains how book-keeping is different from accounting and the accounting equation.

# The purpose of accounting

By the end of this chapter you will be able to:

- ★ understand and explain the difference between book-keeping and accounting
- ★ state the purposes of measuring business profit and loss
- ★ explain the role of accounting in providing information for monitoring progress and decision making.



## The difference between book-keeping and accounting

### Key terms

**Book-keeping** involves the collection, recording, storage and retrieval of financial transactions of a business.

**Accounting** is the process of collecting, recording, classifying, summarising, analysing, interpreting and communicating financial data in order to allow the users of accounting information to make informed judgements and decisions.

**Financial statements** are made up of an income statement and a statement of financial position.

**Financial data** refers to any aspect of a business that can be measured in terms of money, for example, sold goods for \$400 cash.

**Book-keeping** is largely concerned with the development and maintenance of accounting records. It involves the detailed recording of all the financial transactions that have taken place over a period in a business. Every transaction of economic value should be recorded otherwise it could get forgotten and omitted. Book-keeping is important as it ensures the records of all financial transactions that a business has undertaken are accurate, up-to-date and comprehensive.

**Accounting** involves collecting, recording, classifying, summarising, analysing and interpreting financial data. Accountants use book-keeping records to prepare **financial statements** at regular intervals. These statements are then analysed and interpreted to aid decision making.

### Definition of accounting

Accounting is a process of:

- a collecting and recording **financial data**
- b classifying financial data
- c summarising financial data
- d analysing financial data
- e interpreting financial data
- f communicating financial data.

Let us now examine each step of the accounting process more closely.

- a **Collecting and recording financial data** – Every business needs to collect financial data and then record this data. The data comes from the transactions which a business undertakes daily, for example, sold goods to Amigo Ltd for \$400 on credit. The financial data that would be recorded from this transaction would be an increase in the total sales and an increase in the amount owed by customers to the business.

Think about it!

What if a business has valuable, highly-trained employees? The employees are not part of the 'financial data' and therefore get overlooked. Do you agree? If you agree, how important is this omission?

Key term

**Interested parties** are all those people or groups of people who have a special interest in a business. They may be internal or external to the business, for example, prospective investors, the government, trade payables, managers. **Income statement** calculates the profit made by a business. Along with the statement of financial position, it makes up the financial statements of a business.

- b Classifying financial data** – After the financial data has been recorded, it is then classified into groups, for example, assets or liabilities, income or expenses. To continue with the previous example, an increase in total sales would be classified as 'revenue' and an increase in the amount owed by customers would be an asset called 'trade receivables'.
- c Summarising financial data** – Once financial data has been recorded and classified, it is summarised for the benefit of the people who are interested in the business – people who are often referred to as **interested parties**. One example of a summary is the **income statement** which calculates the profit that a business has made.
- d Analysing financial data** – Analysing means examining something in detail with the intention of explaining and interpreting it. For example, on their own, figures in the form of profit or loss are not as useful as analysis using these figures and accounting ratios (see more in Chapter 21). Analysis allows comparisons between years and between competing businesses, for instance. Based on these comparisons, important decisions can be made and business strategies can be planned.

Think about it!

Ian scored 10 marks in his accounting test while Yagmur scored 50 marks in her test. Who performed better? It may appear that Yagmur has done better. However, Ian's test had a maximum mark of 10, while Yagmur's test had a maximum mark of 100. Converted to a percentage, we can see that Ian has done better with a 100 per cent score, while Yagmur only scored 50 per cent. This shows us that stand-alone figures do not give us all the important information. The figures need to be converted into ratios or percentages, in this example, in order to fully make sense.

Work with a partner to answer the following questions:

- Ian Toys made a profit of \$50 000 and Yagmur Toys made a profit of \$150 000. Which business is more profitable?
- Do you have enough information to answer this question? If not, what additional information do you need?

Think about it!

In pairs, decide who would interpret the financial data of a soft drinks company.

- e Interpreting financial data** – Once the data has been analysed, the interested parties need to interpret the data. Interpreting is deciding what the intended meaning of something is. For example, a manager will use information from the analysis of figures in the income statement to make important decisions. If the business has been consistently profitable over the past few years, they may decide to expand the business' operations (see more in Chapter 22).
- f Communicating financial data** – The summarised data is then made available to the users of accounting, also called the interested parties. For example, in the case of limited companies (see Chapter 17), shareholders can use the information to monitor how well their investment is doing.

## Activity 1

- 1 State whether or not each item is financial data:
  - a Cash that a customer pays for services received
  - b Well-trained employees
  - c A government tax proposal on fizzy drinks
  - d The purchase of a motor van
  - e The sale of equipment
  - f The location of a restaurant which brings in more customers than its competitors
  - g Good suppliers who deliver quality goods on time.
- 2 Copy and complete the table below and place a tick (✓) in the appropriate column to indicate what each activity represents.

	Classifying financial data	Interpreting financial data	Communicating financial data
Deciding whether an item involved in a business transaction is an asset or a liability.			
Publishing the income statement on the business website.			
Measuring the profitability of a business using ratios.			
Deciding whether an item involved in a business transaction is an income or an expense.			
Measuring the liquidity of a business using ratios.			
Sending the financial statements of a business to shareholders by email.			

## Purpose of accounting

### Key info

It is the purpose of accounting to take financial data and convert it to a form that can be used for good decision making.

The purpose of accounting is to provide important financial information that helps interested parties to monitor progress. Managers can use financial data to analyse the opportunities and challenges that a business faces.

Accounting also helps with good decision making. For example, if profits have been falling, the income statement reveals the reasons why. Perhaps expenses have increased. In which case, managers will want to make important decisions about which expenses to decrease and how.

Accounting can also inform interested parties what a business is worth. The statement of financial position (see Chapter 2) keeps interested parties informed about the assets, liabilities and net worth of a business.

## Purpose of measuring business profit and loss

One of the main aims of a business is to make a profit. Businesses need to be able to measure this profit. It can then be compared with profits of previous years. If it is falling, owners and managers will want to either decrease expenses or increase revenue. Because the income statement records the various expenses incurred, managers can analyse them to look for cost-cutting measures.

If a business has been consistently making a good profit, managers may want to grow the business by expanding its operations into other markets or by increasing the product range.

Business profit can also be used to compare with a competitor's profit. If a business is making a good profit but not as much as its competitors, this gives managers a reason to take steps to reduce expenses or increase revenue in some way, so that profitability improves. They could also increase income by advertising more widely for instance.

The financial statements also help to measure a business' ability to pay the highest returns to its owners relative to its competitors.

### Think about it!

Would you compare a vegetable vendor's accounts with those of an appliance retailer? Give reasons for your answer.



### Activity 2

Read the following case study and then answer the questions below:

Amrita is a baker who is opening her first shop. In order to keep records of her transactions she plans to employ a book-keeper.

- 1 Explain why it is important for Amrita to keep financial records of her business transactions.
- 2 Explain why a book-keeper may be willing to work for a lower salary than an accountant.
- 3 Advise Amrita whether she should employ a book-keeper or an accountant. Give reasons for your answer.



## Role of accounting in monitoring progress and decision making

### Users of accounting information – interested parties

Every business has interested parties. Interested parties are the people or firms who use the accounting information to monitor the progress of the business. This helps them to make important economic decisions. Examples of interested parties are:

- » **Owner(s) of a business** – They will want to know how well their investment in the business is doing. Is the business profitable enough? The owner(s) will also want to know what the net worth of the business is.
- » **Prospective investors** – They like to know how well their investment will do in the future by studying present and past accounting records of the business they are intending to invest in. Good profitability and increasing net worth are strong signs that a business will be a good investment.

### Study tip

If a question asks you to list three interested parties, read the context in which the question is asked and choose the most relevant of the five interested parties listed on this page and the next. If a business is a sole trader business, for example, that does not want to expand, then it will not have any prospective owners.

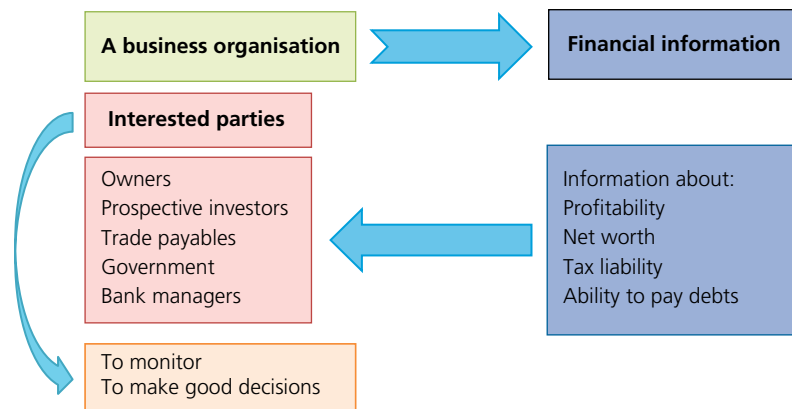


## 1 THE PURPOSE OF ACCOUNTING

### Key term

**Trade payables** represent businesses or individuals to whom money is due for services or goods supplied to the business.

- » **Bank manager** – A bank manager will ask for and use past and present accounting records before granting a loan or an overdraft. A business may not have enough money or cash flow to pay the interest and this could be reason for a bank to not grant a loan. Also, if a business has a lot of existing long-terms loans, banks will not be very willing to lend them money.
- » **Trade payables (creditors)** – A lot of transactions are on a credit basis. This means that payments are made some time after the transaction has taken place. As a result, a business could have a number of people or businesses that it owes money to – called **trade payables**. Suppliers and other creditors of the business will want to know whether they will be paid on time, if at all. Financial statements give them this information.
- » **The government** – The government likes to know what profit a business has made in order to calculate the amount of tax that the business has to pay.



▲ The purpose of accounting

### Activity 3

- 1 Explain why financial information needs to be communicated to the interested parties of a business. List at least four interested parties in your answer.
- 2 Amenco Ltd is a business which sells ready-made clothes. It has been in business for ten years. Most of its customers pay by cash or credit card. However, its suppliers allow one month's credit. Apart from trade payables, the business owes its bank for a loan it took five years ago. Being a limited company, Amenco Ltd must pay tax which is calculated on the amount of profit the business has made. List at least four interested parties of Amenco Ltd.



## Exam-style questions

The following multiple-choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 What is accounting?  
 A A chore  
 B A process  
 C A system  
 D A task. [1]
- 2 Which is the correct order for the steps in the accounting process?  
 A Collecting, summarising, analysing, interpreting, communicating  
 B Collecting, summarising, interpreting, communicating, analysing  
 C Summarising, collecting, analysing, communicating, interpreting  
 D Summarising, collecting, interpreting, analysing, communicating [1]
- 3 Which value is not included in financial data?  
 A The good location of a café which has a high volume of foot traffic  
 B The payment of an invoice totaling \$400  
 C The sales for the month of June of \$5 000  
 D The value of a motor vehicle that a company owns [1]
- 4 Which statement is true?  
 A Accounting is part of book-keeping.  
 B Accounting requires the skills of an expert accountant.  
 C Book-keeping includes activities such as analysing and interpreting financial data.  
 D Book-keeping requires the skills of an expert accountant. [1]
- 5 What is **not** a purpose of measuring business profit or loss?  
 A To compare a business' profit with the profits of its competitors.  
 B To compare a business' profit with those of any other business.  
 C To take steps to reduce losses.  
 D To compare the current year's profit with last year's profit. [1]

The mark allotted to the structured question below is a guide to the length of time that should be taken to complete it.

- 6 Andrew McDonald is a sole trader. The following people are interested in the accounts of his business:  
 A Andrew McDonald (owner)                      D Bank manager  
 B Potential partner                                      E Trade creditor  
 C Loan creditor

Copy and complete the following table to show which people would be especially interested in the different features of the accounting records of the business. Each of the five interested parties listed above should not appear in the table more than **twice**.

[6]



## 1 THE PURPOSE OF ACCOUNTING

Features of the accounting records	Interested parties
Whether the business can pay interest when it is due	1 _____ 2 _____
The market value of the assets that the business owns	1 _____ 2 _____
Whether the business is profitable	1 _____ 2 _____
Whether the business has enough liquidity	1 _____ 2 _____

### ? Chapter review questions

- 1 State what is meant by the term 'accounting'.
- 2 Explain the difference between book-keeping and accounting.
- 3 State the purpose of accounting.
- 4 State one purpose of measuring business profit or loss.
- 5 Complete the sentences below, using the following words:  
recording; book-keeping; financial; classifying; owners; interpreting; trade payables; analysing; decision making; bankers; communicating
  - a \_\_\_\_\_ is concerned with the maintenance of accounting records.
  - b \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ make up the process that is called accounting.
  - c \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ are possible interested parties in a business.
  - d The purpose of accounting is to take \_\_\_\_\_ data and convert it to a form that can be used for good \_\_\_\_\_.
- 6 List at least three interested parties of an internet provider and explain why accounting is important to each of them.
- 7 Copy and complete the following table by entering 'true' or 'false' for each statement.

Statement	True/False
1 There is no difference between accounting and book-keeping.	
2 Accounting is only carried out at the end of a financial year.	
3 Managers can use financial data to define and analyse the opportunities and challenges that a business faces.	
4 The statement of financial position is used to calculate the profit of a business.	
5 Business profit is often compared with a competitor's profit.	

### Revision checklist

In this chapter, you have learnt:

- ✓ the definition of accounting
- ✓ the purpose of accounting
- ✓ the difference between book-keeping and accounting
- ✓ the purpose of measuring business profit and loss
- ✓ what financial data is and what financial data is not
- ✓ the importance of accounting to a business and its interested parties.

# 2

## The accounting equation

By the end of this chapter you will be able to:

- ★ explain the meaning of assets, liabilities and owner's equity
- ★ explain and apply the accounting equation
- ★ outline the double entry system of book-keeping.

### Key terms

**Owner's equity**, in accounting, is usually what the business owes the owner. It can refer to funds raised by the owner to fund a business idea.

**Assets** are resources of monetary value that a business owns or are owed to the business. Examples of assets are cash, motor vehicles, trade receivables and property.

**Liabilities** are amounts that the business owes people for resources supplied to the business. Examples of liabilities are trade payables, overdraft and loans.

**Accounting equation** is a formula that is used to illustrate the relationship between the assets, liabilities and owner's equity of a business. It shows that all the assets of a business are provided or funded either by the owner or the trade payables or other creditors of the business.

## Assets, liabilities and owner's equity

Accounting records of a business will often start with the owner supplying resources, for example, cash and motor vehicles. From an accounting point of view, the owner is regarded as a separate entity from the business. Therefore, when the owner supplies a business with resources, the business now owes the owner for these resources. This is the **owner's equity** (or capital) and is represented by resources of monetary value (or **assets**) that the business now owns. The business benefits from the ownership of assets by using them to generate income.

We can show this in the form of an equation:

**Owner's equity (resources supplied by the owner) = Assets (resources owned by the business)**

Often, people other than the owner (the bank, for instance) supply resources to the business. These are the **liabilities** of a business. A liability is a debt or obligation owed to lenders or suppliers.

## The accounting equation

When the business acquires a liability, the equation is altered to:

**Owner's equity = Assets – Liabilities**

This is called the **accounting equation**.

As this is an equation, both sides of it should have the same value. This makes sense as one side of the equation represents the value of the owner's investment in the business, and the other side represents the net value of what is owned by the business.

If we modify the equation:

**Assets = Owner's equity + Liabilities**

OR

**Liabilities = Assets – Owner's equity**

## 2 THE ACCOUNTING EQUATION

### Key info

Resources owned by the business = resources supplied to the business.

### Study tip

Remember the equation merely states:  
What the business owns = what the business owes.

### Study tip

If two of the three components of the accounting equation are given, you can use the equation to calculate the third.

This equation, which is the foundation of accounting, shows that all the assets are financed either with the money invested by the owner or the money received from borrowings.

### Activity 1

- 1 Define owner's equity.
- 2 Define liability.
- 3 Explain why 'owner's equity is a liability.'
- 4 Complete the following table:

	Assets	Liabilities	Owner's equity
a	7 000	?	5 000
b	?	1 350	2 450
c	2 670	500	?
d	8 000	?	3 780
e	?	1 900	4 100

### Key term

The **statement of financial position** of a business is a statement listing the assets, liabilities and owner's equity (or capital) at a specific point of time. It is one of the financial statements prepared at the end of the financial years. It records the assets, liabilities and capital of the business.

## The double entry system of book-keeping

Every economic or business event will have a dual effect on the accounting equation. This can be seen in the **statement of financial position**, which reflects the accounting equation. One side of the equation represents all the assets and the other side represents the liabilities and owner's equity. Both sides should be equal.

On 1 January 2018 Anita Goswell decided to start a business. Her accounting equation will be:

$$\text{Assets} = \text{Owner's equity} + \text{Liabilities}$$

$$\$0 = \$0 + \$0$$

### 1 Introduction of owner's equity

On 2 January 2018 Anita opened a bank account for the business named Anita Goswell Trading. She deposited \$56 000 cash into this account.

Her accounting equation will be:

$$\text{Assets} = \text{Owner's equity} + \text{Liabilities}$$

$$\$56\,000 \text{ (cash at bank)} = \$56\,000 \text{ (owner's equity)} + \$0$$

The statement of financial position will look like this:

Anita Goswell Trading Statement of financial position as at 2 January 2018	
Assets: Cash at bank	\$ 56 000
Owner's equity	56 000

**Key term**

**Inventory** refers to goods that a business purchases for resale.

## 2 Purchase of an asset – paying by cheque

On 5 January 2018, Anita purchased **inventory** for \$5 000, paying by cheque.

$\text{Assets} = \text{Owner's equity} + \text{Liabilities}$

$\$5\,000 \text{ (inventory)} + \$51\,000 \text{ (cash at bank} = \$56\,000 - \$5\,000) = \$56\,000$   
 $\text{(owner's equity)} + \$0$

The statement of financial position will look like this:

Anita Goswell Trading		
Statement of financial position as at		
5 January 2018		
		\$
Assets:	Inventory	5 000
	Cash at bank	<u>51 000</u>
		<u>56 000</u>
Owner's equity		56 000

## 3 Purchase of an asset on credit – a liability is created

On 6 January 2018, Anita Goswell Trading bought a motor vehicle costing \$6 000 from Salient Motors on credit. Salient Motors is now a creditor and must be paid back at some later date.

$\text{Assets} = \text{Owner's equity} + \text{Liabilities}$

$\$6\,000 \text{ (motor vehicle} = \$0 + \$6\,000) + \$5\,000 \text{ (inventory)} + \$51\,000 \text{ (cash at bank)} = \$56\,000 \text{ (owner's equity)} + \$6\,000 \text{ (creditor} = \$0 + \$6\,000)$

The statement of financial position will look like this:

Anita Goswell Trading		
Statement of financial position as at 6 January 2018		
		\$
<b>Assets:</b>		
Motor vehicle		6 000
Inventory		5 000
Cash at bank		<u>51 000</u>
		<u>62 000</u>
<b>Owner's equity</b>		56 000
<b>Liabilities:</b>		
Creditor (Salient Motors)		<u>6 000</u>
		<u>62 000</u>

## 4 Payment of a liability

On 25 January 2018, Anita paid Salient Motors \$5 000 by cheque in part payment of debt owing.

$\text{Assets} = \text{Owner's equity} + \text{Liabilities}$

$\$6\,000 \text{ (motor vehicle)} + \$5\,000 \text{ (inventory)} + \$46\,000 \text{ (cash at bank} = \$51\,000 - \$5\,000) = \$56\,000 \text{ (owner's equity)} + \$1\,000 \text{ (creditor} = \$6\,000 - \$5\,000)$

## 2 THE ACCOUNTING EQUATION

The statement of financial position will look like this:

Anita Goswell Trading	
Statement of financial position as at 25 January 2018	
	\$
<b>Assets:</b>	
Motor vehicle	6 000
Inventory	5 000
Cash at bank	<u>46 000</u>
	<u>57 000</u>
<b>Owner's equity</b>	56 000
<b>Liabilities:</b>	
Creditor (\$6 000 – \$5 000)	<u>1 000</u>
	<u>57 000</u>

### 5 Sale of asset for cash

On 29 January 2018, Anita sold inventory for cash \$3 000.

$\text{Assets} = \text{Owner's equity} + \text{Liabilities}$

$\$6\,000$  (motor vehicle) +  $\$2\,000$  (inventory =  $\$5\,000 - \$3\,000$ ) +  $\$46\,000$  (cash at bank) +  $\$3\,000$  (cash in hand =  $\$0 + \$3\,000$ ) =  $\$56\,000$  (owner's equity) +  $\$1\,000$  (creditor)

The statement of financial position will look like this:

Anita Goswell Trading	
Statement of financial position as at 29 January 2018	
	\$
<b>Assets:</b>	
Motor vehicle	6 000
Inventory	2 000
Cash at bank	46 000
Cash in hand	<u>3 000</u>
	<u>57 000</u>
<b>Owner's equity</b>	56 000
<b>Liabilities:</b>	
Creditor (Salient Motors)	<u>1 000</u>
	<u>57 000</u>

### 6 Owner withdraws assets from the business for personal use

On 30 January 2018, Anita withdrew \$3 000 from the bank for her own personal use.

When the owner withdraws resources from the business for personal use, it is referred to as **drawings**. This is recorded as a decrease in owner's equity and a decrease in the asset withdrawn.

$\text{Assets} = \text{Owner's equity} + \text{Liabilities}$

$\$6\,000$  (motor vehicle) +  $\$2\,000$  (inventory) +  $\$43\,000$  (cash at bank =  $\$46\,000 - \$3\,000$ ) +  $\$3\,000$  (cash in hand) =  $\$53\,000$  (owner's equity – drawings =  $\$56\,000 - \$3\,000$ ) +  $\$1\,000$  (creditor)

#### Key term

**Drawings** is the term given to the value of assets in the form of cash or inventory withdrawn from a business by the owners for personal use. Drawings reduce the owner's equity.



The statement of financial position will look like this:

Anita Goswell Trading		
Statement of financial position as at 30 January 2018		
	\$	\$
<b>Assets:</b>		
Motor vehicle		6 000
Inventory		2 000
Cash at bank		43 000
Cash in hand		<u>3 000</u>
		<u>54 000</u>
<b>Owner's equity:</b>		
Opening balance	56 000	
Less Drawings	<u>(3 000)</u>	53 000
<b>Liabilities:</b>		
Creditor (Salient Motors)		<u>1 000</u>
		<u>54 000</u>

## 7 Payment of a business debt by the owner from personal funds

On 31 January 2018, Anita paid Salient Motors \$1 000 cash from her own personal funds.

This will have the same effect as an injection of fresh equity into the business by the owner; therefore, owner's equity will increase by the amount of \$1 000.

*Assets = Owner's equity + Liabilities*

*\$6 000 (motor vehicle) + \$2 000 (inventory) + \$43 000 (cash at bank) + \$3 000 (cash in hand) = \$54 000 (owner's equity = \$53 000 + \$1 000) + \$0 (creditor = \$1 000 - \$1 000)*

The statement of financial position will look like this:

Anita Goswell Trading		
Statement of financial position as at 31 January 2018		
		\$
<b>Assets:</b>		
Motor vehicle		6 000
Inventory		2 000
Cash at bank		43 000
Cash in hand		<u>3 000</u>
		<u>54 000</u>
<b>Owner's equity:</b>		<u>54 000</u>

Here is a summary of the effect of transactions on the assets, liabilities and owner's equity in an accounting equation:

- » If an asset increases, then either a liability or owner's equity will also increase.
- » If an asset decreases, then either a liability or owner's equity will also decrease.

## 2 THE ACCOUNTING EQUATION

### Think about it!



The accounting equation can serve as an error detection tool. Do you agree? Give examples in support of your answer.

- » If an asset increases, then another asset involved in the transaction will decrease.
- » If an asset decreases, then another asset involved in the transaction will increase.
- » If a liability or owner's equity increases, then another liability involved in the transaction will decrease.
- » If a liability or owner's equity decreases, then another liability involved in the transaction will increase.

### Key terms

**Current assets** are assets that can be sold, used up or consumed through the normal workings of a business within no more than a year from the date of the statement of financial position.

**Non-current assets** are those assets that the business has bought with the intention of using them for a period of more than a year, such as machinery, motor vehicles and premises.

**Liquid assets** are those assets that can be quickly converted to cash with no loss in value.

**Trade receivables** are businesses or individuals who have received goods or a service from the business on credit, with the understanding that payment is due within the credit period.

### Activity 2

Copy and complete the following table with the words 'decreases' or 'increases' to show which effect each transaction would have on the assets, liabilities and owner's equity of a business:

	Transactions	Assets	Liabilities	Owner's equity
a	The owner introduced \$45 000 cash into the business bank account.			
b	The business bought goods on credit from Sully & Sons.			
c	Benjamin, a friend of the owner, lent the business \$3 000 in cash.			
d	The business sold goods for cash \$500.			
e	The business paid Benjamin \$3 000 by cheque.			
f	The business returned goods \$50 to Sully & Sons.			
g	The owner withdrew \$400 from the business bank account for personal use.			
h	The business bought a motor vehicle \$4 500, paying by cheque.			
i	The business paid a creditor \$58 cash.			

### Types of assets

There are two types of assets: **current assets** and **non-current assets**. Current assets include cash and other liquid or near **liquid assets**. Trade receivables and inventory are some other examples of current assets. If an asset can reasonably be expected to be converted into cash within one year, then it is a current asset. For example, the value of inventory increases or decreases as it is bought or sold. The value of **trade receivables** also fluctuates when more goods are sold on credit or trade receivables pay off amounts owing for goods received. The cash at bank will also change with multiple deposits and withdrawals made during the year.

### Key terms

**Current liabilities** are those debts that must be paid within a year from the date of the statement of financial position, for example, trade payables and overdraft.

**Non-current liabilities** are those debts that do not need to be paid within a year from the date of the statement of financial position, for example a long-term bank loan or lease.

Non-current assets are those assets purchased with the intention of keeping them for their entire economic life, which is always more than a year. They are not bought for resale but for use within the business to generate revenue; for example, motor vehicles, machinery and premises.

## Types of liabilities

**Current liabilities**, as the name suggests, are those debts that must be paid within one year. Trade payables are a good example of a current liability. They represent suppliers from whom a good or a service has been purchased. These trade payables will normally expect to be paid within a specified period, and are known to give discounts for early payment. Another example of a current liability is a bank overdraft.

**Non-current liabilities** are those amounts owed by a business which are not due to be repaid within 12 months of the statement of financial position date, for example, a long-term bank loan.

Here is a more detailed version of Anita Goswell's statement of financial position as at 30 January 2018:

Anita Goswell Trading		
Statement of financial position as at 30 January 2018		
	\$	\$
<b>ASSETS</b>		
<b>Non-current assets:</b>		
Motor vehicle		6 000
<b>Current assets:</b>		
Inventory	2 000	
Cash at bank	43 000	
Cash in hand	3 000	48 000
<b>Total assets:</b>		<u>54 000</u>
<b>OWNER'S EQUITY AND LIABILITIES</b>		
<b>Owner's equity:</b>		
Opening balance	56 000	
Less Drawings	(3 000)	53 000
<b>Current liabilities:</b>		
Creditor		1 000
<b>Total owner's equity and liabilities:</b>		<u>54 000</u>

### Think about it!

'Every business transaction results in two changes in the statement of financial position.'  
Do you agree? Work with a partner to decide your answer.

### Activity 3

State how each item would be classified as an asset or liability.

- a Buildings and property
- b Machinery
- c Trade receivables
- d Trade payables
- e Overdraft
- f Cash in hand
- g Loan from M. Apple (a friend)
- h Inventory
- i Motor vehicle
- j Equipment

We have seen that every business transaction has an equal and opposite effect on at least two of the components of the accounting equation. It is impossible to prepare a statement of financial position after every business transaction. Therefore, the two effects of every transaction are recorded as a part of book-keeping in the books of account. An account is a physical place where information concerning an asset or liability, or owner's equity is recorded. The books in which accounts are recorded are called ledgers.

When a transaction takes place, we enter the data relating to that transaction in the relevant accounts, making sure that only the accounts affected by the transaction are used. Hence, the balances on these accounts are either increased or decreased. Therefore, for every business transaction, there will be two entries, made in two accounts, hence the term double entry book-keeping. Regardless of which accounts are affected by a transaction, the accounting equation will always hold and the equation will always balance.

### Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 What is the accounting equation?  
A Assets + Liabilities = Owner's equity  
B Assets + Owner's equity = Liabilities  
C Assets – Liabilities = Owner's equity  
D Assets = Liabilities – Owner's equity [1]
- 2 Which definition is not correct?  
A A liability is what a business owns.  
B An asset is a resource that a business owns.  
C Owner's equity is what the business owes the owner.  
D The accounting equation is reflected in the statement of financial position. [1]
- 3 A business had the following assets and liabilities on 6 June 2016:  
Motor vehicle \$5 900; bank loan \$6 000; cash at bank \$49 000; trade payables \$800; inventory \$2 100; premises \$30 000.  
What was the value of owner's equity?  
A \$80 200  
B \$81 200  
C \$81 800  
D \$92 200 [1]
- 4 Which statement is correct?  
A Resources owned by the business = Resources supplied to the business  
B Resources owned by the business = Resources owed to the business  
C Resources owned by the business = Resources supplied by the business  
D What the business supplies = What the business owes [1]

5 Which statement is correct?

- A When the owner deposits money into the business bank accounts, it is called drawings.
- B When the owner pays a business expense from personal funds, it is called drawings.
- C When the owner supplies a motor vehicle to the business, it is called drawings.
- D When the owner withdraws money from the business bank account, it is called drawings. [1]

The mark allotted to the structured question below is a guide to the length of time that should be taken to complete it.

6 Aimee's Frocks has completed its first year of trading which ended on 31 August 2018. Using the information below:

- a calculate the owner's equity at 31 August 2018 [3]
- b prepare Aimee's Frocks' statement of financial position as at 31 August 2018. [5]

	\$
Machinery	15 000
Inventory	10 000
Trade receivable	5 000
Trade payable	2 400
Cash at bank	29 000
Premises	100 000

## ? Chapter review questions

- 1 Simran's accountant prepared a statement of financial position at the end of her first year of trading on 31 December 2018. Simran was not familiar with some of the terms used in this statement.  
State the meaning of each of the following terms:
  - a Drawings
  - b Assets
  - c Trade payables
  - d Current liabilities
  - e Non-current assets.
- 2 Copy and complete the following sentences, choosing from the words below: fixed; equation; accounting; drawings; current liability; capital
  - a Owner's equity is also known as \_\_\_\_\_.
  - b The statement of financial position reflects the \_\_\_\_\_.
  - c When the owner withdraws cash from the business bank account for personal use, it is called \_\_\_\_\_.
  - d Non-current assets are also known as \_\_\_\_\_ assets.
  - e Trade payables is an example of a \_\_\_\_\_.
- 3 Explain why owner's equity is a type of liability.



- 4 The following statements refer to the effect of transactions on the assets, liabilities and owner's equity in an accounting equation. Copy and complete the following table by entering 'true' or 'false' for each statement.

Statement	True/False
If an asset increases, then either a liability or owner's equity will also increase.	
If an asset increases, then another asset involved in the transaction will also increase.	
If an asset decreases, then either a liability or owner's equity will also decrease.	
If a liability or owner's equity increases, then another liability involved in the transaction will increase.	
If a liability or owner's equity decreases, then another liability involved in the transaction will increase.	

- 5 Copy and complete the table below and place a tick (✓) against those items which are correctly classified:

Assets	✓	Liabilities	✓
Furniture and fixtures		Trade payables	
Machinery		Equipment	
Bank loan		Inventory	
Overdraft		Trade receivables	
Property and buildings		Cash in hand	

- 6 Lazarus Trading started business on 1 January 2018. The transactions shown below took place in the first week. Calculate Lazarus' (owner's) equity after all these transactions have taken place. You are not required to prepare a statement of financial position after each transaction.

Jan 1	Lazarus deposited \$45 000 into the business bank account.
Jan 2	Lazarus bought a motor vehicle costing \$6 000 on credit from James Motors.
Jan 3	Lazarus borrowed \$3 500 cash from Jennings.
Jan 5	Lazarus bought goods worth \$2 300 from his suppliers, paying by cheque.
Jan 6	Lazarus paid Jennings cash \$2 000 in part settlement of his debt.
Jan 7	Lazarus withdrew \$3 000 from the business bank account for his personal use.

### Revision checklist

In this chapter, you have learnt:

- ✓ what is meant by assets, liabilities and owner's equity
- ✓ what the accounting equation is
- ✓ how to apply the accounting equation
- ✓ what is meant by the double entry system of book-keeping
- ✓ that every transaction has a dual effect that affects the accounting equation
- ✓ how to use the accounting equation to prepare a statement of financial position.





# SECTION 2

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## Sources and recording of data

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### Chapters

- 3 The double entry system of book-keeping
- 4 Business documents
- 5 Books of prime entry

This section will show you how to make initial entries from source documents to books of prime entry and then to post these entries to the relevant ledgers – the sales ledger, the purchases ledger and the nominal (general) ledger. You will learn how to post transactions to these ledgers from books of prime entry, balance the accounts within them, and interpret these balances. The origins of entries recorded in these accounts are source documents. You will be introduced to common pro-forma source documents and learn how to use them to make entries in books of prime entry. In addition, you will learn the difference between trade and cash discounts and how the cash book and petty cash books are used. Since the internet plays such an important role in the modern-day banking sector, electronic cash transfers as well as physical cash transfers are dealt with in this section as well.

# 3

## The double entry system of book-keeping



By the end of this chapter you will be able to:

- ★ outline the double entry system of book-keeping
- ★ process accounting data using the double entry system
- ★ prepare ledger accounts
- ★ post transactions to the ledger accounts
- ★ balance ledger accounts as required and make transfers to financial statements
- ★ interpret ledger accounts and their balances
- ★ recognise the division of the ledger into the sales ledger, the purchases ledger and the nominal (general) ledger.

### Key terms

The **double entry system of book-keeping** ensures each business transaction has equal and opposite effects in at least two different accounts in the accounting system. An **account** is a record in ledgers, used to collect and store debit and credit amounts relating to an asset, a liability, capital, an income or an expense. For example, every transaction that involves machinery will be recorded in the machinery account.

**Posting** is the act of using one book to transfer entries into accounts in another book, thereby performing or completing double entry.

**Ledgers** are books that collect groups of similar accounts.

## Double entry system of book-keeping

In Chapter 2, you saw that business transactions had two effects on the accounting equation and the statement of financial position. It is impossible to prepare a statement of financial position after every transaction as the number of transactions a business undertakes in one financial year are too numerous to make this possible. This is where the **double entry system of book-keeping** is used.

The very first stage of the accounting process is collecting and recording financial data. Data, after being collected from source documents such as invoices (you will learn more about these in Chapter 4), will then be recorded using the double entry system. The system requires that each transaction is recorded in two different **accounts**. The act of using one book to transfer entries into accounts in another book, in order to complete double entry, is known as **posting**. This ensures that the accounting equation always balances after the recording of a transaction.

## Processing accounting data using the double entry system

Accounts are records that are usually represented by an individual page in the **ledgers**. Every asset, liability, income, expense and capital will have its own individual page. On this page, debit and credit entries are made in date order whenever transactions that affect that asset, liability, income, expense or capital account take place.

To begin the process of setting up a double entry system, a business will need to make a list of all the accounts in which it will be recording transactions. For every transaction, the business can then choose two (or more) accounts to make entries in. Accounts may be added, if needed, or deleted, once closed and not needed anymore. Because of the double entry system, each transaction of a business will affect a combination of two or more accounts from the statement of financial position and/or the income statement.

Table 3.1 shows some of the possible accounts that a business could open.

**Table 3.1** Possible accounts a business could open

Statement of financial position accounts	Income statement accounts
Asset accounts: cash, machinery, trade receivables, equipment, inventory, premises, furniture and fixtures	Income accounts: sales, commission receivables, interest receivable, rent receivable
Liability accounts: rent payable, trade payables	Expense accounts: wages, salary, rent, electricity, telephone and internet
Capital and drawings	

### Key info

If an asset increases, it should be debited. If an asset decreases, it should be credited.  
If a liability or capital increases, it should be credited. If a liability or capital decreases, it should be debited.

## Double entry records for statement of financial position accounts

As mentioned in Chapter 2, every transaction increases or decreases the value of assets, liabilities or capital in accounts concerned with the statement of financial position.

## Preparing ledger accounts

### The 'T' Account – a graphic representation of a ledger account

Every page of a ledger that bears an account is divided into half. The **debits**, abbreviated to 'dr', are shown on the left and the **credits**, abbreviated to 'cr', on the right. The name of the account is placed above the 'T'. If an account is to be debited, an entry is made on the left-hand side of the account. If an account is to be credited, an entry is made on the right-hand side.

The layout of an account is shown below:

Dr			Cr		
Name of the account					
Date	Details	Amount	Date	Details	Amount

Let us now look at how the rules of double entry work for statement of financial position items:

Dr		Name of the (asset) account	Cr
Increases recorded here			Decreases recorded here

Dr		Name of the (liability) account	Cr
Decreases recorded here			Increases recorded here

Try to memorise the accounting equation:

$$\text{Assets} = \text{Owner's equity} + \text{Liabilities}$$

Memorising the accounting equation will make it easy to remember when to debit or credit an account. If an asset's value has increased as a result of a transaction, then the left-hand side of the equation increases and the asset is debited (left-hand side of an account). If the value of a liability has increased as a result of a transaction, then the right-hand side of the equation is increased

and the liability is credited (right-hand side of an account). Remember, too, for every account debited, another account should be credited with the same amount.

#### Activity 1

Copy and complete the following table by entering 'true' or 'false' for each statement.

Statement	True/False
1 If an asset increases, the asset account should be debited.	
2 If a liability increases, the liability account should be debited.	
3 If an asset decreases, the asset account should be debited.	
4 If a liability decreases, the liability account should be credited.	
5 If capital (owner's equity) increases, the capital account should be debited.	

## Posting transactions to the ledger accounts

When making entries, it is important to write the date and the details along with the amount. The entry is not complete if any of this is missing. The detail is the name of the other account involved in the transaction and is mentioned so that a cross-reference can be made.

Remember, once an account is opened, all further entries relating to this asset, liability, etc., are made in this account. It is not necessary to keep opening a new account for every new transaction.

#### Key info

If you have a transaction with:

- cheque – it will always be a bank account that will be debited or credited, and not a 'cheque' account.
- proprietor/owner – the accounts involved are the capital (owner's equity) account or the drawings account. If the owner is bringing resources into the business, then the capital account is credited. If, however, the owner is withdrawing resources from the business for personal use, then the drawings account is debited.

#### → Worked example 1

##### Accounts from the statement of financial position

2018	Transactions	Account to be debited	Account to be credited
May 1	Helen deposited \$45 000 into the business bank account.	Bank	Capital
May 5	The business bought a motor vehicle, paying by cheque \$7 000.	Motor vehicle	Bank
May 10	The business bought furniture from Offset Ltd \$4 500 on credit.	Furniture	Offset Ltd
May 15	The business received a loan of \$7 800 from K.L. Loans by cheque.	Bank	K.L. Loans
May 30	The business paid Offset Ltd \$4 500 by cheque for debt owing to it.	Offset Ltd	Bank
May 30	The owner withdrew cash \$4 000 from the business bank account for personal use.	Drawings	Bank

**Bank account**

Date	Details	\$	Date	Details	\$
2018			2018		
May 1	Capital	45 000	May 5	Motor vehicle	7 000
May 15	K.L. Loans	7 800	May 30	Offset Ltd	4 500
			May 30	Drawings	4 000

**Capital account**

Date	Details	\$	Date	Details	\$
2018			2018		
			May 1	Bank	45 000

**Motor vehicle account**

Date	Details	\$	Date	Details	\$
2018			2018		
May 5	Bank	7 000			

**Furniture account**

Date	Details	\$	Date	Details	\$
2018			2018		
May 10	Offset Ltd	4 500			

**Offset Ltd account**

Date	Details	\$	Date	Details	\$
2018			2018		
May 30	Bank	4 500	May 10	Furniture	4 500

**K.L. Loans account**

Date	Details	\$	Date	Details	\$
2018			2018		
			May 15	Bank	7 800

**Drawings account**

**Drawings account**

Date	Details	\$	Date	Details	\$
2018			2018		
30 May	Bank	4 000			

Think about it!



Work with a partner to answer these questions:  
If a business buys an asset on credit or takes out a loan, an account is opened for each trade payables. Why do you think this is so? Why are all trade payables not grouped together?

Do you think that all trade receivables should also have separate accounts? Why?

At the end of the year, if all transactions are recorded correctly, the total of all debit entries should be equal to the total of all credit entries.

#### Activity 2

A business provides the information shown below. Copy and complete the table by filling in the names of the accounts to be debited and credited.

Transactions	Account to be debited	Account to be credited
1 The owner deposited \$27 000 in the business bank account.		
2 The business bought furniture \$4 500 on credit from Neural Furniture.		
3 The business repaid a loan from Omni Loans \$6 700 by cheque.		
4 The business took a loan in cash from Tabloid Finance \$8 000.		
5 Somli, a credit customer, paid the business \$500 in cash.		
6 The business returned some furniture valued at \$700 to Neural Furniture.		
7 The owner paid a business creditor, Pascal, \$300 from her personal funds.		

### Double entry records for expenses and income

The rule to be followed is: Debit all expenses and credit all income.

#### Key info

The title of income accounts is always accompanied by the suffix 'receivable' or 'received' to differentiate it from an expense account. Rent paid as an expense will be a 'rent account' and rent received as income will be 'rent receivable account'.

#### Think about it!

Revenues increase owner's equity and expenses decrease it. Owner's equity is shown on the right-hand side of the accounting equation. Hence, it makes sense that income is credited (when increased) and expenses are debited (when increased). Do you agree?

Let us now look at how the rules of double entry work for income statement items (expenses and income):

Dr	Income accounts	Cr
Decreases recorded here		Increases recorded here
Dr	Expense accounts	Cr
Increases recorded here		Decreases recorded here

## → Worked example 2

Accounts from the business' income statement *and* statement of financial position

2018	Transactions	Account to be debited	Account to be credited
Jun 1	Paid salaries \$5 000 by cheque.	Salary	Bank
Jun 6	Paid insurance \$400 in cash.	Insurance	Cash
Jun 10	Received interest \$3 900 by cheque.	Bank	Interest receivable
Jun 29	Received rent in cash \$50 000 for rooms rented out.	Cash	Rent receivable
Jun 30	Paid motor expenses in cash \$30	Motor expenses	Cash

### Salary account

Date	Details	\$	Date	Details	\$
2018			2018		
Jun 1	Bank	5 000			

### Bank account

Date	Details	\$	Date	Details	\$
2018			2018		
Jun 10	Interest receivable	3 900	Jun 1	Salary	5 000

### Insurance account

Date	Details	\$	Date	Details	\$
2018			2018		
Jun 6	Cash	400			

### Cash account

Date	Details	\$	Date	Details	\$
2018			2018		
Jun 29	Rent receivable	50 000	Jun 6	Insurance	400
			Jun 30	Motor expenses	30

### Interest receivable account

Date	Details	\$	Date	Details	\$
2018			2018		
			Jun 10	Bank	3 900

### Rent receivable account

Date	Details	\$	Date	Details	\$
2018			2018		
			Jun 29	Cash	50 000

### Motor expenses account

Date	Details	\$	Date	Details	\$
2018			2018		
Jun 30	Cash	30			



#### Activity 3

A business provides the information shown below. Copy and complete the table.

Transactions	Account to be debited	Account to be credited
1 Paid salaries by cheque \$6 000		
2 Paid rent in cash \$7 000		
3 Received commission \$500 cash		
4 Received rent by cheque \$30 000		
5 Paid motor expenses in cash \$50		

#### Accounts linked to inventory

Inventory purchased for resale is normally sold at a price above that of the purchase price. This enables the business to make a profit. However, sometimes the selling price is below the cost price and this will result in a loss. Whether the business makes a profit or a loss, there is a difference in how inventory is valued:

- » Inventory bought will be valued at cost price.
- » Inventory sold (if the business is profitable) will be valued at selling price.

Hence, separate accounts must be opened, as shown in Table 3.2.

**Table 3.2** Accounts linked to inventory

When inventory increases		When inventory decreases	
Purchases account	This account is <i>debited</i> with the cost of goods bought for resale.	Sales account	This account is <i>credited</i> with the selling prices of goods bought for resale and now sold.
Sales returns account/Returns inwards account	This account is <i>debited</i> with the value of goods returned to the business by customers	Purchases returns account/Returns outwards account	This account is <i>credited</i> with the value of goods returned to suppliers

#### Purchases account

##### Key term

**Purchases** refer to the value of goods bought for resale. For example, to a used car dealer, a car bought for resale.

This account is used to record **purchases**, or goods bought by a trader for resale. The value of the goods will be recorded at cost price as a debit in the purchases account. Table 3.3 gives details of the double entries to be posted for purchases of goods for resale.

**Table 3.3** Double entries for purchases

Type of purchase of goods	Accounts affected
Goods purchased for cash	The purchases account will be debited and the cash account credited with the cost price of the purchases.
Goods purchased for cheque payment	The purchases account will be debited and the bank account will be credited with the cost price of the purchases.
Goods purchased on credit from a supplier.	The purchases account will be debited and the supplier's account will be credited with the cost price of the purchases.



Not all purchases go into a purchases account. The purchase of a non-current asset, for instance, will be debited to the asset account and *not* the purchases account. It is only when the business purchases goods or inventory for resale that the purchases account is debited. If a car was bought by a cake shop business, the purchases account would not be debited. Car account (a non-current asset account) would be debited.

### → Worked example 3

A business' purchases of goods for resale

2018	Transactions	Account to be debited	Account to be credited
Aug 1	Bought inventory paying by cash \$400	Purchases	Cash
Aug 10	Bought inventory paying by cheque \$300	Purchases	Bank
Aug 28	Bought inventory on credit from Bombastic Ltd \$670	Purchases	Bombastic Ltd
Aug 30	Paid Bombastic Ltd \$670 cash	Bombastic Ltd	Cash

In the example above, the supplier, Bombastic Ltd, is called a trade payable. When the debt is paid, this trade payable's account will be closed. Here are the ledger accounts for the transaction in Worked example 3.

#### Purchases account

Date	Details	\$	Date	Details	\$
2018			2018		
Aug 1	Cash	400			
Aug 10	Bank	300			
Aug 28	Bombastic Ltd	670			

#### Cash account

Date	Details	\$	Date	Details	\$
2018			2018		
			Aug 1	Purchases	400
			Aug 30	Bombastic Ltd	670

#### Bank account

Date	Details	\$	Date	Details	\$
2018			2018		
			Aug 10	Purchases	300

#### Bombastic Ltd account

Date	Details	\$	Date	Details	\$
2018			2018		
Aug 30	Cash	670	Aug 28	Purchases	670

## Sales account

Think about it!

Will the sale of a non-current asset be credited to the sales account? Give reasons for your answer.



Sales are defined as the sale of goods that were bought for resale by a trader. Though purchases are valued at cost price, sales are valued at selling price. The sales account is credited with the value of the sales revenue earned from the sale of inventory. Table 3.4 gives details of the double entries to be posted for the sale of inventory purchased for resale.

**Table 3.4** Double entries for sales

Inventory sold for cash	The cash account will be debited and the sales account will be credited with the selling price of the inventory sold.
Inventory sold for cheque payment	The bank account will be debited and the sales account will be credited with the selling price of the inventory sold.
Inventory sold to a customer, Selwyn Shoes, on credit	Selwyn Shoes, the customer, will be debited and the sales account will be credited with the selling price of the inventory sold.

## → Worked example 4

### Sale of goods purchased for resale

2018	Transactions	Account to be debited	Account to be credited
Sept 2	Sold inventory for cash \$4 000	Cash	Sales
Sept 10	Sold inventory \$300 receiving a cheque payment	Bank	Sales
Sept 20	Sold inventory to Mark Garments on credit \$280	Mark Garments	Sales

#### Sales account

Date	Details	\$	Date	Details	\$
2018			2018		
			Sept 2	Cash	4 000
			Sept 10	Bank	300
			Sept 20	Mark Garments	280

#### Cash account

Date	Details	\$	Date	Details	\$
2018			2018		
Sept 2	Sales	4 000			

Bank account					
Date	Details	\$	Date	Details	\$
2018			2018		
Sept 10	Sales	300			

Mark Garments account					
Date	Details	\$	Date	Details	\$
2018			2018		
Sept 20	Sales	280			

## Returns

Inventory purchased is sometimes returned for any of the following reasons:

- » The wrong size of the product was shipped.
- » The product did not match the catalogue description.
- » The customer ordered the wrong product.
- » Customers sometimes order more than they need to take advantage of bulk discounts and therefore may return products surplus to their needs.
- » The product was damaged.
- » The product was not delivered on time.

### Key info

When a return is made, the business to whom the return is made must acknowledge receipt of the return. They also must accept the reason for the return as being a valid reason. A note is sent to the person or business making the return, giving full allowance (refunding the whole amount) for the value of the goods returned.

The business could return goods to suppliers or a customer of the business could return goods to the business.

When the business returns goods to suppliers, a returns outwards or purchases returns account is opened. As the supplier is a creditor, the liability of the business (trade payables) will be reduced by the value of the goods returned to the supplier. The returns outwards account is credited with the value of the goods returned. The supplier's account is debited, showing the reduced liability.

Alternatively, customers of the business could return goods to the business. The account opened in this case is called the sales returns account or the returns inwards account. As the customer is a debtor, the debt now owing to the business will be reduced by the value of the goods returned by the customer. The sales return account will be debited. The customer's (trade receivables) account will be credited with the value of goods returned, therefore showing a reduction in the debt owing by this customer.

Table 3.5 summarises the entries and the accounts involved in a returns inventory.

**Table 3.5** Entries for return of inventory

Returns made	Account to be debited	Account to be credited
by customer	sales returns/returns inwards	customer's account
to supplier	supplier's account	purchases returns/returns outwards

## → Worked example 5

### Return of inventory

2018	Transactions	Account to be debited	Account to be credited
Oct 7	The business sold goods to Coventry Traders \$5 600 on credit	Coventry Traders	Sales
Oct 13	Purchased goods from Govinda Ltd \$500 on credit	Purchases	Govinda Ltd
Oct 19	Coventry Traders returned goods \$900, full allowance given	Sales returns/ return inwards	Coventry Traders
Oct 23	The business returned goods to Govinda Ltd \$80, full allowance given	Govinda Ltd	Purchases returns/return outwards

#### Coventry Traders account

Date	Details	\$	Date	Details	\$
2018			2018		
Oct 7	Sales	5 600	Oct 19	Sales returns	900

#### Sales account

Date	Details	\$	Date	Details	\$
2018			2018		
			Oct 7	Coventry Traders	5 600

#### Purchases account

Date	Details	\$	Date	Details	\$
2018			2018		
Oct 13	Govinda Ltd	500			

#### Govinda Ltd account

Date	Details	\$	Date	Details	\$
2018			2018		
Oct 23	Purchases returns	80	Oct 13	Purchases	500

#### Sales returns account

Date	Details	\$	Date	Details	\$
2018			2018		
Oct 19	Coventry Traders	900			

#### Purchases returns account

Date	Details	\$	Date	Details	\$
2018			2018		
			Oct 23	Govinda Ltd	80

### Activity 4

A business provides the information shown below. Copy and complete the table, naming the accounts to be debited and credited in the business' books.

Transactions	Account to be debited	Account to be credited
1 Purchased inventory for cash \$500		
2 Purchased goods on credit \$700 from Aslam Traders		
3 Purchased a motor vehicle paying by cheque \$6 980		
4 Sold goods for cash \$230		
5 Paid motor expenses in cash \$56		
6 Sold inventory on credit to Jalan and Sons \$239		
7 Returned goods to Aslam Traders \$34		
8 Jalan and Sons returned goods \$45		
9 Sold goods to Mason on credit \$4 500		
10 Mason returned goods to us \$450		

#### Think about it!

Work with a partner to answer these questions:

Would you want to compare the debit and credit sides of a debtor's account more often than at the end of a financial year? Why?

## Balancing ledger accounts and transfers to financial statements

At the end of each accounting period, the debit side of each account is compared with the credit sides.

Let us look at a debtor, Nevlin's account:

Nevlin's account					
Date	Details	\$	Date	Details	\$
2018			2018		
Sept 1	Sales	5 000	Sept 10	Cash	5 000
Sept 13	Sales	3 400	Sept 20	Bank	3 400

On inspection, the total debits equal the total credits. This means that Nevlin has paid us for all the goods sold to him on credit and therefore owes us nothing. His account should not appear in the statement of financial position because it is not necessary to show a figure for trade receivables if it is zero. Therefore, Nevlin's account is closed off. Here is how it is done:

Nevlin's account					
Date	Details	\$	Date	Details	\$
2014			2014		
Sept 1	Sales	5 000	Sept 10	Cash	5 000
13	Sales	3 400	20	Bank	3 400
		<u>8 400</u>			<u>8 400</u>

A double line should be drawn under the totals – it is called ruling off

A single line is drawn above both totals.

The totals should be written on the same line.

▲ Closing off an account

### 3 THE DOUBLE ENTRY SYSTEM OF BOOK-KEEPING

If an account has only one entry on each side and they are equal, then there is no need to write the total line. The account is simply ruled off. For example:

Nevlin's account					
Date	Details	\$	Date	Details	\$
2018			2018		
Sept 1	Sales	<u>5 000</u>	Sept 10	Cash	<u>5 000</u>

When the debit side is not equal to the credit side, then the difference is entered as a balance.

Here are the steps to follow to balance an account:

- 1 Total up the debit and credit sides. Write these total *in pencil* at the top of each column. It should be written in pencil as it is a part of your working.
- 2 Write the larger total on both sides of the account on the total line, with a single line above and a double line below.
- 3 Find the difference between the two totals and enter this on the side with the smaller total, just above the total line. This will make the two sides equal.
- 4 In the date column, enter the last day of the accounting period. In the details column, write the phrase 'balance carried down' or 'balance c/d'.
- 5 Now bring the balance down by writing the phrase 'balance brought down' or 'balance b/d'. This entry is made on the opposite side of the balance c/d. The entry will be dated the first day of the next accounting period and the amount will be the same as the balance c/d.

#### Key terms

A balance c/d on the credit side of an account represents a **debit balance**. It is the result of the total debits being more than the total credits.  
A balance c/d on the debit side of an account represents a **credit balance**. It is the result of the total debits being less than the total credits.  
A **personal account** is the account of a person or business.

Shaira's account					
Date	Details	\$	Date	Details	\$
2014		3 000	2014		5 000
Sept 1	Bank	3 000	Sept 10	Purchases	5 000
Sept 30	Balance c/d	<u>2 000</u>			
		<u>8 400</u>			<u>8 400</u>
			Oct 1	Balance b/d	2 000

▲ Balancing an account

## Interpreting ledger accounts and their balances

If the balance c/d is written on the credit side it is because the debit side of the account is more than the credit side. This is a **debit balance**. If a **personal account** has a debit balance, it would show that the person owes money to the business and is therefore a debtor. The totals of all the debit balances of customers will be transferred to the statement of financial position as trade receivables at the end of the financial year.

However, if the balance c/d occurs on the debit side, it would mean that the credit side of the account is more than the debit side. This is a **credit balance**.

#### Key info

The credit balance b/d for \$2 000 on October 1 in Shaira's account will start a new account for the month of October. An account usually starts with a balance b/d (if any) and ends with a balance c/d (if any).

**Key info**

Accounts should always be balanced and closed off at the end of each accounting period, regardless of the number of entries in the account.

If a personal account has a credit balance, it would show that the business owes money to the person. This person is therefore a creditor. The totals of all the credit balances of suppliers will be transferred to the statement of financial position as trade payables at the end of the financial year.

**Activity 5**

A business had the transactions shown below for the month of January 2018. Enter these transactions in the personal accounts (trade payables and trade receivables) *only*. Balance off each personal account at the end of the month, then state which of the balances represent trade receivables and which represent trade payables.

**2018**

Jan 1	Purchases on credit from S. Louis \$560, J. Kelly \$346, M. Mallasa \$289
Jan 3	Sales on credit to D. Makan \$570, R. Stoic \$720, B. Brambles \$890
Jan 6	Purchases on credit from J. Kelly \$876, M. Mallasa \$760, S. Po \$ 745
Jan 12	Sales on credit to B. Brambles \$560, R. Stoic \$850, S. Llama \$932
Jan 16	Return inwards from B. Brambles \$45, R. Stoic \$50
Jan 20	Goods returned to J. Kelly \$34, M. Mallasa \$56
Jan 22	Paid L. Louis by cheque \$560
Jan 25	S. Llama paid in cash \$932
Jan 29	Paid S. Po in cash \$745
Jan 30	D. Makan paid by cheque \$570

## Division of the ledger

The ledger contains the different accounts where the business transactions are recorded. Their balances are used in preparing financial statements at the end of the financial year.

As a business grows, the number of ledger accounts will also grow. Therefore, for convenience and good organisation, accounts of the same type are maintained together. Commonly, there are three divisions of the ledger: the sales ledger, the purchases ledger and the nominal (general) ledger.

### Sales ledger

The personal accounts of all the credit customers of the business are maintained in the sales ledger. The purpose of this ledger is to provide information about how many trade receivables the business has and the value of the debts owing to the business at any point of time. The total of the closing (debit) balances in all the trade receivables accounts, at the end of the financial year, makes up the trade receivables figure in the statement of financial position.

### Purchases ledger

The personal accounts of all the credit suppliers of the business are maintained in the purchases ledger. The purpose of this ledger is to provide information about how many trade payables the business has and the value of the debts owing to

them at any point of time. The total of the closing (credit) balances in all the trade payables accounts, at the end of the financial year, makes up the trade payables figure in the statement of financial position.

## Nominal (general) ledger

The cash account and all other accounts not contained in the sales and purchases ledgers are maintained in this ledger. The accounts of other assets and other liabilities, income, expenses, capital, sales, purchases and returns can be found in this ledger.

### Activity 6

- 1 Mia is a trader who maintains a full set of accounting records.
  - a State two reasons why Mia maintains accounts in different divisions of the ledger.
  - b Copy and complete the table and name the division of the ledger in which each account is found.

Account	Ledger
Premises	
Dolores, a credit customer	
Sales	
Purchases	
Return inwards	
Harvey, a credit supplier	
Rent	

- 2 Larry is a trader. His financial year ends on 31 December. Larry maintains a full set of double entry records. He maintains three ledgers: a sales ledger, a purchases ledger and a nominal (general) ledger. Name the division of the ledger in which each of the following accounts would appear.
  - a Sales account
  - b Reilly's account (a customer)
  - c Purchases account.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 B.K. Traders provided the following information:

	\$
Inventory	4 000
Equipment	10 000
Trade receivables	2 500
Trade payables	3 500
Bank overdraft	600



What was the value of total assets?

- A** \$15 600
- B** \$16 500
- C** \$17 100
- D** \$20 600

[1]

- 2** A customer, Neil, pays the business by cheque for goods previously bought by him on credit. Which entries record the payment in the business' ledgers?

[1]

	Account to be debited	Account to be credited
<b>A</b>	Trade payables	Bank
<b>B</b>	Bank	Trade payables
<b>C</b>	Bank	Trade receivables
<b>D</b>	Trade receivables	Bank

- 3** Kaye returned damaged goods to her supplier, Mungo. Which entries are made in Mungo's books?

[1]

	Account to be debited	Account to be credited
<b>A</b>	Sales returns	Kaye
<b>B</b>	Purchases returns	Kaye
<b>C</b>	Kaye	Purchases returns
<b>D</b>	Kaye	Sales returns

- 4** Machinery was purchased on credit. Which entries are made to record this? [1]

	Account to be debited	Account to be credited
<b>A</b>	Machinery expenses	Trade payables
<b>B</b>	Trade payables	Machinery expenses
<b>C</b>	Machinery	Trade payables
<b>D</b>	Machinery	Cash

- 5** Which balance will be recorded as an asset in a statement of financial position?

- A** A credit balance on the bank account
- B** A credit balance on a supplier's account
- C** A debit balance on the drawings account
- D** A debit balance on a customer's account

[1]

The marks allotted to the structured questions on the next page are a guide to the length of time that should be taken to complete them.



### 3 THE DOUBLE ENTRY SYSTEM OF BOOK-KEEPING

- 6 On 1 August 2018 Nelly had the following transactions:
- Paid \$100 cash into the bank.
  - Transferred private computer \$500 to the business office for use by the staff.
  - Took cash, \$300, as drawings.
  - Paid a creditor, Jason, \$120 by cheque.
  - Paid electricity bill \$300 for the month of July by credit transfer.

Copy and complete the table below, stating the double entry needed to record *each* transaction. The first has been completed as an example. [8]

	Account debited	\$	Account credited	\$
1	Bank	100	Cash	100
2				
3				
4				
5				

- 7 Kelsey is a trader who makes both cash purchases and credit purchases. She provided the following information.

<b>At 1 January 2018</b>	<b>\$</b>
Amount owing to Josh, a credit supplier	1 500
<b>During the year ended 31 December 2018</b>	
Jan 17 Amount paid by cheque for inventory	300
Feb 1 Rent received in cash	2 000
Feb 3 Payment made to Josh for the amount owing	
Jun 29 Rent received by cheque	500
Nov 28 Inventory bought on credit from Josh	3 700

- a Prepare the following accounts in Kelsey's ledgers for the year ended 31 December 2018 and balance off the accounts. [14]
- Purchases account
  - Josh's account
  - Rent receivable account
- b State whether Josh is a creditor or debtor. [1]
- 8 Sahira Ali is a trader. Her ledger is divided into a sales ledger, a purchases ledger and a nominal (general) ledger. [2]
- a State two advantages of dividing the ledger into these three sections. [1]
- b Name one account which would appear in the nominal (general) ledger. [1]

On 1 October 2014 Sahira Ali's trade payables included the following:

	<b>\$</b>
Waheed Khan	390
Iqbal Wholesalers	650

Sahira Ali's transactions for October 2014 included the following:

Oct 5	Purchased goods on credit from Iqbal Wholesalers, \$280
Oct 13	Purchased goods on credit from Waheed Khan, list price \$420, less 20 per cent trade discount
Oct 16	Returned goods, list price \$210, to Waheed Khan
Oct 24	Sent a cheque for \$380 to Waheed Khan in full settlement of the amount owing on 1 October
Oct 31	Iqbal Wholesalers charged \$6 on the overdue account

- c Prepare the following accounts in the ledger of Sahira Ali for the month of October 2014. Balance the accounts and bring down the balances on 1 November 2014.

i Waheed Khan account

ii Iqbal Wholesalers account

[9]

(Adapted from Cambridge IGCSE Accounting 0452/21, October/November 2014, Q1)

- 9 Imran is a trader. The following information is available about Hannah, a credit customer.

Mar 1	Owed Imran \$200
Mar 6	Purchased goods, list price \$320, less 20 per cent trade discount
Mar 12	Returned goods with a list price of \$80
Mar 28	Paid the balance due on 1 March after deducting a cash account of 2 per cent

Prepare Hannah's account for March in the books of Imran. Balance the account on 31 March and bring down the balances on 1 April.

[7]

(Adapted from Cambridge IGCSE Accounting 0452/11, May/June 2013, Q3 a & b)

- 10 On 1 July 2013 a trader had the following transactions:

- Received \$800 by cheque from subletting premises.
- Took goods costing \$200 for his own use.
- Received \$600 by cheque in full settlement of a debt of \$625 from Tabitha, a credit customer.
- Sold goods costing \$1 000 on credit to Samir for \$1 400.

Complete the table below showing how these transactions are recorded.

The first one has been completed as an example.

[7]

Transaction	Debit entry		Credit entry	
		\$		\$
1	Bank	800	Rent receivable	800
2				
3				
4				

(Adapted from Cambridge IGCSE Accounting 0452/13, October/November 2013, Q6)

#### ? Chapter review questions

- 1 State what is meant by an asset.
- 2 State the difference between a non-current asset and a current asset.
- 3 State what is meant by a liability.
- 4 State the difference between a non-current liability and a current liability.
- 5 Name two accounts which would appear in the nominal (general) ledger.
- 6 Name the division of the ledger in which a sole trader will maintain his customers' accounts.
- 7 Mai Ling is a baker. Suggest one item she would include in her non-current assets.
- 8 Sally is a trader. The following account appeared in her ledger:

Vera's account					
Date	Details	\$	Date	Details	\$
2018			2018		
Jan 10	Returns	35	Jan 1	Balance b/d	440
Jan 19	Bank	226	Jan 6	Purchases	650
	Discount	13			

- a State the division of Sally's ledger in which the above account would appear.
  - b Explain the entry on 10 January and state where the double entry would be made in Sally's accounts.
- 9 Melania is a trader. She paid her home electricity invoice from her business bank account. State how this payment was recorded in Melania's books of account.

Account debited	Account credited

#### Revision checklist

In this chapter, you have learnt:

- ✓ how a double entry system is used
- ✓ what accounts are and how to prepare them
- ✓ what a ledger is and how it is used
- ✓ a business can use three different divisions of the ledger
- ✓ what a 'T' account is and how to use it
- ✓ how to enter an owner's transactions using double entry
- ✓ when accounts should be debited and credited
- ✓ how to make double entry records for inventory
- ✓ when and how to prepare the purchases, sales, sales returns and purchases returns accounts
- ✓ how to close off accounts
- ✓ how to balance ledger accounts.



# Business documents

By the end of this chapter you will be able to:

- ★ recognise and understand the following business documents: invoice, debit note, credit note, statement of account, cheque and receipt
- ★ complete pro-forma business documents
- ★ understand the use of the following business documents as sources of information: invoice, credit note, cheque counterfoil, paying-in slip, receipt and bank statement.



## Business documents

Business documents are documents that a business uses to source financial data for use in accounting records.

Business documents are:

- » invoices
- » notes (debit and credit)
- » statements of account
- » cheques
- » receipts
- » bank statements.

### Key terms

A **sales invoice** is a copy of an invoice retained by a seller when a credit sale is made.

A **purchases invoice** is the invoice received by a customer for a credit purchase made.

### Key info

A cash sale will generate a cash receipt.



### Key terms

A **cash discount** is given to customers for paying their debts promptly.

A **trade discount** is given to customers who buy in bulk. It is a deduction on the list price.

The **list price** is the price at which the trader usually sells the product.

## Invoices

Invoices are used by a business at the time of a credit sale. The customer who receives the original invoice uses it as a record of his/her credit purchases. The supplier keeps a copy of the invoice as a record of his/her credit sales. Hence, the same document can be a **sales invoice** or a **purchases invoice**.

Though each business may have its own version of an invoice, all invoices should contain the following information:

- » the seller's name and address
- » the buyer's name and address
- » the date
- » a clear description of the goods or service supplied, including price and quantity.

Before we look at an example of an invoice, it is necessary to distinguish between a **cash discount** and a **trade discount**. A cash discount is a discount given to customers for prompt payment. It is recorded in the books of accounts. A trade discount, which is shown as a deduction on the **list price** in an invoice, is not documented in accounting records. A trade discount is given to customers who buy in bulk or who have been long-standing customers.

### → Worked example 1

#### Invoice

		From: Mason & Son 23 Lakeview	
Invoice No. 235/A		12 July 2018	
To: Ace & Company 45 Park Street			
Description	Quantity	Price per unit	Amount
Copper wire	2 rolls	\$ 30	\$ 60
Insulation tape	1 roll	10	10
			70
			Less 10% discount 7
		Invoice total	63
Terms: Cash discount of 2% if account paid by 31 August 2018			

#### Think about it!

Working in pairs, brainstorm reasons why a supplier would give a customer a trade discount.

#### Study tip

It is always a good idea to show your working.

#### Working

Total due for copper wire = 2 rolls × \$30 = \$60

Total due for insulation tape = 1 roll × \$10 = \$10

Total of goods sold = \$60 + \$10 = \$70

Trade discount = 10% × 70 = \$7

Invoice total = \$70 – \$7 = \$63

### Activity 1

- 1 Look at the invoice shown in Worked example 1 above.
  - a State the name of the seller sending the invoice.
  - b State the name of the customer receiving the invoice.
  - c State the rate of trade discount mentioned in the invoice.
  - d State the rate of cash discount mentioned in the invoice.
  - e Calculate the amount due if paid before 31 August 2018.
  - f State the amount due if paid after 31 August 2018.
  - g State two differences between trade discount and cash discount.
  - h State which accounts will be debited and credited in the books of Mason & Sons.
  - i State which accounts will be debited and credited in the books of Ace & Company, if the materials bought are goods for resale.

- 2 Copy and complete the missing items (words or figures) A to G shown on the invoice below.

H. Hussein 3 Manuka Popuri		J. Ali 14 Penny Road 15 April 2018	
Item	Quantity	Price per unit	Total
Mattresses	4	\$ 1 200	A _____
Beds	B _____	550	3 300.00 C _____
Less		D _____ discount @ 2%	E _____
			F _____
Terms: 2½% G _____ discount for settlement within 14 days			

## Debit and credit notes

The primary aim of a note is to document returns or overcharging. If goods received by customers are not what they ordered by way of quantity or quality, or if they are damaged and faulty, then those goods will be returned. The note gives the supplier information of any shortages or the value of the faulty goods being returned. Every business will have its own style of note, but it must contain the following information:

### Key info

The amount in a note should reflect the trade discount allowed at the time of the credit purchase.

- » the seller's name and address
- » the buyer's name and address
- » the date
- » a clear description of the goods or service returned or overcharged, including price, quantity and total value. The price mentioned in the debit note should be the price charged by the supplier, so if a trade discount was allowed, this should be deducted from the price.

There are two types of notes: debit notes and credit notes.

### Debit notes

A debit note is a document issued by a customer to a supplier when returning goods originally bought on credit. A debit note is a request to the seller to reduce the total of the original invoice and issue a credit note; therefore, no entries are made in the accounting records when a debit note is received for returns.

A debit note can also be issued by a seller instead of an invoice to revise (upwards) the amount of an invoice already issued. This happens when the original invoice amount was incorrectly calculated. In this case, the supplier as well as the customer will make accounting entries to record the debit note in the same way as the original invoice was recorded and the customer's account will be debited in the books of the seller.



## → Worked example 2

### Debit note

C. Cassidy Union Drive Manley	Debit No. 15	M. McKenzie 27 Lakeside Manley	6 December 2018
<b>Details</b>	<b>Quantity</b>	<b>Price</b>	<b>Amount</b>
Dining sets	5	\$ 300.00	\$ 1 500.00
			<i>Less 2% trade discount</i> 30.00
		Invoice total	<u>1 470.00</u>
Reason for return: Wrong size supplied Please issue a Credit Note			

### Working

Value of dining sets returned =  $5 \times 300 = \$1\,500$

Trade discount =  $2\% \times 1\,500 = \$30$

Debit note total =  $1\,500 - 30 = \$1\,470$

## Activity 2

- 1 Answer the following questions regarding the debit note in Worked example 2 above:
  - a State the name of the person sending the note.
  - b State the name of the person receiving the note.
  - c State the rate of trade discount mentioned in the note.
  - d State two reasons why a buyer may send a debit note to a seller.
- 2 Copy and complete the missing items (words or figures) A to E shown on the debit note below.

To: Billy Hue 14 Novel Way Gensing	Debit Note 3	From: M. Mans Kellyworld	15 April 2019
<b>Item</b>	<b>Quantity</b>	<b>Price per unit</b>	<b>Total</b>
Cotton thread	2 reels	\$ 1.50	A _____
Packets of needles	B _____	4.00	80.00
			83.00
Less C _____		Discount @ 1%	D _____
			E _____

## Credit notes

A credit note is issued by a supplier to a customer acknowledging the receipt of goods returned and letting the customer know the value of full allowance being given for goods returned. A credit note could also be issued by a supplier to a customer when there has been an overcharge on an invoice for goods bought on credit. In either case, a credit note results in the customer's account being credited in the supplier's books. The customer who receives the original credit note uses it as a source document to record the purchases return. The supplier uses a copy of the credit note as a source document to record the sales return.

### → Worked example 3

#### Credit note

This is an example of a credit note that would be sent by C. Cassidy in exchange of the debit note issued by his customer, M. McKenzie, for goods returned:

M. McKenzie 27 Lakeside Manley		Credit note number: C 23/M	C. Cassidy Union Drive Manley 15 January 2019	
Details	Quantity	Price	Amount	
Dining sets	5	\$	\$	
		300.00	1 500.00	
		Less 2% trade discount	<u>30.00</u>	
		<u>1 470.00</u>		
Reason for issue of credit note: Wrong size supplied				

### Activity 3

- 1 Answer the following questions regarding the credit note in Worked example 3 above:
  - a State the name of the person sending the note.
  - b State the name of the person receiving the note.
  - c State the rate of trade discount mentioned in the note.
  - d State two reasons why a supplier may send a credit note to a customer.
  - e State the account to be debited and the account to be credited in C. Cassidy's books.
  - f State the account to be debited and the account to be credited in M. McKenzie's books.



- 2 Copy and complete the missing items (words or figures) A to E shown on the credit note below.

To: Li Chen 12 Flamorgan Hushev		Credit note number C56	From: N. Raj Jenking
			24 May 2018
Item	Quantity	Price per unit \$	Total \$
Chairs	10	45.00	A _____
Antique table lamps	B _____	100.00	800.00
			1 250.00
Less	C _____	Discount @ 4%	D _____
			E _____

## Statement of account

Suppliers usually send a monthly statement of account to their customers. It is a summary of a customer's account activity, showing credit purchases, discounts allowed, returns and payments made during the month. It is a copy of the customer's account in the supplier's books. The purpose of a statement of account is to remind customers of the amount due to their suppliers. The customer can also use the statement of account to check the statement against their own records to ensure that no errors have been made by either the supplier or themselves. Every business will have its own style of statement of account, but it must contain the following information:

- » the supplier's name and address
- » the customer's name and address
- » the date (usually the last day of the month)
- » the opening balance, showing the amount owing at the start of the accounting period
- » invoices and credit notes issued
- » cash discounts allowed (if any)
- » payments received
- » the balance owing at the end of the accounting period (usually a month).

### → Worked example 4

Lima Furniture Suppliers				30 June 2018
34 Lake Road, Taka				
Kelston Retailers				
Kelston Road, Kelston				
Date	Details	Debit	Credit	Balance
2018		\$	\$	\$
Jun 1	Balance b/d	3 400		3 400 (dr)
Jun 6	Invoice 34/f	2 400		5 800(dr)
Jun 10	Note 5/g		300	5 500(dr)
Jun 15	Cheque 6700-00		4 500	1 000(dr)
Jun 20	Invoice 55/j	1 000		2 000(dr)
Amount due: \$2 000				
Terms: 2.5% cash discount if account is paid by 31 July 2018				

As the statement is a reproduction of an account already maintained by both the supplier and the customer, no entries are made in either of their accounting records, unless there is an error to be corrected.

### Activity 4

- 1 State one purpose of a statement of account.
- 2 Complete the statement of account below for M. Molly, 27 Crescent Drive, Timbucto, who is a debtor of A. Solly, 34 Lake Drive, Solento.

<b>2018</b>				
Jul 1	Balance brought forward \$450			
Jul 7	M. Molly purchased \$370 goods on credit, invoice no 45/GM			
Jul 15	M. Molly paid A. Solly \$400 by cheque no 4500-00			
Jul 27	M. Molly returned goods worth \$35, full allowance given, Note X/34			
Jul 28	M Molly paid A. Solly \$335 cheque no 4500-23			
M. Molly 27 Crescent Drive Timbucto				Date:
<b>Date</b>	<b>Details</b>	<b>Debit</b>	<b>Credit</b>	<b>Balance</b>
2018		\$	\$	\$
Jul 1	Balance b/d			450 (dr)
Jul 7	Invoice 45/GM			
Jul 15			400	
Jul 27	Note X/34			
Jul 28	Cheque 4500-23			
Amount due _____				
Terms: 2.5% cash discount if account is paid by 31 August 2018				

## Cheque

### Key terms

A **standing order** enables a business to order its bank to pay a certain set amount of money regularly at a stated date to an individual or an organisation.

A **paying-in slip** is a small document that a person depositing money (depositor) fills in with the date and amount of money being paid by them into their bank account. Details such as the depositor's bank account number, the date and the details of the cash (notes and coins) and cheques deposited are included.

Most businesses today use electronic transfers and **standing orders** to make payments. However, some businesses still use the traditional method of payment – a cheque. A cheque is a signed unconditional order to a bank to pay a stated sum from the issuer's savings or current account. The payee (the person to whom the cheque has been issued) will receive payment in a way that is safe and convenient.

A book of pre-printed cheques is issued to a customer by a bank. All that the customer must do is to fill in the date, the amount in words and figures and the supplier's name. The cheque should be signed by the customer and this signature should match the one the bank has in its records. Each cheque has a perforated edge that allows it to be detached from its counterfoil. The counterfoil remains in the cheque book and is used as a source document by the payer (the customer) to record the payment in their accounting records.

When the cheque is deposited in the bank, a **paying-in slip** is completed. This slip also has a counterfoil which is completed as well. This counterfoil is used by the supplier as a source document to make entries in the cash book.



▲ An example of a cheque and its counterfoil

## Receipt

A receipt is a formal written acknowledgement that a business has received money in payment following a sale. It shows the date, goods or services sold, prices, the total amount paid and the method of payment. A cash receipt is usually provided to a customer who pays in cash. This cash receipt serves as a source document for entries in the cash books of the customer.

## Bank statement

A bank statement is a record that summarises all the transactions in the business' bank account since the previous statement. The statement is sent to the business typically on a fixed date every month and lists the deposits, withdrawals, credit transfers, standing orders, bank charges, interest paid and earned, cheques paid into the bank and cheques paid out of the bank account. It also includes the statement date, the transaction date for each transaction, the statement period, the business' name and account number.

The statement starts with the opening balance from the previous month. Added to it are all the transactions during the month resulting in a closing balance. The transactions on a statement are listed in date order. Businesses should check their statement

<b>RECEIPT</b>		№ 000001	
DATE _____			
FROM _____		\$ _____	
		DOLLARS	
<input type="radio"/> FOR RENT <input type="radio"/> FOR _____			
ACCT.		<input type="radio"/> CASH	
PAID		<input type="radio"/> CHECK	
DUE		<input type="radio"/> MONEY ORDER	
		<input type="radio"/> CREDIT CARD	
FROM _____ TO _____		BY _____	

▲ An example of a receipt

for any errors which can be detected when reconciling their own records with the bank statement (see Chapter 8).

Businesses use the bank statement to keep track of their finances. Regular monitoring will help the business avoid overdraft fees and detect errors or fraud in time.

FIRST BANK OF MIKI				
13 James Street Vic				
May Jones		CURRENT ACCOUNT STATEMENT		Page 1 of 1
25 Dune Street Vic		Account No. 0005-145-568-00		Statement period 01/01/2019 to 31/01/2019
		Withdrawals	Deposits	Balance
2019		\$	\$	\$
Jan 1	Balance b/d			3 000.00
Jan 4	Cheque 10987	500.00		2 500.00
Jan 13	Deposit		500.00	3 000.00
Jan 16	Cheque 2056	100.00		2 900.00
Jan 17	Bank transfer: Noel		400.00	3 300.00
Jan 18	Deposit		450.00	3 750.00
Jan 31	Bank charges	100.00		3 650.00
<b>Totals at end of period</b>		<b>700.00</b>	<b>1 350.00</b>	<b>3 650.00</b>

### Key term

A **bank transfer** takes place when funds are transferred from one bank account to another by electronic means.

▲ An example of a bank statement

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- Which source document issued by a business is used to prepare the sales return account?  
 A Credit note  
 B Debit note  
 C Sales invoice  
 D Statement of account [1]
- Roxy ordered 200 computer components from Pooja. Each component was priced at \$20.95. Pooja allowed a trade discount of 5 per cent. What was the total of the invoice that Roxy received?  
 A \$3 580.90  
 B \$3 890.50  
 C \$3 950.80  
 D \$3 980.50 [1]



- 3 Which document will a supplier issue to a customer who has been overcharged for goods supplied on credit?

A Credit note  
 B Debit note  
 C Sales invoice  
 D Statement of account

[1]

- 4 Lal had the following business transactions with Neena, a new customer:

		\$
Jun 1	Good invoiced to Neena	4 000
Jun 10	Cheque received from Neena	3 000
Jun 20	Credit note issued to Neena	600
Jun 29	Goods invoiced to Neena	3 200

How much did Neena owe Lal on June 30?

A \$3 600  
 B \$4 200  
 C \$6 600  
 D \$10 400

[1]

- 5 Regina sold goods to Kareena at a list price of \$5 000. Regina has allowed Kareena a trade discount of 5 per cent and a cash discount of 2 per cent. What was the amount of the invoice sent to Kareena by Regina?

A \$4 566  
 B \$4 570  
 C \$4 655  
 D \$4 750

[1]

The marks allotted to the structured questions below are a guide to the length of time that should be taken to complete them.

- 6 Hirosh is a supplier and one of her credit customers is Jay Ling. Jay Ling's account as it appears in Hirosh's ledger is shown below.

Date	Details	\$	Date	Details	\$
2018			2018		
May 1	Balance b/d	3 400	May 15	Bank	3 000
May 7	Sales	4 900	May 17	Sales returns	1 000
May 19	Sales	2 500	May 27	Bank	2 000
			May 27	Discount allowed	400
			May 31	Balance c/d	4 400
		<u>10 800</u>			<u>10 800</u>

- a Prepare a statement of account for Hirosh to send to Jay Ling. [5]  
 b State whether the balance at 31 May is a debit balance or a credit balance. [1]



**7 a** Insert the missing figures in the following document. [3]

CREDIT NOTE			
Vijay Singh 11 North Road Lowtown		Jai Kapur 44 West Street Hightown	
		25 April 2015	
Quantity	Description	Unit price	Amount
4	External doors	\$ 55	\$ 220
	Less <b>A</b> _____ % trade discount		33
			<b>B</b> _____
20 metres	Floorboards	1.50	<u>30</u>
			<b>C</b> _____

- b** Name the person who issued the credit note. [1]  
**c** Suggest one reason for the issue of the credit note. [1]  
**d** Name the document which would have been issued to request a credit note. [1]  
**e** Complete the following table to show where the credit note would be recorded. [4]

Books of Jai Kapur		Books of Vijay Singh	
Account debited	Account credited	Account debited	Account credited

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2015, Q2)

- 8** Sam Sumo received a statement of his account with the Eastern Commercial Company at 30 September 2010.
- a** State one purpose of sending a statement of account to a customer. [2]  
 Sam's statement was as follows.



EASTERN COMMERCIAL COMPANY				
STATEMENT OF ACCOUNT				
Sam Sumo			30 September 2010	
Date	Detail	Dr	Cr	Balance
		\$	\$	\$
Sept 1	Balance b/f	400.00		400.00
Sept 7	Sales – invoice 301	56.50		456.50
Sept 12	Sales – invoice 330	217.00		673.50
Sept 19	Sales returns – credit note 29		16.50	657.00
Sept 28	Bank – Sam Sumo		392.00	265.00
Sept 30	Balance c/f			265.00
Terms: 2% discount for settlement within 21 days				

- b i** State why Sam paid \$392 on 28 September when the balance brought forward on 1 September was \$400. [1]
- ii** State whether this payment was for the correct amount. Give a reason for your answer. [3]

On 19 October 2010 Sam deducted the discount offered from the balance on the statement dated 30 September 2010 and paid the net amount which he considered was due.

- c i** Calculate the amount Sam deducted from the balance due at 30 September. Show your workings. [3]
- ii** State the net amount which Sam paid on 19 October. [3]
- d** Show the entries in the Eastern Commercial Company's accounts for the month of September to record each of the transactions shown in the statement of account. Balance Sam Sumo's account at 30 September. [10]
- e** Sam wishes to take advantage each month of the discount terms offered by the Eastern Commercial Company. Explain how Sam can ensure he obtains the discount each month. [2]

(Adapted from Cambridge IGCSE Accounting 0452/11, October/November 2010, Q4)

- 9 Ian McDonald buys goods from Fiona Fraser. The following document was issued at the end of April 2011.

STATEMENT OF ACCOUNT				
Fiona Fraser				
Unit 12 Newton Industrial Estate				
Bradleyford				
Ian McDonald			30 April 2011	
High Street				
Seatown				
Date	Reference	Debit	Credit	Balance
		\$	\$	\$
2011				
Apr 1	Balance	100.00		100.00
Apr 4	Interest charged	2.00		102.00
Apr 19	Cheque		102.00	0
Apr 22	Invoice 496	250.00		250.00
Apr 27	Credit note 202		20.00	230.00
The last amount shown in the balance column is the amount now due.				
Terms: 2% cash discount if amount paid within 14 days of date of statement.				

- a State the purpose of a statement of account. [1]  
b Name the person who issued the above statement of account. [1]

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2011, Q1)

- 10 Briscow has a hardware business and buys inventory on credit. He receives purchase invoices from his suppliers.  
a Name the book of prime entry in which Briscow will enter his purchase invoices. [1]  
b Briscow has received a purchase invoice from a supplier. Certain items are missing from the invoice but it is possible to complete the missing items from the other information.

Complete the missing items (words or figures) A–G on the supplier's invoice.



Global Supply Company			
Sales invoice			
Briscow		15 September 2011	
Quantity	Description	Unit price	Total
		\$	\$
100	Fastenings	2.50	250.00
250	Long screws	A _____	112.50
1 000	Boltheads	0.75	750.00
50	Wall fixings	3.00	150.00
B _____	Angles	2.80	210.00
500	Wood nails	0.30	150.00
Less D _____	E _____ discount		C _____
			F _____
			_____
		Total	1 557.60
Terms: $2\frac{1}{2}\%$ G _____ discount for payment within 14 days of invoice			

(Adapted from Cambridge IGCSE Accounting 0452/13, October/November 2011, Q3)

11 Joe's business had the following assets and liabilities on 31 March 2011:

	\$
Non-current assets	120 000
Liabilities due within one year	25 000
Current assets	35 000
Liabilities due in over one year	50 000

a Calculate the capital and capital employed. [2]

During the month of April 2011, Joe recorded the following transactions:

- i Bought goods on credit from Henry, \$200.
- ii Sold goods costing \$300, to Mary for the selling price of \$500, on credit.
- iii Sent Henry a cheque for \$190 in full settlement of his debt of \$200.
- iv Mary returned goods with a selling price of \$50.

b Complete the grid below and show the amount and effect on capital of each transaction. The first transaction has been completed as an example. [12]

Transaction	Book of prime entry	Accounts to be debited	Accounts to be credited	Effect on capital
i	Purchases journal	Purchases	Henry	\$ Nil
ii				
iii				
iv				

- c State the purpose of the three documents used in transactions 2 to 4 above.

- i invoice [2]  
 ii Cheque counterfoil [2]  
 iii Credit note [2]

(Adapted from Cambridge O Level Accounting 7110/21, May/June 2011, Q1)

## ? Chapter review questions

- Define and explain the purpose of each of the following source documents:
  - Invoice
  - Credit note
  - Debit note
  - Statement of account
- It was discovered that a credit customer had been charged \$65 for a purchase instead of \$56. Name the document issued by the supplier to correct the error.
- Name the document issued to a customer by a supplier of goods on credit.
- The table below shows the sales figures for Karamba Retailers for the year ended 30 June 2019. State the amount of the credit entry in the sales account?

Goods	Trade discount	Net
\$	\$	\$
50 000	2 700	47 300

- State one reason why a supplier might allow a trade discount to a customer.
- ABC Ltd supplies goods to Jonas and Sons. Jonas and Sons owe ABC Ltd \$450 on 1 June. Below is an invoice that was sent to Jonas and Sons for additional goods purchased.
  - Complete the invoice below.

		<b>Sales Invoice</b>		3 June 2019
		ABC Ltd		
Jonas and Sons		Invoice no. 2598		
Uniqueville				
<b>Description</b>	<b>Quantity</b>	<b>Price</b>	<b>Total</b>	
			\$	
Lighting units	6	30.00 each	A _____	
Wooden cases	21	10.00 each	B _____	
		Total	C _____	

- Jonas and Sons returned some damaged goods to ABC Ltd. Complete the credit note below.

		<b>Credit Note no 258/Y</b>		16 June 2019
		ABC Ltd		
A _____				
<b>Description</b>	<b>Quantity</b>	<b>Price</b>	<b>Total</b>	
		\$	\$	
Lighting units	2	30.00 each	B _____	
Wooden cases	4	10.00 each	C _____	
		Total	D _____	



- c Jonas and Sons paid the amount owed at the beginning of June by cheque no. 7008 on June 25 and received 2 per cent cash discount. Calculate the discount and the amount of the cheque.
- d Complete the following statement of account prepared by ABC Ltd and sent to Jonas and Sons. (Refer to questions 6a, 6b and 6c above to help you.)

ABC Ltd			Date:	
Statement of Account				
To: _____				
Date	Details	Dr	Cr	Balance
2019		\$	\$	\$
Jun 1	Balance b/d			450 (dr)
Jun 3	Invoice 2598			
Jun 16	Note 258/Y			
Jun 25	Cheque 7008			
	Discount			
Amount due \$ _____				
Terms: Cash discount of 2% if paid within 30 days				

- 7 On 4 June 2018 Kusum received the document below from her supplier, Lui Ltd.

Lui Ltd		31 May 2018		
27 Ji Lang Lane, Shanghai				
Kusum 5 Ki Street Kan Town				
Date	Details	Dr	Cr	Balance
2018		\$	\$	\$
May 1	Balance b/d	2 500		2 500 (dr)
May 15	Sales	500		3 000 (dr)
May 21	Sales Returns		50	2 950 (dr)
May 29	Bank		950	
May 29	Discount		50	

- a Name the above document.
- b Calculate the balance amount due from Kusum to Lui Ltd on 31 May 2018. Show your workings.
- c State the names of the source documents sent by Lui Ltd to Kusum for the following transactions:

Date	Name of source document
May 15	
May 21	

- d Calculate the percentage rate of the discount allowed to Kusum on 29 May 2018. Show your workings.

## Revision checklist



In this chapter, you have learnt:

- ✓ to recognise the following business documents: invoice, debit note, credit note, statement of account, cheque and receipt
- ✓ to prepare the following business documents: invoice, debit note, credit note, statement of account, cheque and receipt
- ✓ what a pro-forma business document is
- ✓ the difference between a sales and purchases invoice and a debit and credit note
- ✓ how business documents are used as sources of information: invoice, credit note, cheque counterfoil, paying-in slip, receipt and bank statement.
- ✓ when the following business documents are sent: invoice, debit note, credit note, statement of account, cheque and receipt
- ✓ how to use business documents as a source of information for maintaining books of accounts
- ✓ why a trade discount is mentioned in an invoice and how it is different from a cash discount
- ✓ what a bank statement is and how it is used.

# Books of prime entry



By the end of this chapter you will be able to:

- ★ explain the advantage of using various books of prime entry
- ★ explain the use of, and process, accounting data in the books of prime entry: cash book, petty cash book, sales journal, purchases journal, sales returns journal, purchases returns journal and the general journal
- ★ post the ledger entries from the books of prime entry
- ★ distinguish between and account for trade discount and cash discounts
- ★ explain the dual function of the cash book as a book of prime entry and as a ledger account for bank and cash
- ★ explain the use of and record payments and receipts made by bank transfers and other electronic means
- ★ explain and apply the imprest system of petty cash.

## Advantage of using books of prime entry

### Key terms

A **book of prime entry** is a book where transactions are first listed in date order. These entries are later posted to ledger accounts, using the double entry system of book-keeping. A **cash book** contains the bank and cash accounts of a business. It may be a two-column cash book, or a three-column cash book if it records discounts.

Ledger accounts are the sources of information from which financial statements are prepared. However, if a business were to update them after every transaction, the accounts in the nominal (general) ledger would be overcrowded. Therefore, **books of prime entry** are used.

A book of prime entry is a book in which transactions are recorded before they become a part of the double entry system of book-keeping. This saves time and aids accuracy.

As we will see, it is not necessary to remember which account to debit or which to credit when making an entry in a book of prime entry. Instead of having to make double entries each time a transaction takes place, most of these subsidiary books allow for month end totals to be posted. These books serve as a device for listing the transactions as they take place, before they are forgotten. Books of prime entry can be maintained by several people, which allows for more accuracy and fewer errors.

The advantages of using books of prime entry can be briefly summarised as follows:

- » They prevent the accounts in the nominal (general) ledger from being overcrowded.
- » They are a quicker way to record transactions.
- » There are fewer errors.

The books of prime entry are:

- » the **cash book**
- » the petty cash book
- » the sales journal
- » the sales returns journal (or returns inwards journal)
- » the purchases journal
- » the purchases returns journal (or returns outwards journal)
- » the general journal.



**Key info**

A debt does not have to be paid in cash to qualify for a cash discount. It could be paid by cheque or a bank transfer. It is the time factor that is important, not the mode of payment. As long as payment is made within the time period for it to qualify for a cash discount, a cash discount will be given.

The nature of the transaction dictates which book it should be recorded in. Therefore, credit sales are entered in the sales journal, whereas cash sales will be recorded in the cash book. Credit purchases will be recorded in the purchases journal and purchases returns in the purchases returns journal.

**Activity 1**

State two reasons why a book of prime entry is used to make entries before transactions are recorded using double entry in ledgers.

**Key terms**

**Discounts received** are cash discounts allowed by a supplier to a business when payment is made within the qualifying period. It is an income.

**Discounts allowed** are cash discounts given to a customer by a business for prompt payment. It is an expense incurred by the business for having its debts settled promptly.

**Trade discounts and cash discounts**

A cash discount is a discount given to customers for prompt payment. Cash discounts are recorded in the books of accounts. If the discount is given by a supplier to the business for prompt payment, then it will be recorded in a **discounts received** account. If the discount is given to a customer by the business, for prompt payment, then it will be recorded in the **discounts allowed** account. The rate of discount is stated as a percentage and will be mentioned in all sales documents as an incentive to customers to pay within a specified period.

Cash discounts are included in the profit and loss section of the income statement and not in the trading account. Discounts allowed are an expense and discounts received, an income. These discounts do not affect the cost of goods sold or the sales revenue in the trading account.

A trade discount, which is shown as a deduction on the list price in an invoice, is not documented in accounting records. A trade discount is given to customers who buy in bulk. Regular customers are often rewarded with a trade discount too. It is common for a manufacturer to quote a list price and then offer different customers differing reductions in the price by way of trade discounts.

**Study tip**

Remember, when the amount paid by a customer in full settlement is less than the amount owed, the difference is a cash discount. In this case, it is a discount allowed.

**Activity 2**

- 1 Calculate the cash discount at 4 per cent on \$4 500 owed. Then calculate the amount to be paid by cheque after deducting the cash discount.
- 2 M. Maney owed the business \$500. He paid \$490 in full settlement. Calculate the rate of discount?
- 3 The business receives \$95 in full settlement of an account after allowing 5 per cent cash discount. Calculate the amount of the cash discount.

**Key info**

It is important to remember that trade discounts are *not* recorded in books of accounts. Therefore, the discounts allowed account and the discounts received account are meant for the purpose of recording cash discounts only, not trade discounts. The only place trade discounts are mentioned would be in invoices.

**Use of accounting data in books of prime entry****Cash book**

In Chapter 3 you learnt how accounts are maintained using the double entry system. You opened many accounts, including the cash account and the bank account. These two accounts recorded the movement of money into and from a business. It is now common practice to move these accounts out of the ledger into a separate book called the cash book. The cash and bank accounts are shown together side-by-side in the cash book. The debit column for cash represents the debit side of a cash account and the credit column for cash therefore represents

the credit side of the cash account. Similarly, the debit column for bank will represent the debit side of the bank account and the credit column for bank will represent the credit side of the bank account.

### Dual function of the cash book

The cash book has a dual function – it is a book of prime entry and also a ledger account for bank and cash. The rules of double entry are still applied in the cash book. Money received, in cash or by cheque, is debited in the cash book in the cash and bank columns. Payments made by cash or cheque are credited in the cash and bank columns. Therefore, the cash book is a book of prime entry, as it is the first book in which cash and bank transactions are recorded, *and* a book of double entry, as it acts as a ledger account for cash and bank transactions. Though the cash and bank columns appear together in the cash book, they retain their separate identities and should be balanced separately.

#### Key info

The cash book is a book of prime entry that follows the rules of double entry.

Debit Side (Receipts)				Credit Side (Payments)			
Date	Details	Cash	Bank	Date	Details	Cash	Bank
20x5		\$	\$	20x5		\$	\$
Jul 1	Bal. B/d	450	100	Jul 3	Bank C	250	
Jul 3	Sales	2,300		Jul 7	Rent		50
Jul 3	Cash C		250	Jul 14	Bank	60	

**Annotations:**

- Bank receipts recorded here:** Points to the Bank column on the debit side.
- Bank withdrawals recorded here:** Points to the Bank column on the credit side.
- Cash received recorded here:** Points to the Cash column on the debit side.
- Cash payments recorded here:** Points to the Cash column on the credit side.
- The details column shows which account has been credited:** Points to the 'Cash C' entry in the debit side details column.
- Details column shows which account has been debited:** Points to the 'Bank C' entry in the credit side details column.

**Footnote:** C stands for a 'contra entry'. These two entries represent one transaction. Note the entry in the details column: When cash is credited, the detail is 'Bank', which indicates the double entry account. When bank is debited, the detail is 'Cash', indicating the double entry account.

▲ A two-column cash book

### Debit side of the two-column cash book

The debit side of the two-column cash book is used to record receipts. Money added to the business cash till will be entered in the cash column. Bank deposits will be recorded in the bank column.

Bank deposits could be:

- » cheques paid into the bank
- » bank transfers/credit transfers – a simple and convenient way for trade receivables to pay the business by directly transferring money into the business' account. These funds are electronically transferred, using internet banking.

### Credit side of the two-column cash book

Any payments made by cash taken out of the business cash till or cash box are recorded in the cash column on the credit side. Similarly, bank withdrawals will be recorded on the credit side in the bank column.

**Key term**

**Direct debits** are an arrangement by a business with its bank for a creditor (account payables) to transfer money from the business' account on pre-arranged dates.

Bank withdrawals could be:

- cheques made out to business trade payables
- **direct debits** – these represent an arrangement by a business with its bank for a creditor to transfer money from the business' account on pre-arranged dates. Businesses usually pay their electricity and other bills this way
- standing orders – these represent instructions to the business' bank to transfer a set amount from the business' account into that of a creditor at regular intervals.

## Contra entries

Contra entries are used to record cash from the business' cash till paid into the business' bank account and cash withdrawn from the business' bank account for business use. These transactions are called contra entries because they appear on both sides of the cash book, as explained below.

### Cash from the business' cash till paid into the business' bank account

When this transaction takes place, it is necessary to debit bank and credit cash. As both cash and bank accounts appear side-by-side in the cash book, both debit and credit entries are made in the same book, usually on the same page. A 'C' is placed alongside both entries to show the contra entry.

### Cash withdrawn from a business' bank account for business use

When this transaction takes place, the cash account will be debited and the bank account credited. Again, both entries will be made in the cash book, one on the debit side and one on the credit side.

### Surplus cash paid into the bank account

It will be necessary for businesses to deposit surplus cash into the bank to ensure that the cash till does not have too much cash. The entries to be made in the cash book are debit the bank column of the cash book and credit the cash column. A 'C' is placed alongside both entries to show the contra entry.

## Two-column cash book

### ➔ Worked example 1

The following transactions are written up in the form of a two-column cash book. A 'C' is placed alongside some entries to show that double entries have been completed to the other accounts.

**2018**

Jul 1	Cash balance \$450, Bank balance \$100
Jul 3	K. Koku, a debtor paid the business \$2 300, cash
	The business deposited \$250 cash into the bank
Jul 7	The business paid rent \$50 by cheque
Jul 8	Cash sales \$450 paid directly into bank
Jul 14	The business took \$60 from the cash till and paid into the bank account
Jul 18	The business paid motor expenses by cheque \$35
Jul 24	The business paid a creditor L. Lee in cash \$50
Jul 28	Withdrew \$300 from bank for business use
Jul 29	The business owner withdrew \$150 from bank for personal use



Two-column cash book (Page 6)							
Date	Details	Cash	Bank	Date	Details	Cash	Bank
2018		\$	\$			\$	\$
Jul 1	Bal b/d	450	100	Jul 3	Bank C	250	
Jul 3	K. Koku	2 300		Jul 7	Rent		50
Jul 3	Cash C		250	Jul 14	Bank C	60	
Jul 8	Sales		450	Jul 18	Motor expenses		35
Jul 14	Cash C		60	Jul 24	L. Lee	50	
Jul 28	Bank C	300		Jul 28	Cash C		300
				Jul 29	Drawings		150
				Jul 31	Bal c/d	2 690	325
		<u>3 050</u>	<u>860</u>			<u>3 050</u>	<u>860</u>
Aug 1	Bal b/d	2 690	325				

Postings from the cash book to the ledgers:

#### Sales ledger

##### K. Koku's account

Date	Details	\$	Date	Details	\$
2018			2018		
			Jul 3	Cash	2 300

#### Purchases ledger

##### L. Lee's account

Date	Details	\$	Date	Details	\$
2018			2018		
Jul 24	Cash	50			

#### Nominal (general) ledger

##### Sales account

Date	Details	\$	Date	Details	\$
2018			2018		
			Jul 8	Bank	450

##### Rent account

Date	Details	\$	Date	Details	\$
2018			2018		
Jul 7	Bank	50			

Motor expenses account					
Date	Details	\$	Date	Details	\$
2018			2018		
Jul 18	Bank	35			
Drawings account					
Date	Details	\$	Date	Details	\$
2018			2018		
Jul 29	Bank	150			

**Study tip**

If not otherwise instructed, bank and cash balances are always assumed to be debit balances.

**Key info**

The cash column of the cash book, representing the cash account, can never have a credit balance. This is because cash is a tangible asset. When the cash is used up, the balance will be zero.

**Key term**

**Dishonoured cheque** is a cheque that has been rejected for payment when deposited in the bank.

**Activity 3**

Look at Worked example 1, above. State whether the balances carried down in the cash book on 31 July are debit or credit balances.

**Bank overdraft**

The bank column of the cash book can have a credit balance. This is when the bank has extended an overdraft facility to the business. An overdraft is a type of short-term loan that a bank gives its customers upon request. In this instance, the business can withdraw more than it has deposited in the bank, resulting in the business having a credit balance in its bank account (in the cash book).

**Dishonoured cheque**

A **dishonoured cheque** is also known as a bounced cheque. A cheque is dishonoured by a bank when they return it to the drawer, unpaid. The most common reason why a cheque is dishonoured is because there are insufficient funds in the drawer's account to pay the cheque. Other reasons include:

- » irregular signature – the signature on the cheque does not match the specimen signature held by the bank
- » alterations – an alteration is made, even if the alteration is initialed
- » the cheque is presented before the date on the cheque. For example, a cheque bearing a date of 17 July, but written on 2 July is a post-dated cheque. This cheque will be dishonoured if presented before 17 July
- » the cheque is stale if it is more than six months old
- » the drawer has stopped payment on the cheque
- » the amount in words differs from the amount in figures shown on the cheque.

When a cheque is dishonoured, the business makes the following entries: bank account is credited and the debtor's account debited with the amount of the cheque. This entry reverses the original entry.

### Activity 4

- Look at the details given below for M. Ngugui's cash book. Work with your partner to:
  - decide where the opening bank balance will be recorded – on the debit side or credit side of the cash book. Why?
  - calculate the amount that should be deposited in the bank from the cash till on 31 May. Will this be a contra entry?
- Prepare M. Ngugi's two-column cash book from the details shown below.

#### 2019

May 1	Opening balances: Cash \$3 500; Bank \$360 (cr)
May 6	Cash sales paid into bank \$500
May 14	Paid suppliers L. Rado by cheque \$170 Cash sales \$600
May 18	Received and banked cheque from Monique, a debtor, \$600 Paid wages in cash \$300
May 21	Monique's cheque for \$600 returned unpaid by bank Deposited \$600 cash into bank
May 28	Paid rent by cash \$300
May 31	Deposited all cash over the sum of \$100 into bank

### Activity 5

Sally Mewakab maintains a two-column cash book. Transactions for the month of August 2018 are shown below.

#### 2018

Aug 1	Cash balance \$6 000, Bank balance \$3 000 (dr)
Aug 7	Cash sales paid into bank \$560
Aug 7	Paid M.N. Supplies by cheque \$700
Aug 7	Paid insurance by cheque \$200
Aug 12	Received and banked cheque from Henriques \$500
Aug 17	Paid wages in cash \$500
Aug 21	Received and banked cheque \$340 from Ace and Co
Aug 27	Paid motor expenses by cheque \$45

On 2 September 2018 Sally received the following bank statement from her bank.

				Account name: Sally Mewakab
				Date: 31 August 2018
				Massey Bank 11 Notingworth Southtown
				<b>Statement of current account</b>
Details	Debit	Credit	Balance	
	\$	\$	\$	
Balance			3 000	
Cash		560	3 560	
0450 (M.N. Supplies)	700		2 860	
09850 (Insurance)	200		2 660	
00670 (Henriques)		500	3 160	
Bank charges	50		3 110	

Prepare Sally's two-column cash book for August, showing the balances carried down at 31 August 2018.

Note: In the activity above, all the transactions (except for bank charges) already appear in the cash book. Therefore, only bank charges will be the extra entry recorded from the bank statement. Do not worry about the entries missing in the bank statement. These entries will be recorded in the bank reconciliation statement, a topic we will be covering in Chapter 8.

### Three-column cash book

The three-column cash book has an extra money column to record discounts, so it has discounts, cash and bank columns on the debit side as well as on the credit side. This is to avoid too many entries being made in the nominal (general) ledger, where discounts accounts are maintained.

When a debtor pays a debt promptly, and is allowed a discount, the debtor's account is credited with the whole amount of the debt, and the cash book is debited with the amount received. The discount is entered on the debit side as well in the discounts column. As the discounts column is not a part of double entry, the column total is posted to the debit side of the discounts allowed account at the end of the accounting period. This debit represents the double entry for all the individual credit entries made in the trade receivables accounts for discounts allowed.

When we pay a creditor, and receive a discount, the creditor's account is debited with the whole amount of the debt. The amount paid is entered on the credit side of the cash book along with the discount paid. As the discount column is not a part of double entry, the total of the discounts column at the end of the accounting period is posted to the credit of the discounts received account. This credit represents the double entry for all the individual debit entries made in the trade payables accounts for discounts received.

### Three-column cash book and the treatment of discount columns

#### → Worked example 2

Sammy started a business on 1 June 2018 with a capital of \$4 500 deposited into the business' bank account. Transactions for the month of June 2018 include the following:

2018	
Jun 3	Purchased machinery, paying by cheque \$2 000
Jun 6	Withdrew \$600 cash from bank for business use
Jun 10	Received cheque for \$450 from Kim and paid it into the bank account
Jun 15	Cash sales paid into bank \$380
Jun 17	Paid Manu by cheque \$355 in full settlement of his account of \$370
Jun 22	Cheque of \$450 paid into bank on 10 June was returned dishonoured by the bank
Jun 26	Received cash of \$245 from Casey in full settlement of her account of \$250

Sammy's three-column cash book:

Date	Details	Dis	Cash	Bank	Date	Details	Dis	Cash	Bank
2018		\$	\$	\$	2018		\$	\$	\$
Jun 1	Capital			4 500	Jun 3	Machinery			2 000
Jun 6	Bank C		600		Jun 6	Cash C			600
Jun 10	Kim			450	Jun 17	Manu	15		355
Jun 15	Sales			380	Jun 22	Kim			450
Jun 26	Casey	5	245		Jun 30	Bal c/d		845	1 925
		<u>5</u>	<u>245</u>	<u>5 330</u>			<u>15</u>	<u>845</u>	<u>5 330</u>
Jul 1	Bal b/d		845	1 925					

**Think about it!**

Will a new business have opening balances? Why? Will the discount columns have opening balances? Why?

Posting the discount columns to the nominal (general) ledger:

**Nominal (general) ledger****Discounts received account**

Date	Details	\$	Date	Details	\$
2018			2018		
			Jun 30	Total for the month	15

**Discounts allowed account**

Date	Details	\$	Date	Details	\$
Jun 30	Total for the month	5			

**Activity 6**

- 1 Dolly is a sole trader. She provides the details shown below. Prepare a three-column cash book, balance it off and ensure the relevant discount accounts in the nominal (general) ledger are prepared.

Balances at 1 July 2016: Bank overdraft \$1,670; Cash in hand \$2,500.

Transactions for the month of July were:

**2018**

Jul 3	Received and banked a cheque from Jan in full settlement of his account of \$500 after deducting cash discount of 2 per cent
Jul 5	Cash sales \$400
Jul 10	Dolly paid further capital into bank \$6 500
	Paid cheques in full settlement of accounts owing to Harry \$800 and Mason \$500, in each case deducting 5 per cent cash discount
Jul 16	Paid rent in cash \$600
	Cash sales banked \$250
Jul 20	Paid wages by cheque \$300
	Paid motor repairs in cash \$130
Jul 22	Received and banked cheque for \$370 from Nena in full settlement of her account of \$400 after deducting cash discount
Jul 30	Dolly withdrew \$500 by cheque for personal use

- 2 Tatyana's business has a bank overdraft at 31 August 2019. Suggest one way in which she could reduce or eliminate the overdraft.

**Key terms**

A **petty cash book** is used to record low-value cash transactions such as petrol charges, cleaning expenses and postage stamps.

An **imprest** or **float** is a fixed amount of money with which the petty cashier starts an accounting period.

**Analytical petty cash book**

As a business grows, so do its many cash transactions. These transactions include small value (or petty) cash payments and receipts that would overcrowd the cash book and cause numerous postings to the relevant accounts. Because of this, small payments such as travelling expenses, postage and stationery, cleaning expenses and small payments to trade payables are recorded in a separate book called the **petty cash book**. Big businesses with numerous low value transactions use the petty cash book for the following reasons:

- » To record small amounts received or paid out, saving frequent referrals to the main cash book. Entries are made in the main cash book only at the beginning of the accounting period when the petty cashier is given a fixed sum of money called an **imprest** or **float**.



### Key info

The petty cash book is a book of double entry; therefore, like the cash book, it is a book of prime entry as well as a ledger account with a debit and credit side.

- » A junior member of staff, called the petty cashier, maintains the petty cash book. Any errors made due to the petty cashier's inexperience are not serious ones, since the amounts involved are 'petty' or small. The added advantage is that the junior petty cashier gets experience in handling a book of accounts and cash.
- » Since it is maintained by a junior member, the chief cashier, who handles the cash book and is better paid, is saved from routine work, enabling him to attend to more important tasks.

### Imprest system

At the start of an accounting period, the chief cashier advances to the petty cashier a sum of money that enables him to meet petty expenses during that accounting period. These expenses normally require a cash payment. This fixed amount is called the imprest or float. The petty cashier records this amount on the debit side of the petty cash book, while the cashier records it on the credit side of the cash book.

The person being paid from the float fills in a **petty cash voucher**, which is presented to the petty cashier along with proof of expenditure such as a receipt or invoice. She signs the voucher to state that it has been paid by the petty cashier. The imprest is restored in time for the next accounting period, which allows the petty cashier to start the new accounting period with the same amount of cash. The advantage of the imprest system is that the cashier is always aware of how much petty cash is being spent in each accounting period. From time to time, the imprest can be adjusted to meet the changing needs of the business.

### Key term

A **petty cash voucher** is a document showing the purpose for which the money is required and the date. It is signed by the person making a claim for cash for an expense.

### Activity 7

- 1 Define:
  - a float
  - b petty cash book
- 2 State three advantages of maintaining a petty cash book.
- 3 If the monthly imprest is \$200 and the expenses for the month total \$135, how much will the chief cashier give the petty cashier to restore the imprest?

### Study tip

It is important to read the questions carefully as information about which expenses columns to include on the credit side of the petty cash book may be mentioned in the questions.

### Petty cash book analysis columns

The debit side of the petty cash book records the amounts received by the petty cashier. This includes the imprest as well as small cash receipts from staff for personal phone calls, for instance. The credit side has many columns to record payments for expenses. These columns are known as analysis columns as main expenses are analysed into different categories, so for example, there will be a separate column to record travel expenses, another to record postage and another to record stationery. These amounts can then be posted to the respective accounts in the nominal (general) ledger at the end of the accounting period. A column on the credit side of the petty cash book records the voucher number to which the payment relates.

### How to make entries in a petty cash book

- » **When the float is received at the start of the accounting period** – an entry is made on the debit side of the petty cash book. The date column should be filled with the relevant date. The details column will have the words 'cash' or 'bank', whichever is relevant.
- » **When expenses are recorded during the accounting period** – every payment made is entered twice: first in the total column and then in the appropriate expense column. A brief description of the payment is entered in the details column, for example, if travel expenses involves a payment for petrol, the amount will be entered in the travel expenses column and 'petrol expenses' is entered in the details column.
- » **When receipts are recorded during the accounting period** – small payments received by the petty cashier during the accounting period are entered on the

debit side of the petty cash book and the account to be credited is entered in the details column. For example, if a debtor makes a small cash payment and her account is credited, her account name is entered in the details column.

- » **When totals are made at the end of the accounting period** – at the end of the accounting period, the total column is totalled vertically. Each of the subsidiary columns are totalled. The totals of the subsidiary columns, when added horizontally, should of course be equal to the total of the totals paid column.
- » **When the imprest is restored** – there are two ways an imprest is restored:
  - after the petty cash book is balanced (balance and then restore)
  - before the petty cash book is balanced (restore and then balance).

#### Steps to take if instructed to balance and then restore the imprest

- 1 Balance the receipts column and the total paid column in the same way as balancing a ledger account. Carry down the balance (if any).
- 2 Bring down the balance (if any) in the receipts column to start a new accounting period.
- 3 Enter the restoration of the imprest (if any) in the receipts column. This amount is the amount required to make the balance with the petty cashier (the balance b/d) equal to the float or the imprest.

#### Steps to take if instructed to restore the imprest before balancing the petty cash book

- 1 Bring the balance down, if any.
- 2 Restore the imprest after calculating the amount of the imprest (amount in hand *less* amount spent). This amount is to be entered in the receipts column.
- 3 Balance the receipts column and the total paid column in the same way as balancing a ledger account. Carry down the balance. This balance should be equal to the imprest.

### Maintaining the petty cash book 1

#### → Worked example 3

This worked example demonstrates how to:

- enter the month's transactions in the petty cash book
- balance the petty cash book
- restore the imprest.

On 1 March, the petty cashier received \$150 from the chief cashier as a cash imprest.

Below is a summary of Mason & Sons' petty cash transactions:

	\$	Voucher no.
Stationery	15	1
Cleaning	8	2
Stamps	12	3
Postage	15	4
Cleaning	20	5
Stationery	15	6
Cleaning	17	7

Receipts	Date	Details	V. no.	Total	Postage	Cleaning	Stationery
\$	2018			\$	\$	\$	\$
150	Mar 1	Cash					
	Mar 3	Stationery	1	15			15
	Mar 6	Cleaning	2	8		8	
	Mar 7	Stamps	3	12	12		
	Mar 10	Postage	4	15	15		
	Mar 18	Cleaning	5	20		20	
	Mar 25	Stationery	6	15			15
	Mar 30	Cleaning	7	17		17	
				102	27	45	30
	Mar 31	Balance c/d		48			
150				150			
48	Apr 1	Balance b/d					
102	Apr 1	Cash					

### Activity 8

Bala keeps an analytical petty cash book using the imprest system. The imprest amount is \$150. His transactions for the month of January 2019 are shown below:

Date		\$	Voucher no.
Jan 1	Balance	150	
Jan 2	Bought petrol	30	2
Jan 3	Bought stamps	7	3
Jan 4	Paid for postage	9	4
Jan 8	Cleaning products	6	5
Jan 10	Vehicle repairs	30	6
Jan 15	Paid cleaners	55	7
Jan 25	Received for phone call	5	8
Jan 29	Postage	3	9

- 1 Enter the above transactions in Bala's petty cash book with columns for 'postage and stationery', 'cleaning expenses' and 'travelling expenses'.
- 2 Balance the petty cash book at 31 January, bringing down the balance on 1 February.
- 3 On 1 February, the petty cashier received an amount of cash from the chief cashier to restore the imprest. Enter this transaction in the petty cash book.

## Maintaining the petty cash book 2

### → Worked example 4

This worked example demonstrates how to:

- enter the month's transactions in the petty cash book
- restore the imprest
- balance the petty cash book
- post the expense accounts to the ledgers.



## 5 BOOKS OF PRIME ENTRY

Raymond maintains his petty cash book using the imprest system. For the month of March 2018, his petty cash transactions were as follows:

2018		\$	Voucher no.
Mar 1	Petty cash balance	4.50	
Mar 2	Received cash to restore the imprest	45.50	
Mar 6	Bought stationery	15.00	1
Mar 10	Paid a creditor, Salse	6.00	2
Mar 15	Bought stamps	5.00	3
Mar 18	Received cash for personal telephone call	3.00	4
Mar 25	Bought envelopes	1.00	5

### Study tip

The amount for the restoration of the imprest is calculated in the following way:

Amount for restoration of imprest = Amount spent – amount received during the month after the imprest was restored (telephone call)  
 = 27 – 3  
 = \$24

Receipts	Date	Details	V No.	Total	Stationery	Postage	Ledger account
\$	2018			\$	\$	\$	\$
4.50	Mar 1	Bal b/d					
45.50	Mar 2	Cash					
	Mar 6	Stationery	1	15.00	15.00		
	Mar 10	Salse	2	6.00			6.00
	Mar 15	Stamps	3	5.00		5.00	
3.00	Mar 18	Tel. call	4				
	Mar 25	Envelopes	5	1.00	1.00		
24.00	Mar 31	Cash					
				27.00	16.00	5.00	6.00
	Mar 31	Bal c/d		50.00			
				77.00			
50.00	Apr 1	Bal b/d					

Posting to the ledgers:

### Nominal (general) ledger

#### Stationery account

Date	Details	\$	Date	Details	\$
2018			2018		
Mar 31	Total for the month	16			

#### Postage account

Date	Details	\$	Date	Details	\$
2018			2018		
Mar 31	Total for the month	5			

### Purchases ledger (PL)

#### Salse's account (page 12)

Date	Details	\$	Date	Details	\$
2018			2018		
Mar 31	Petty cash transfer	6			

**Key term**

**Sales journal** is a book of prime entry where credit sales are recorded.

## Sales journal

Only credit sales are entered in the **sales journal**. The entries are made from copies of the sales invoices sent to customers. Entries are made as follows:

- » The date on which the transaction occurred is entered in the date column.
- » The name of the debtor (customer) is entered in the name/details column.
- » The number of the sales invoice is entered in the invoice number column.
- » The amount, net of trade discount, is entered in the amount column.

Date	Name/details	Invoice number	Amount \$
------	--------------	----------------	--------------

▲ **Figure 5.2** Rulings of the sales journal

## Posting from the sales journal into the ledgers

When a credit sale takes place:

- 1 The customer's account is debited in the sales ledger.
- 2 The details of the invoice are recorded in the sales journal.

At the end of the accounting period, the total of the sales journal is credited to the sales account in the nominal (general) ledger. This total forms the double entry for all the individual debit entries in the personal accounts (in the sales ledger).

### Activity 9

Copy and complete the following sentences:

- 1 The \_\_\_\_\_ of the sales journal is posted to the \_\_\_\_\_ of the \_\_\_\_\_ account in the \_\_\_\_\_ ledger.
- 2 As soon as a \_\_\_\_\_ sales takes place, the \_\_\_\_\_ account in the \_\_\_\_\_ ledger is debited.
- 3 The amount entered in the sales journal does not include \_\_\_\_\_ discount.

## Sales returns journal

Details of goods returned by customers are entered in the sales returns journal. It is prepared from copies of credit notes sent to the customers for goods they have returned. Entries are made as follows:

**Study tip**

Remember: only credit sales are entered in the sales journal.

- » The date column records the date of the transaction.
- » The details column records the name of the customer.
- » The note number column records the number of the credit note.
- » The amount column records the amount of the credit note (net of trade discount).

Date	Name/details	Note number	Amount \$
------	--------------	-------------	--------------

▲ Rulings of the sales returns journal

## Posting from the sales returns journal into the ledgers

When the customer returns goods:

- 1 The customer's account is credited in the sales ledger.
- 2 Details of the credit note are recorded in the sales returns journal.

At the end of the accounting period, the total of the sales returns journal is debited to the sales returns account in the nominal (general) ledger. This total forms the double entry for all the individual credit entries in the personal accounts (in the sales ledger).

### Activity 10

- 1 Copy and complete the following sentences:
  - a The \_\_\_\_\_ of the sales returns journal is posted to the \_\_\_\_\_ of the \_\_\_\_\_ account in the \_\_\_\_\_ ledger.
  - b As soon as goods are returned by the \_\_\_\_\_, the \_\_\_\_\_ account in the \_\_\_\_\_ ledger is credited.
- 2 Give two reasons why goods are returned by customers.

## Recording transactions in the sales journal and posting entries to the ledgers

### → Worked example 5

This worked example shows how to record transactions in the sales journal and the sales returns journal and how to post entries to the customers' accounts and the nominal (general) ledger.

Jun 4	Credit sales to Jason \$350, Mason \$480
Jun 15	Goods returned by Mason \$60
Jun 20	Credit sales to Mason \$600

Sales journal			
Date	Name	Invoice no.	Amount
2018			\$
Jun 4	Jason	XXX	350
Jun 4	Mason	XXX	480
Jun 20	Mason	XXX	<u>600</u>
			<u>1430</u>

Sales returns journal			
Date	Name	Note no.	Amount
2018			\$
Jun 15	Mason	XXX	<u>60</u>
			<u>60</u>

Sales ledger					
Mason's account					
2018	Details	\$	2018	Details	\$
Jun 4	Sales	480	Jun 15	Sales returns	60
Jun 20	Sales	600			
Jason's account					
2018	Details	\$	2018	Details	\$
Jun 4	Sales	350			
Nominal (general) ledger					
Sales account					
2018	Details	\$	2018	Details	\$
			Jun 30	Total for the month	1 430
Sales returns account					
2018	Details	\$	2018	Details	\$
Jun 30	Total for the month	60			

## Activity 11

Prepare the sales and sales returns journals and record the following transactions. Then post to the customer's accounts and show the transfers to the nominal (general) ledger.

### 2018

- May 1 Credit sales to Mandab \$230, Yussouf \$670.
- May 10 Goods returned to us by Yussouf \$35.
- May 15 Credit sales to Mandab \$500, Yussouf \$290.
- May 18 Cash purchases, Mandab \$650.
- May 25 Goods returned to us by Mandab \$56.

### Key term

**Purchases journal** is a book of prime entry where credit purchases are recorded.

## Purchases journal

Only credit purchases are entered in the **purchases journal**. The entries are made from copies of the invoices received from suppliers. Entries are made as follows:

- » The date on which the transaction occurred is entered in the date column.
- » The name of the creditor (supplier) is entered in the name/details column.
- » The number of the invoice is entered in the invoice number column.
- » The amount (net of trade discount) is entered in the amount column.

Date	Name/details	Invoice number	Amount
			\$

▲ Rulings of purchases journal

## Posting from the purchases journal into the ledgers

When a credit purchase takes place:

- 1 The supplier's account is credited in the purchases ledger.
- 2 Details of the purchases invoice are recorded in the purchases journal.

At the end of the accounting period, the total of the purchases journal is debited to the purchases account in the nominal (general) ledger. This total forms the double entry for all the individual credit entries in the personal accounts (in the purchases ledger).

### Study tip

Remember: only credit purchases are entered in the purchases journal.

### Activity 12

- 1 Copy and complete the following sentences:

- a The \_\_\_\_\_ of the purchases journal is posted to the \_\_\_\_\_ of the \_\_\_\_\_ account in the \_\_\_\_\_ ledger.
- b As soon as a \_\_\_\_\_ purchase takes place, the \_\_\_\_\_ account in the \_\_\_\_\_ ledger is credited.
- c The amount entered in the purchases journal does not include \_\_\_\_\_ discount.

## Purchases returns journal

The purchases returns journal is also called the returns outwards journal. Details of goods returned by the business to its suppliers are entered in this journal. It is prepared from copies of credit notes received from suppliers for goods returned to them. Entries are made as follows:

- » The date column records the date of the transaction.
- » The details column records the name of the supplier.
- » The note number column records the number of the credit note.
- » The amount column records the amount of the credit note (net of trade discount).

Date	Name/details	Note number	Amount \$
------	--------------	-------------	--------------

▲ Rulings of the purchases returns journal

## Posting from the purchases returns journal into the ledgers

When the business receives a credit note after returning goods to its supplier:

- 1 The supplier's account is debited in the purchases ledger.
- 2 The details of the credit note received are recorded in the purchases returns journal.

At the end of the accounting period, the total of the purchases returns journal is credited to the purchases returns account in the nominal (general) ledger. This total forms the double entry for all the individual debit entries in the personal accounts (in the purchases ledger).



### Activity 13

1 Copy and complete the following sentences:

- a The \_\_\_\_\_ of the purchases returns journal is posted to the \_\_\_\_\_ of the \_\_\_\_\_ account in the \_\_\_\_\_ ledger.
- b As soon as goods are returned to the \_\_\_\_\_, the \_\_\_\_\_ account in the \_\_\_\_\_ ledger is debited.

## Recording transactions in the purchases and purchases returns journals and then posting entries to the ledgers

### → Worked example 6

This example shows you how to record transactions in the purchases journal and the purchases returns journal. It then shows you how to post those entries to the suppliers' accounts and relevant accounts in the nominal (general) ledger.

**2018**

Jun 1 Credit purchases: Smith \$320, Agatha \$150  
 Jun 2 Cash purchases: Smith \$400, Agatha \$300  
 Jun 7 Goods returned to Smith \$20  
 Jun 28 Credit purchases: Smith \$180

Purchases journal			
Date	Name	Invoice no.	Amount
2018			\$
Jun 1	Smith	XXX	320
Jun 1	Agatha	XXX	150
Jun 28	Smith	XXX	<u>180</u>
			<u>650</u>

Purchases returns journal			
Date	Name	Note no.	Amount
2018			\$
Jun 7	Smith	XXX	<u>20</u>
			<u>20</u>

#### Study tip

It is not necessary to include an invoice number column in the purchases and sales journals and a note column in the purchases and sales returns journals, if the question does not ask for them to be included.

Purchases ledger					
Smith's account					
2018	Details	\$	2018	Details	\$
Jun 7	Purchases returns	20	Jun 1	Purchases	320
			Jun 28	Purchases	180
Agatha's account					
2018	Details	\$	2018	Details	\$
			Jun 1	Purchases	150



**Think about it!**

Discuss with your partner why the two transactions of 2 June were not recorded in the books above.

**Nominal (general) ledger****Purchases account**

2018	Details	\$	2018	Details	\$
Jun 30	Total for the month	650			

**Purchases returns account**

2018	Details	\$	2018	Details	\$
Jun 30	Total for the month	20			

**Activity 14**

Prepare the purchases journal and the purchases returns journal. Then post to the suppliers' accounts and show the transfers to the nominal (general) ledger.

**2019**

Jan 1	Credit purchases: Kombe \$350, Sellaway \$670
Jan 4	Credit purchases: Mallasa \$270, Kellagary \$500
Jan 8	Goods returned by us to Kombe \$60, Mallasa \$70
Jan 11	Credit purchases: Phillipe \$680, Kombe \$300
Jan 18	Cash purchases: Kombe \$450
Jan 27	Goods returned by us to Phillipe \$70
Jan 30	Credit purchases: Phillipe \$370

**General journal**

There is one last book of prime entry that records all the transactions which are not recorded in the six books of prime entry mentioned in this chapter so far. This book is the **general journal** and it is used to record infrequent transactions. It is also used to make adjusting entries. If these transactions were recorded directly from source documents into the ledger, the details would be forgotten.

The general journal is a sort of diary which records, in date order, many different transactions not recorded in the six books of prime entry already described in this chapter. The general journal is used to record transactions before they are posted into the ledger and is *not* a book of double entry. If a business did not maintain the other books of prime entry, the general journal could be used to record all transactions that a business has.

The format of the general journal is shown below. The first line is the name of the account to be debited as per the rules of debit and credit. The second line is the name of the account to be credited. It is slightly indented to differentiate it from the debit entry. The third line contains the **narrative**, which is a brief explanation of what is being recorded.

Date	Details	Debit	Credit
		\$	\$
	The account to be debited	XX	
	The account to be credited		XX
	(The narrative)		

▲ Format of the general journal

**Key terms**

The **general journal** is a book of prime entry meant for the records of all transactions that cannot be recorded in other books of prime entry.

A **narrative** is a brief explanation of the transaction recorded in the general journal. It sometimes contains a reference to the source document that proves the transaction has taken place.

Each entry in the general journal must contain these details:

- » date
- » name of the account(s) to be debited
- » name of the account(s) to be credited
- » short description of the event or transaction (also called the narrative).

### Uses of a general journal

The general journal is typically used to record:

- » opening entries
- » writing off irrecoverable debts
- » purchases and sales of non-current assets on credit
- » correcting errors
- » one-off irregular transactions.

#### Activity 15

- 1 State what is meant by the term narrative.
- 2 State three uses of a journal.

### Opening entries

The opening entry is a once-only entry, posted when the business first opens its books of accounts. The assets owned by the business are debited and the liabilities are credited. The difference between the two is the capital, which is also entered in the credit column. The entries are then posted to the ledgers, where these accounts are opened for the first time.

### → Worked example 7

Mikey, after being in business for some years without keeping proper records, now decides to keep a double entry set of books. On 1 June 2018, he establishes that his assets and liabilities are as follows:

- Assets: Premises \$3400; Fixtures \$560; Motor vehicle \$700; Trade receivables – Eugene \$350, Bank \$230, Cash \$1340.
- Liabilities: Trade payables – Peacock \$350, Wally \$560.

Mikey				
General journal				
Date	Details	Debit	Credit	
2018		\$	\$	
Jun 1	Premises	3 400		
	Fixtures	560		
	Motor vehicle	700		
	Trade receivables – Eugene	350		
	Bank	230		
	Cash	1 340		
	Trade payables: – Peacock			350
	– Wally			560
	Capital			*5 670
(Assets and liabilities to open the books of accounts)				

#### Working

$$\text{Capital} = \text{assets} - \text{liabilities} = 6\,580 - (350 + 560) = \$5\,670$$

### Posting to ledgers

- » The assets will be posted to the nominal (general) ledger on the debit side of the respective accounts.
- » The liabilities will be posted to the nominal (general) ledger on the credit side of the respective accounts.

#### Activity 16

Prepare a journal entry to open Manu's books. On 1 January 2018, his assets and liabilities are as follows:

- Assets: Machinery \$5 670; Furniture \$3 450; Premises \$23 000; Trade receivables – Joss \$234; Cash and cash equivalents \$1 200.
- Liabilities: Trade payables – Mellie \$890, Bossy \$120.

- » Trade receivables will be posted to the sales ledger on the debit side of the trade receivables' accounts.
- » Trade payables will be posted to the purchases ledger on the credit side of the trade payables' accounts.
- » Capital will be posted to the nominal (general) ledger on the credit side of the capital account.

These accounts are now all opened and other entries can be posted to them.

### Writing off irrecoverable debts

A debt that will never be paid is called an irrecoverable debt. It should be written off as an expense as it is no longer an asset. The debtor's account should also be closed off (see Chapter 13).

### → Worked example 8

A debt of \$780 owing from Halsinder is to be written off as irrecoverable on 31 July 2018. The journal entry is:

Date	Details	Debit	Credit
2018		\$	\$
Jul 31	Irrecoverable debts Halsinder's account	780	780
	Write off of balance on Halsinder's account as irrecoverable		

#### Think about it!

Would a purchase or sale of a non-current asset for cash be entered in the journal? Why?

### Activity 17

- 1 Prepare a journal entry to record the following: Samantha owed the business \$670 and is declared bankrupt. Her debt is to be written off on 30 June 2018. A narrative is required.
- 2 State what is meant by the term irrecoverable debt.
- 3 Explain why the irrecoverable debt account is debited.
- 4 Explain why Samantha's account is credited.

### Activity 18

Pass a journal entry for the following: Office equipment bought on credit from M. & O. Offices for \$260.

### Purchase and sale of a non-current asset on credit

The purchase and sale of a non-current asset on credit is not recorded in any of the other books of prime entry. These transactions are recorded in the general journal before being posted to the ledgers.

(Note that sale of non-current assets is covered in Chapter 11 Accounting for depreciation and disposal of non-current assets.)

### Correcting errors

The use of the general journal to correct errors is covered in Chapter 7 Correction of errors.

### One-off irregular transactions

Transactions that cannot be entered in any other book of prime entry should be recorded in the general journal before being posted to the ledgers. These include unusual transactions and year-end transfers to the financial statements.

As these transactions are numerous and unpredictable, it is impossible to make a complete list.

## → Worked example 9

At 31 December 2018, Jelco Ltd has the following ledger accounts that need to be transferred to the appropriate financial statements:

- Rent for the year \$4 500, which includes a prepayment of \$500.
- Inventory at 1 January 2018 amounted to \$3 200.

Other information at 31 December 2018:

- Inventory was valued at \$12 000.
- A provision for depreciation for machinery is to be made \$500.

Other information at 7 June 2019:

- An irregular transaction – on 7 June 2019, a debtor, Donnelly, paid his debt of \$600 by offering his computer in full settlement.

Jelco Ltd				
General journal				
Date	Details	Debit	Credit	
2018		\$	\$	
Dec 31	Income statement	4 000		
	Rent			4 000
	(Transfer of rent for the year to the income statement)			
	Trading a/c	3 200		
	Inventory			3 200
	(Transfer of opening inventory to the trading account section of the income statement)			
	Inventory	12 000		
	Trading a/c			12 000
	(Transfer of closing inventory to the trading account section of the income statement)			
	Income statement	500		
	Provision for depreciation of machinery			500
	(Transfer of annual depreciation charge for machinery to the income statement)			
2019		\$	\$	
Jun 7	Computer a/c	600		
	Donnelly			600
	(Accepted a computer from Donnelly in full settlement of his debt. See letter in file no. 34/DD)			

## Activity 19

- 1 Prepare journal entries for the following transfers and transactions on 31 December 2019:
  - a Electricity for the year \$3 400 included a prepayment of \$400.
  - b Provide for depreciation of computers \$500.
  - c Closing inventory was \$60 000.
  - d Provide for doubtful debts \$500.
  - e Opening inventory on 1 January 2018 was valued at \$70 000.
  - f The business returned a faulty printer bought on credit from Jolly Printers, \$500.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 In which book of prime entry is the purchase of a non-current asset on credit recorded?  
**A** Cash book  
**B** General journal  
**C** Purchases journal  
**D** Purchases returns journal [1]

- 2 Doherty uses the imprest system of petty cash. The imprest amount is \$300, which is restored at the end of every month.  
 The transactions shown below take place in the month of June.  
 What is the amount of the imprest restored to the petty cashier on 1 July?

- A** \$274  
**B** \$284  
**C** \$294  
**D** \$300 [1]

		Receipts	Payments
		\$	\$
Jun 4	Travelling expenses		67
Jun 8	Cleaning expenses		55
Jun 12	Stationery sold to staff	10	
Jun 16	Postage		22
Jun 20	Cleaning products		130
Jun 25	Petrol charges		10

- 3 Manesh's purchases journal includes the following entry:

Date	Name	\$
Jun 1	Nandita	360

To which accounts will this entry be posted in Manesh's ledger? [1]

	Account to be debited	Account to be credited
<b>A</b>	Bank	Nandita
<b>B</b>	Purchases	Nandita
<b>C</b>	Nandita	Bank
<b>D</b>	Nandita	Purchases

- 4 The total of Mary's sales and sales returns journal for July showed the following:  
 » Sales \$13 000  
 » Sales returns \$900  
 How are these posted to Mary's ledger? [1]

	Sales account	Sales returns account
	\$	\$
<b>A</b>	Debit 13 000	Debit 900
<b>B</b>	Debit 13 000	Credit 900
<b>C</b>	Credit 13 000	Credit 900
<b>D</b>	Credit 13 000	Debit 900

- 5 Where are credit customer's accounts found in a sole trader's books of account?  
**A** Purchases journal  
**B** Purchases ledger  
**C** Sales journal  
**D** Sales ledger [1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 Jonah is a sole trader who keeps full double entry accounting records including a three-column cash book. All cheques received are banked on the same day. On 30 June 2018 balances in his books included the following.

	\$
Trade receivables:	
H. Syde	500
B. Sharp	800
M. Yaveli	630
Trade payables:	
J. Teime	400
P. Mulder	1 000
Cash	600
Bank (dr)	2 500

Jonah's transactions for the month of July 2018 included the following.

	\$
Jul 3 H. Syde paid the amount he owed by cheque after deducting cash discount of \$10	
Jul 7 Cash was withdrawn from bank for office use.	200
Jul 10 Paid J. Teime by cheque after deducting \$15 cash discount.	
Jul 12 Paid wages in cash.	400
Jul 14 B. Sharp paid the amount he owed by cheque after deducting a cash discount of \$20.	
Jul 17 Paid P. Mulder by cheque after deducting cash discount of \$25	
Jul 20 Cash sales paid directly into bank	350
Jul 21 M. Yaveli paid the amount he owed by cheque	
Jul 24 Paid wages in cash.	250
Jul 24 Paid electricity bill by cheque	600
Jul 29 Jonah's bank returned M. Yaveli's cheque for \$630 as dishonoured	

- a** Prepare Jonah's three-column cash book and balance it on 31 July 2018, bringing down the balance on 1 August 2018. [21]  
**b** Make the entries required in the discounts accounts on 31 July 2018. [4]  
*(Adapted from Cambridge IGCSE Accounting 0452/2, October/November 2004, Q4)*
- 7 Ashok maintains his petty cash on the imprest system. He keeps a balance of \$150. At the end of June, the balance in hand is \$45 and there are vouchers for expenditure of \$100.
- a** Calculate the amount Ashok will draw from the bank to restore his petty cash balance? [2]  
**b** Suggest one reason for the difference in the petty cash balance. [1]



- 8** Basu started business on 1 January 2018. On that day, his assets and liabilities are as follows:
- » Assets: Machinery \$1 830; Furniture \$7 890; Premises \$15 000; Trade receivables \$564; Cash and cash equivalents \$5 400.
  - » Liabilities: Trade payables – Kixe \$340, Ben \$145.
- a** Prepare a journal entry to open the books of accounts. A narrative is required.
- 9** John Paihia, a trader, maintains a petty cash book using the imprest system.
- a** Explain what is meant by the imprest system in relation to petty cash books. John Paihia's imprest amount is \$300. His transactions for the month of September 2007 were as follows: [2]

		\$
Sept 1	Balance brought down	48
Sept 1	Petty cash restored to imprest amount	?
Sept 6	Bought postage stamps	15
Sept 11	Paid to Paul Ahipara, a creditor	95
Sept 19	Paid cleaner	24
Sept 23	Paid travelling expenses	9
Sept 25	Bought office stationery	72
Sept 29	Received cash refund from stationery supplier for overcharge	6

- b** Prepare John Paihia's petty cash book and enter the above transactions.
- c** Balance the book on 30 September 2007 and carry down the balance.
- d** Make the entry on 1 October 2007 to restore the petty cash to the imprest amount. [14]
- e** Explain to John Paihia how the double entry is completed for the items recorded in the analysis columns of the petty cash book. [4]
- (Adapted from Cambridge IGCSE Accounting 0452/3, October/November 2007, Q1)

- 10** Kuda Maposa maintains a petty cash book using the imprest system.
- a** State one advantage of the imprest system of petty cash. [1]
- On 1 March 2015 the balance of Kuda Maposa's petty cash book was \$100 which was equal to the amount of the imprest.
- Her transactions for the month of March 2015 were as follows.

		\$
Mar 6	Paid for postage costs	13
Mar 11	Bought tea and coffee	5
Mar 14	Purchased stationery	27
Mar 18	Paid T Masuka, a credit supplier	15
Mar 21	Received refund for damaged stationery	10
Mar 26	Paid window cleaner	12
Mar 29	Paid P Zhonga, a credit supplier	16

- b** Prepare Kuda Maposa's petty cash book and enter these transactions. Balance the petty cash book and bring down the balance on 1 April 2015. [11]
- c i** State the amount required to restore the imprest on 1 April 2015. [1]
- ii** Name the account which would be credited with this amount. [1]
- d** Name the ledger account in which the transaction of 21 March would be recorded. [1]
- (Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2015, Q1)



**11** Yuri keeps a full set of accounting records.

**a** Name the ledger in which each of the following accounts is found. [6]

Account	Ledger
Insurance	
Sales	
Purchases	
Lottie, a credit supplier	
Matthew, a credit customer	
Capital	

**b** Yuri maintains a sales journal, a sales returns journal, a purchases journal and a purchases returns journal. Name one other book of prime entry which he may maintain. [1]

**c** State why it is useful for a business to maintain a sales journal. [2]

On 1 April Susan and Elinor owe Yuri \$260 and \$120 respectively. Yuri's sales journal and sales returns journal for the month showed the following.

Sales journal		
		\$
Apr 4	Susan	600
Apr 16	Elinor	<u>320</u>
		<u>920</u>

Sales returns journal		
		\$
Apr 12	Susan	105
Apr 17	Elinor	<u>46</u>
		<u>151</u>

**d** Prepare the ledger accounts for Elinor, sales and sales returns for the month of April. Balance the accounts where necessary and bring down the balances on 1 May. [8]

On 8 April Susan paid the amount she owed on 1 April, after taking 5 per cent cash discount.

**e** Calculate the amount which Yuri received from Susan. [2]

**d** Yuri employs a book-keeper to maintain the accounts of his credit customers. Name the account which Yuri prepares to check for fraud or error in the book-keeper's work. [1]

(Adapted from Cambridge IGCSE Accounting 0452/13, May/June 2014, Q2)

**12** Carol is a trader. She maintains a three column cash book and also a petty cash book. The imprest amount is \$100. All payments below \$50 are made from petty cash.

**a** State two reasons for maintaining a petty cash book. [2]

Carol had the following transactions during April 2016.



Apr 1	Petty cash imprest restored from the business bank account
Apr 4	Purchased tea and coffee for office staff, \$11
Apr 9	Paid K Mzolo's account of \$450, by cheque, after deducting a cash discount of 2 per cent
Apr 16	Bought stationery, \$25
Apr 19	Paid taxi fare, \$8
Apr 20	Received a cheque from B Mamba in settlement of his account of \$920, less 2½ per cent cash discount
Apr 23	Paid T Nhete, a credit supplier, \$38
Apr 28	Cash sales, \$2 970
Apr 29	Paid all the cash in the main cash account, except \$100, into the bank account

**b** Record the above transactions in the:

**i** petty cash book [9]

**ii** three column cash book [10]

Balance each book and bring down the balances on 1 May 2016.

(Adapted from Cambridge IGCSE Accounting 0452/22, May/June 2016, Q1)

- 13** Diane is a trader. She buys goods on credit from Udomo. On 1 October 2016 Diane owed Udomo \$720. Several transactions took place between the traders in October 2016.

**a** Complete the following table. Name the book of prime entry in which each document would be recorded by each trader. If the document is not entered in a book of prime entry, write 'No entry'. [10]

Date	Document	Book of prime entry used by Diane	Book of prime entry used by Udomo
Oct 8	Invoice \$560		
Oct 12	Debit note \$115		
Oct 16	Credit note \$100		
Oct 24	Cheque \$720		
Oct 31	Statement of account \$460		

**b** Name the person who issued each of the following documents. In each case, suggest one reason for the issue of that document.

**i** Debit note 12 October [2]

**ii** Credit note 16 October [2]

**iii** Statement of account 31 October [2]

**c** Prepare the account of Diane as it would appear in the ledger of Udomo for October 2016. Balance the account and bring down the balance on 1 November 2016. [4]

(Adapted from Cambridge IGCSE Accounting 0452/21, October/November 2016, Q2)

## ? Chapter review questions

- 1 Name:
  - a a suitable book that can be used to record small cash transactions
  - b the amount of money with which the petty cashier starts each new period
  - c two books of prime entry that are also books of double entry
  - d two books of prime entry that are not books of double entry
  - e the ledger to which the expenses in the analytical columns in the petty cash book are posted
  - f the account to which the total of the discount column on the debit side of the cash book is posted
  - g the book of prime entry where the adjustments for the following will be made: A used car business bought a car for resale on credit for \$4 600. The car remained unsold and the business decided to retain it as a non-current asset for business use
  - h Grey's and Jonah's books of prime entry in which the following transaction will be entered: Grey returned some faulty goods to Jonah \$590
  - i the book of prime entry in which the invoice for the following transaction will be entered: Holly sent Jenna an invoice for inventory supplied to her on credit.

- 2 Copy and complete the following table by entering 'true' or 'false' for each statement.

Statement	True/False
The cash columns and the bank columns in the cash book represent two separate accounts.	
The books of prime entry are used to prevent the accounts in the nominal (general) ledger from being overcrowded with too many details.	
The petty cash book is the only book of prime entry that uses the double entry system.	
Cash sales are entered in the sales journal.	
The general journal is used to record purchases of non-current assets on credit.	

- 3 The list price of a product is \$20 000 and a trade discount of 10 per cent is offered to the customer. The customer pays her invoice within 30 days to claim a cash discount of 5 per cent. Calculate the amount paid by the customer.
- 4 A statement of account showed a balance owing of \$10 000. Two per cent discount was available if payment was made during the following month. The debtor paid in time and claimed the discount.
  - a Calculate the amount paid by the debtor. Show your workings.
  - b Name the type of discount claimed by the debtor.

### Revision checklist



In this chapter, you have learnt:

- ✓ about the advantages of using various books of prime entry
- ✓ what a book of prime entry is
- ✓ what a cash book is
- ✓ the two types of cash books
- ✓ how to make entries in the two types of cash books
- ✓ how to post entries and totals from the cash books to the ledgers
- ✓ what a bank overdraft is
- ✓ how a two-column cash book is different to a three-column cash book
- ✓ what petty cash is and its uses
- ✓ the meaning of the terms 'imprest' and 'analytical' in relation to the petty cash book
- ✓ how to balance a petty cash book
- ✓ how to post entries from the petty cash book to ledgers
- ✓ what the sales and sales returns journals are
- ✓ how to make entries in the sales and sales returns journals
- ✓ how to post from the sales and sales journals to the ledgers
- ✓ what the purchases and purchases returns journals are
- ✓ how to make entries in the purchases and purchases returns journals
- ✓ how to post from the purchases and purchases returns journals to the ledgers
- ✓ what a general journal is and what it is used for
- ✓ how to make entries in the general journal and post them to ledgers
- ✓ how to distinguish between an account for trade discount and cash discounts
- ✓ the dual function of the cash book as a book of prime entry and as a ledger account for bank and cash
- ✓ the use of bank transfers and other electronic means and how to record payments and receipts made by these methods.

# SECTION 3

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## Verification of accounting records

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### Chapters

- 6 The trial balance
- 7 Correction of errors
- 8 Bank reconciliation
- 9 Control accounts

This section covers the techniques used to verify accounting records. Errors found in the process of such verification are then corrected and the profit for the year is adjusted accordingly. You will learn about control accounts and bank reconciliation, as well as the correction of errors. You will also learn what a trial balance is, how to prepare one and how they can be used to verify accounting records. Trial balances have their limitations, however, because they do not reveal all errors committed. Errors that affect the trial balance and those that do not affect it are also studied in this section, in addition to methods used to correct these errors and the profit affected by these errors. The suspense account, which plays an important part in the correction of errors, is also introduced. The bank reconciliation statement – a technique used to verify bank records – is covered in this section, as are control accounts that are used to provide a cross-check on the important sales and purchases ledgers. You will learn how these control accounts are used to speed up the location of errors revealed by the trial balance.

# 6

## The trial balance

By the end of this chapter you will be able to:

- ★ understand that a trial balance is a statement of ledger balances on a particular date
- ★ outline the uses and limitations of a trial balance
- ★ prepare a trial balance from a given list of balances and amend a trial balance which contains errors
- ★ identify and explain those errors which do not affect the trial balance: commission, compensating, complete reversal, omission, original entry and principle.



### Key term

A **trial balance** is a statement that lists account names and their balances, recorded in debit and credit columns, on a certain day.

## Trial balance

In previous chapters, you learnt about the accounting equation and double entry book-keeping. You know that maintaining books of accounts should produce equal debits and credits. This is because, for every debit entry in the ledger, there should be a credit entry. It is necessary to ensure that the entries in a business' book-keeping system are arithmetically correct. The **trial balance** is used to do this. Hence, the trial balance is one method of verifying accounting records. You will be learning more methods in later chapters.

## Uses and limitations of a trial balance

The trial balance can be used as follows:

- » **Verify accounting records** – if the trial balance does not balance, the total debits entered by the book-keeper are not equal to the total credits entered.
- » **Help locate errors** – if the trial balance does not balance, an error has been made. However, a trial balance that balances is not proof that the book-keeping entries are free from errors. Transactions not recorded and totally omitted, for example, would not affect the trial balance. This is a limitation of a trial balance.
- » **Facilitate the preparation of financial statements** – the income statement and the statement of financial position. The trial balance is the source from which the financial statements are prepared. If the trial balance does not balance, then the difference must be investigated and resolved before the financial statements are prepared, so that they are accurate.

### Key info

The trial balance is not part of the double entry system of book-keeping. It is simply a statement listing account balances.



## Activity 1

- 1 Explain what a trial balance is.
- 2 State two uses of a trial balance.
- 3 Explain one limitation of a trial balance.
- 4 State the names of the accounts that will be debited and credited in the following transactions:

2018		Account to be debited	Account to be credited
May 1	The owner invested \$6 900 by cheque in the business.		
May 3	The business bought goods from L. Larry \$670 on credit.		
May 5	The business sold goods to Kelly on credit \$780.		
May 7	The business returned goods to L. Larry \$45.		
May 10	The business sold goods and deposited the money in the bank \$890.		
May 17	The business bought stationery \$76 paying by cheque.		
May 20	Kelly returned goods worth \$89.		
May 24	The business paid L. Larry by cheque in full settlement.		
May 27	Kelly paid the business by cheque in full settlement.		
May 29	The business paid wages \$67 by cheque.		
May 31	The owner withdrew \$40 from the bank for his personal use.		

## Preparing a trial balance

### Key info

Balance b/d stands for balance brought down. This is the term used for an opening balance which was the closing balance for the previous accounting period.

Balance c/d stands for balance carried down. This is the term used to carry down the closing balance on an account from one accounting period to the next.

### Worked example 1

Using information from Activity 1, we can prepare the ledger accounts as follows:

Bank account					
Date	Details	\$	Date	Details	\$
2018			2018		
May 1	Capital	6 900	May 17	Stationery	76
May 10	Sales	890	May 24	L. Larry	625
May 27	Kelly	691	May 29	Wages	67
			May 31	Drawings	40
			May 31	Balance c/d	7 673
		<u>8 481</u>			<u>8 481</u>
Jun 1	Balance b/d	7 673			



## 6 THE TRIAL BALANCE

### Capital account

Date	Details	\$	Date	Details	\$
2018			2018		
May 31	Balance c/d	<u>6 900</u>	May 1	Bank	<u>6 900</u>
			Jun 1	Balance b/d	<u>6 900</u>

### Purchases account

Date	Details	\$	Date	Details	\$
2018			2018		
May 3	L. Larry	<u>670</u>	May 31	Balance c/d	<u>670</u>
Jun 1	Balance b/d	<u>670</u>			

### L. Larry's account

Date	Details	\$	Date	Details	\$
2018			2018		
May 7	Purchases returns	45	May 3	Purchases	670
24	Bank	<u>625</u>			
		<u>670</u>			<u>670</u>

### Kelly's account

Date	Details	\$	Date	Details	\$
2018			2018		
May 5	Sales	780	May 20	Sales returns	89
			May 27	Bank	<u>691</u>
		<u>780</u>			<u>780</u>

### Sales account

Date	Details	\$	Date	Details	\$
2018			2018		
			May 5	Kelly	780
May 31	Balance c/d	<u>1 670</u>	May 10	Bank	<u>890</u>
					<u>1 670</u>
			Jun 1	Balance b/d	<u>1 670</u>

### Purchases returns account

Date	Details	\$	Date	Details	\$
2018			2018		
May 31	Balance c/d	<u>45</u>	May 7	L. Larry	<u>45</u>
			Jun 1	Balance b/d	<u>45</u>



**Study tip**

Use the balance brought down figures to make up the trial balance. This ensures you enter it in the correct column. If the balance brought down is on the debit side, it is a debit balance and should be written in the debit column, for example, purchases.

**Stationery account**

Date	Details	\$	Date	Details	\$
2018			2018		
May 17	Bank	<u>76</u>	May 31	Balance c/d	<u>76</u>
Jun 1	Balance b/d	76			

**Sales returns account**

Date	Details	\$	Date	Details	\$
2018			2018		
May 20	Kelly	<u>89</u>	May 31	Balance c/d	<u>89</u>
Jun 1	Balance b/d	89			

**Wages account**

Date	Details	\$	Date	Details	\$
2018			2018		
May 29	Bank	<u>67</u>	May 31	Balance c/d	<u>67</u>
Jun 1	Balance b/d	67			

**Drawings account**

Date	Details	\$	Date	Details	\$
2018			2018		
May 31	Bank	<u>40</u>	May 31	Balance c/d	<u>40</u>
Jun 1	Balance b/d	40			

**Key info**

Kelly's and L. Larry's accounts do not appear in the trial balance because their accounts were closed.

The trial balance can now be prepared using all the account balances as follows:

**Key info**

The bank balance could be a debit or a credit balance. This is because sometimes there is a bank overdraft. This happens when the bank has allowed the business to withdraw more than it has deposited in the bank. Always read the question carefully to decide whether the bank balance is a debit or credit balance.

**Trial balance as at 31 May 2018**

	Debit	Credit
	\$	\$
Bank	7 673	
Capital		6 900
Purchases	670	
Sales		1 670
Purchases returns		45
Stationery	76	
Sales returns	89	
Wages	67	
Drawings	40	
	<u>8 615</u>	<u>8 615</u>

**Key terms**

**Closing inventory** is the value of inventory that has remained unsold at the end of the financial year.

**Finished goods** are goods ready for sale after having gone through the manufacturing process.

**Work in progress** are items that are not yet completed and only partly made.

**Opening inventory** is inventory that a business has at the start of the year. It represents an asset and hence will be a debit balance. It is last year's closing inventory.

## Closing inventory

Any inventory that has remained unsold at the end of the accounting period is called **closing inventory**. In the case of a trader, it would include only **finished goods**. However, in the case of a manufacturer, closing inventory would include, in addition to finished goods, inventory of raw materials and **work in progress** (you will learn more about closing inventory for manufacturers in Chapter 19). The value of closing inventory is achieved with a physical count of the inventory. (You will learn how to value inventory in Chapter 14). As inventory represents goods purchased for resale which remain unsold, the value of closing inventory is not included in the trial balance. Total purchases are already included and hence, if closing inventory is included, the effect is doubled and the trial balance will not balance. This year's closing inventory is next year's **opening inventory**.

### Activity 2

State whether the accounts shown in the table below will have a debit or credit balance. Use your knowledge of the accounting equation to help you. The first one is done for you.

Account name	Debit or credit?
Purchases	Debit
Sales	
Return outwards	
Cash	
Drawings	
Capital	
Trade receivables	
Trade payables	
Motor vehicle	
Rent	
Returns inwards	
Rent receivable	
Bank overdraft	
Stationery	
Inventory	

## Amending a trial balance which contains errors

As a rule, the accounts of assets or expenses should each have debit balances. However, the accounts of liabilities, capital and income should each have a credit balance. The trial balance reveals the following errors:

- » Arithmetical errors – these are errors of addition and subtraction. For example, an error in addition within an account or within the trial balance.
- » Using one figure for a debit entry of a transaction and another figure for the credit entry.

**Think about it!**

Can the balance in the cash account be a credit balance? Why?

- » Entering only one aspect of a transaction. For example, making a debit entry but forgetting to make a corresponding credit entry.
- » Entering a transaction twice on the same side of an account. For example, entering two debits instead of one debit and one credit.

You can do the following to locate errors:

- » Check whether the closing balances of accounts are correct.
- » Check whether the closing balances are transferred correctly to the trial balance numerically.
- » Check whether the closing balances are transferred correctly to the right column of the trial balance.
- » Check whether the totals of the debit and credit columns of the trial balance are correct.
- » Find the difference in the trial balance totals and check whether it resembles any of the closing balances or transactions. This balance may not have been transferred to the trial balance or the transaction may have been omitted.
- » Find the difference in the trial balance totals and divide by two. See if this figure resembles any of the transactions or closing balances. If the figure matches either a transaction or a closing balance, then it may have been written on the wrong side of the trial balance.
- » Finally, check whether all the double entries have been made for each transaction.

## → Worked example 2

An inexperienced book-keeper prepared the trial balance below for Gaurav, which contains errors. A corrected trial balance at 31 August 2019 is shown on the next page.

	Debit	Credit
	\$	\$
Capital	80 000	
Cash	70	
Bank overdraft	600	
Trade receivables		670
Trade payables	800	
Property & buildings		70 000
Machinery	6 000	
Opening inventory		900
Purchases	890	
Sales	760	
Purchases returns	400	
Sales returns		50
Wages		900
Rent received	450	
Electricity		200
Closing inventory		280
Office equipment	<u>3 330</u>	
	<u>93 300</u>	<u>73 000</u>

▲ Gaurav's trial balance as at 31 August 2019



	Debit \$	Credit \$
Capital		80 000
Cash	70	
Bank overdraft		600
Trade receivables	670	
Trade payables		800
Property & buildings	70 000	
Machinery	6 000	
Opening inventory	900	
Purchases	890	
Sales		760
Purchases returns		400
Sales returns	50	
Wages	900	
Rent received		450
Electricity	200	
Office equipment	3 330	
	<u>83 010</u>	<u>83 010</u>

▲ Gaurav's corrected trial balance as at 31 August 2019

### Key info

When calculating the capital in Activity 3 it is important to separate the debit from the credit balances. Remember that assets and expenses are debit balances and liabilities and income are credit balances. The difference between the total debit and credit balances should give you the capital.

### Activity 3

Hiloma has a business supplying furniture. His financial year ends on 31 March. In March 2018, his accounts showed the following balances:

	\$
Opening inventory	4 000
Non-current assets at cost	45 000
Cash at bank	700 (dr)
Sales	8 000
Purchases	4 700
Return inwards	450
Return outwards	50
Rent	340
General expenses	860
Drawings	500
Capital	?

- 1 Using your knowledge of the accounting equation, calculate the capital.
- 2 Prepare Hiloma's trial balance as at 31 March 2018.
- 3 State whether capital has a debit or credit balance.

## Errors that do not affect the trial balance

A trial balance may balance even if errors are made. This is a major limitation of a trial balance. Trial balances cannot detect book-keeping errors that fall into the following categories:

- » **Errors of omission** – this error occurs when a transaction is completely omitted from the books. Neither a debit entry nor a credit entry is made.

### Key term

**Errors of omission** occur when a transaction is completely omitted from the books.

**Key terms**

**Errors of commission** occur when the correct amount is entered, both debit and credit, but in the wrong account of the same class.

**Errors of principle** occur when the correct amount is entered, both debit and credit, but one of the entries is made in an account belonging to a different class.

**Compensating errors** occur when two or more errors cancel each other out.

**Overcast** means to record a total that is more than the true total. **Casting** means totalling.

**Errors of original entry** occur when an incorrect figure was used to record a transaction, both debit and credit.

**Errors of complete reversal of entries** occur when the correct amounts are used but double entries are made on the wrong side of the accounts concerned.

For example, the business sold goods worth \$300 to Jimmy, but did not enter it in the sales account or Jimmy's personal account.

- » **Errors of commission** – when the correct amount is entered, both debit and credit, but in the wrong account of the same class, it is an error of commission. For example, where a sale of \$36 to M. White is debited to the account of S White (note that both are personal accounts).
- » **Errors of principle** – when the correct amount is entered, both debit and credit, but one of the entries is made in an account belonging to a different class. For example, repairs to a motor vehicle are debited to Motor vehicle account.
- » **Compensating errors** – this is when two or more errors cancel each other out. For example, when the sales account is **overcast** (over-added) by \$30 and the purchases account is also overcast by \$30.
- » **Errors of original entry** – this error occurs when an incorrect figure was used to record a transaction, both debit and credit. For example, an error was made when totalling the amount of a sales invoice or the wrong figure was entered in the book of prime entry. The figure used was \$230, instead of the correct figure of \$130, to make the double entry.
- » **Errors of complete reversal of entries** – this error occurs when the correct amounts are used but double entries are made on the wrong side of the accounts concerned. For example, Mason paid the business \$350 by cheque. The business debited Mason and credited bank with the amount of \$350, instead of debiting bank and crediting Mason with that amount.

**Activity 4**

Identify the errors made in the following transactions. The first one has been done for you.

Transaction	Type of error
1 The purchase of a motor vehicle \$5 600, had been entered in error in the motor expenses account.	Error of principle
2 The purchase of a motor vehicle on credit from Simpson for \$3500 had been completely omitted from the books of the business.	
3 Inventory taken for own use \$120 has been debited to purchases account and credited to drawings.	
4 Returns inwards \$178 from Hadi had been entered in error in Ali's account.	
5 The sales account was under-cast by \$689 and the office expenses account was under-cast by \$689.	
6 The payment for repairs to the motor vehicle \$45 had been entered in error in the motor vehicle account.	
7 A sale of \$567 to Ella had been entered in the books, both debit and credit, as \$756.	
8 Cash paid to M. Rainman \$54 entered on the debit side of the cash book and the credit side of M. Rainman's account.	

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Which error affects the trial balance?  
 A An addition error in the Sales returns account  
 B Debiting a sale to M. Jalan's account instead of J. Balan's account  
 C Debiting the repairs to machinery to the machinery account  
 D Failing to enter a purchases invoice in the accounting records [1]
- 2 A trial balance has equal debits and credits of \$40 000 each. It was subsequently discovered that a rent payment of \$400 had been entered wrongly in the insurance premium account instead of the rent account. What will the trial balance totals be after the error was corrected?  
 A \$39 600  
 B \$40 000  
 C \$40 400  
 D \$44 000 [1]
- 3 The purchase of a new table has been debited to the repairs account in error. Which type of error is this?  
 A Complete reversal of entries  
 B Omission  
 C Original entry  
 D Principle [1]
- 4 Which error is an error of omission?  
 A No entries have been made for the purchase of machinery for cash.  
 B Purchase of machinery for cash has only been entered in the cash book.  
 C Purchase of machinery for cash has only been entered in the machinery account.  
 D The machinery account has not been entered in the trial balance. [1]
- 5 What is the purpose of the trial balance?  
 A To check that all invoices have been sent  
 B To check that all notes have been sent  
 C To check that the bank balance agrees with the bank statement  
 D To check the arithmetical accuracy of the double entry system used [1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 Name two errors that do not affect the trial balance. *complete reversal, omission* [2]
- 7 In Lylah's books, credit purchases from a supplier, Kenny, have been credited to the purchases account and debited to the Kenny's account in error. Name the type of error which has been made. [1]

- 8 Copy and complete the table below. Place a tick to show on which side of a trial balance each item would appear. The first one has been completed as an example. [5]

	Debit	Credit
Machinery	✓	
Purchases		
Bank overdraft		
Capital		
Drawings		
Trade receivables		

- 9 A payment for machinery repairs has been debited to the machinery account in error.

- a Name the type of error which has taken place. *commission* [1]  
 b Explain the effects of this error on the trial balance. *none* [2]

- 10 Sanath Jaffer is a trader. His financial year ends on 31 January. He provided the following information on 31 January 2013.

	\$
Capital	53000
Drawings	6 100
Revenue	6 6000
Purchases	43 350
Purchases returns	1 150
Inventory 1 February 2012	3 700
Inventory 31 January 2013	4 100
Bank overdraft	3 050
Trade receivables	5 320
Trade payables	3 450
General expenses	17 850
Non-current assets	50 400

- Complete a trial balance for Sanath Jaffer at 31 January 2013. Show any difference you find as a balance on an appropriate account. [7]

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2013, Q3 a)

- 11 a Complete the table below. Use a tick (✓) to show on which side of a trial balance each item would appear. The first one has been completed as an example. [5]

	Debit	Credit
Equipment	✓	
Bank overdraft		
Sales		
Discount allowed		
Capital		
Drawings		



- b** State one purpose of preparing a trial balance. [1]  
**c** A payment for vehicle repairs has been debited to the motor vehicles account in error.  
**i** Name the type of error which has taken place. *accrual error* [1]  
**ii** Explain the effects of this error on the trial balance. *no effect* [2]

(Adapted from Cambridge IGCSE Accounting 0452/13, October/November 2013, Q2 d, e & f)

- 12** Christos is in business buying and selling goods on credit. The following details relate to the account of Michelle for the month of July 2011.

		\$
Jul 1	Michelle owed Christos	200
Jul 7	Christos sent an invoice to Michelle	150
Jul 16	Christos sent a credit note to Michelle	8
Jul 31	Michelle sent Christos a cheque	195
Jul 31	Christos allowed Michelle cash discount	5

- a** Prepare the account of Michelle in the books of Christos. Bring down the balance on 1 August 2011. [6]  
**b** Name the book of prime entry in which Christos would record the transaction of 16 July 2011. [1]

The balances on Christos' books at 31 July 2011 were as follows:

	\$
Capital	?
Drawings	8 000
Office furniture	5 000
Provision for depreciation on office furniture	3 200
Inventory	4 150
Bank overdraft	250
Trade payables	2 950
Sundry expenses	10 600
Purchases	32 400
Provision for doubtful debts	350
Revenue (sales)	53 750
Trade receivables	6 250

- c** Prepare the trial balance for Christos at 31 July 2011, including the balance on the capital account. [6]  
**d** State the item in the trial balance which would include the balance on Michelle's account. [1]  
**e** State two differences between a trial balance and a statement of financial position. [4]

(Adapted from Cambridge O Level Accounting 7110/21, October/November 2011, Q1)



## Chapter review questions

- 1 Define what is meant by opening inventory.
- 2 State two uses of a trial balance.
- 3 Define what is meant by closing inventory.
- 4 Explain why closing inventory is not included in a trial balance.
- 5 Explain three errors that affect a trial balance.
- 6 Complete the following sentences, choosing from the words below:  
account; debit; statement; particular; balances; credit  
A trial balance is a \_\_\_\_\_ of \_\_\_\_\_ names and their \_\_\_\_\_ in  
\_\_\_\_\_ and \_\_\_\_\_ columns on a \_\_\_\_\_ day.

## Revision checklist

In this chapter, you have learnt:

- ✓ what a trial balance is
- ✓ the advantages of a trial balance
- ✓ the limitations of the trial balance, because it cannot reveal all errors
- ✓ how to prepare a trial balance using account balances
- ✓ the difference between opening and closing inventory
- ✓ how to locate errors revealed by the trial balance
- ✓ how to amend a trial balance that contains errors
- ✓ which errors are not revealed by the trial balance
- ✓ how to identify errors.



# Correction of errors

By the end of this chapter you will be able to:

- ★ correct errors by means of journal entries
- ★ explain the use of a suspense account as a temporary measure to balance the trial balance
- ★ correct errors by means of suspense accounts
- ★ adjust a profit or loss for an accounting period after the correction of errors
- ★ understand the effect of correction of errors on a statement of financial position.

## Types of errors

In Chapter 6, we came across two types of errors:

- » errors that affect the trial balance (when the trial balance does not balance)
- » errors that do not affect the trial balance (the trial balance totals agree, not revealing the errors committed).

### Activity 1

- 1 Explain three types of errors that affect the trial balance.
- 2 Name the six errors that do not affect the trial balance.

1. arithmetical, recorded twice on same side, swapped accounts, in trial balance  
 2. commission, omission, complete reversal, principle, original entry, compensating



## Correcting errors by means of journal entries

Errors are usually found after the date on which they are made. When they are discovered, they are corrected by means of journal entries before making entries in the relevant ledger accounts.

The following errors do not affect the statement of financial position:

- » Errors of omission
- » Errors of commission
- » Errors of principle
- » Compensating errors
- » Errors of original entry
- » Errors of complete reversal.

### Key info

You will have noticed that the errors that do not affect the trial balance have unique names, as shown.

## → Worked example 1

### Correction of errors that do not affect the trial balance

#### Error of omission

On 31 January 2018 the business sold goods worth \$300 to Jimmy, but did not enter it either in the sales account or Jimmy's personal account.

A correction entry would be to simply make the original entries.

#### Study tip

The two parts of the journal entry prepared to correct an error of commission or error of principle are:

- 1 One part, either the debit or credit, should undo the wrong entry.
- 2 The other part should record the right entry.

General journal			
Date	Details	Debit	Credit
2018		\$	\$
Jan 31	Jimmy's account	300	
	Sales account		300
(Error of omission, now corrected)			

#### Error of commission

On 31 January 2018, it was discovered that a sale of \$36 to M. White was entered in the account of S. White (note that both are personal accounts).

Since the business should have debited M. White it will now do that – debit M. White's account (do the right thing) and Credit S. White's account to cancel the wrong debit (undo the wrong).

The correction entry:

General journal			
Date	Details	Debit	Credit
2018		\$	\$
Jan 31	M. White's account	36	
	S. White's account		36
(Error of commission, now corrected)			

#### Error of principle

On 31 January 2018, it was discovered that repairs to a motor vehicle worth \$45 were debited to motor vehicle account (note that the two accounts belong to different classes: repairs are expenses whereas a motor vehicle is an asset.)

To correct the error:

General journal			
Date	Details	Debit	Credit
2018		\$	\$
Jan 31	Motor vehicle repairs account	45	
	Motor vehicle account		45
(Error of principle, now corrected)			

#### Compensating error

On 31 January 2018, it was discovered that the sales account was overcast by \$30 and the purchases account was also overcast by \$30.

In such a case, we will debit the sales account with \$30 to reduce the total sales and credit the purchases account with \$30 to reduce the total purchases. This is known as a compensating error.



## 7 CORRECTION OF ERRORS



### Key term

**Undercast** means to record a total that is less than the true total.

### Think about it!

Work with a partner to discuss the following:  
What if both the accounts shown above were undercast?  
Which account would be debited and which would be credited? By how much?

### Key info

Casting means totalling. Therefore, if a total is overcast, it has been incorrectly added up to give a sum that is greater than it should be. **Undercasting** is when a column of figures has been incorrectly added up to give a total that is less than it should be.

To correct the error:

General journal			
Date	Details	Debit	Credit
2018		\$	\$
Jan 31	Sales account	30	
	Purchases account		30
(Compensating error, now corrected)			

### Error of original entry

On 31 January 2018, it was discovered that the invoice sent to K. Lolly was recorded in the sales journal at \$130 instead of \$230.

As \$130 was used to make a double entry, we will credit sales with \$100 (the difference) to increase total sales, and debit the customer's account with \$100, to make his debt increase by \$100.

To correct the error:

General journal			
Date	Details	Debit	Credit
2018		\$	\$
Jan 31	K. Lolly's account	100	
	Sales account		100
(Error of original entry, now corrected)			

### Error of complete reversal of entries

On 31 January 2018, it was discovered that the business had debited Mason and credited bank to record the following transaction: Mason paid the business \$350 by cheque.

To correct this error, the business will now debit bank with \$700 (\$350 x 2) and credit Mason with \$700. The amount in the correcting entry is doubled. The reason we do this is that these two entries will undo the error.

To undo the wrong entry:

General journal				
Date	Details	Debit	Credit	
2018		\$	\$	
Jan 31	Bank account	350		
	Mason's account		350	

To post the right entry:

General journal				
Date	Details	Debit	Credit	
2018		\$	\$	
Jan 31	Bank account	350		
	Mason's account		350	

Combining the two entries above we now post the entry needed to correct the error of complete reversal:

General journal			
Date	Details	Debit	Credit
2018		\$	\$
Jan 31	Bank account	700	
	Mason's account		700
(Error of complete reversal on entries, now corrected)			

## Activity 2

State the journal entries necessary to correct the following errors:

- 1 The purchase of a motor vehicle on credit from Simpson for \$3500 had been completely omitted from the books.
- 2 The payment of \$45 for repairs to a machine had been entered in error in the machinery account.
- 3 A purchase of \$350 from Kella had been entered in error, both debit and credit, as \$530.
- 4 Inventory taken for own use \$120 has been debited to purchases account and credited to drawings.
- 5 Private insurance of \$78 had been debited to insurance account.
- 6 Returns inwards of \$230 from Benny had been entered in error in Jenny's account.
- 7 Cash drawings of \$380 had been credited to the bank column of the cash book.
- 8 A purchase of goods from Sandra \$850 on credit had been entered in the books as \$580.
- 9 The following transaction was completely omitted from the books: Cash sales \$3500.
- 10 Machinery purchased from J. Johnson on credit \$6700 was entered in M. Johnson's account in error.
- 11 A sale of \$100 to J. Hart was debited in error to K. Hart's account.
- 12 A sale of \$340 to Yang has been entered in the books, both debit and credit, as \$430.
- 13 The sale of a printer for \$560 has been credited to the sales account in error.
- 14 The purchase of machinery on credit from Kim worth \$34000 has been completely omitted from the books.
- 15 A receipt of cash from Jim for \$324 was debited to Jim's account and credited to cash account.
- 16 Sales journal was undercast by \$750 and office expenses account was undercast by \$750.



▲ When the trial balance does not agree, a suspense account is opened.

## Suspense account as a temporary measure to balance the trial balance

You have seen that errors that affect the trial balance will cause the trial balance totals to be unequal. The errors are:

- » incorrect totalling in any account
- » recording only one aspect of a transaction, for example, recording a debit but omitting the credit
- » using different figures for debit and credit entries.

Businesses should make every attempt to find the reasons why the trial balance totals do not agree. If, however, the errors cannot be found, it is still important to make the trial balance totals agree so that draft financial statements can be

**Key term**

A **suspense account** is a temporary account opened to make the trial balance totals equal. It acts as a holding account until the error(s) causing the inequality in the trial balance totals is discovered.

prepared. Therefore, a **suspense account** is opened with the difference in the trial balance totals. If the total debits are more than the total credits in the trial balance, then the difference is recorded in the suspense account as a credit. If the credits exceed the debits, the difference is recorded as a debit. With the suspense account, the trial balance will balance. The suspense account will appear in the draft statement of financial position as a current asset (if it is a debit balance) or a current liability (if it is a credit balance).

## Suspense account and correction of errors

One suspense account is opened to accommodate all the errors until they are found. These errors are then corrected by means of journal entries and the suspense account closes automatically.

### → Worked example 2

The book-keeper extracted a trial balance on 30 June 2019 which failed to agree by \$500, a shortage on the credit side of the trial balance. A suspense account was opened for the difference.

In the first week of July 2019, the following errors, made in the previous financial year, were found:

- a Purchases journal had been undercast by \$70.
- b Sales of \$350 to Manny had been debited in error to Danny's account.
- c Sales journal had been undercast by \$670.
- d Rent account had been undercast by \$100.

To correct error 'a' which affects the trial balance, an entry will be made in the suspense account:

General journal			
Date	Details	Debit	Credit
2019		\$	\$
Jun 30	Purchases account	70	
	Suspense account		70
[Purchases undercast, now corrected]			

To correct error 'b' which does not affect the trial balance:

General journal			
Date	Details	Debit	Credit
2019		\$	\$
Jun 30	Manny's account	350	
	Danny's account		350
[Error of commission, now corrected]			

To correct error 'c' which affects the trial balance, an entry will be made in the suspense account:

General journal			
Date	Details	Debit	Credit
2019		\$	\$
Jun 30	Suspense account	670	
	Sales account		670
[Sales undercast, now corrected]			

To correct error 'd' which affects the trial balance, an entry will be made in the suspense account:

General journal			
Date	Details	Debit	Credit
2019		\$	\$
Jun 30	Rent account	100	
	Suspense account		100
(Rent account undercast, now corrected)			

#### Nominal (general) ledger

##### Suspense account

Date	Details	\$	Date	Details	\$
2019			2019		
Jun 30	Sales account	670	Jun 30	Difference in trial balance totals	500
				Purchases	70
				Rent	100
		<u>670</u>			<u>670</u>

### Activity 3

- 1 Explain when a suspense account is opened.
- 2 Fill in the blanks:  
If the debits are more than the \_\_\_\_\_ in a trial balance, the \_\_\_\_\_ is entered on the \_\_\_\_\_ side of the \_\_\_\_\_ account.
- 3 Copy and complete the table below by placing a tick (✓) in the correct column to show how each of the following errors would affect the agreement in the totals of a trial balance:
  - a A sale of goods to Manning of \$350 was correctly entered in the sales journal but was entered in Manning's account as \$530.
  - b \$35 worth of discounts received was debited to the discounts allowed account.
  - c \$45 cash taken for personal use was credited to the capital account.
  - d Inventory at close was overvalued by \$500.
  - e Cheque from Jules \$450 was credited to Julia's account.
  - f \$53 was received from the sale of a motor vehicle was credited to the sales account and debited to cash account.

Transaction	No effect	Debit side will exceed the credit side by the amount shown	Credit side will exceed the debit side by the amount shown
		\$	\$
a			
b			
c			
d			
e			
f			

**Think about it!**

When an account is wrongly debited instead of being credited, and vice versa, the amount by which it affects the trial balance is doubled. Why?

**Key terms**

**Gross profit** is the difference between sales revenue and the cost of sales.

**Profit for the year** is the difference between the gross profit and expenses incurred by the business.

## Adjusting profit or loss after a correction of errors

It will be necessary to adjust profit or loss after correcting errors. The following rules apply:

- » If errors are discovered after the preparation of the income statement, profit from that income statement will need adjustments.
- » Errors that affect items in the trading account section of the income statement, such as sales or purchases, will affect the **gross profit** as well as the **profit for the year**.
- » Errors that affect items in the profit and loss section of the income statement, such as expenses or income, will affect only profit for the year.
- » Errors which only affect statement of financial position items, such as assets and liabilities, will not affect profit.

### → Worked example 3

#### Effect of correcting errors on profits

The trial balance of Hakim as at 31 July 2018 showed a difference that was posted to a suspense account. Draft financial statements for the year ended 31 July 2018 were prepared showing a profit for the year of \$3 500. The following errors were subsequently discovered:

- 1 Sales of \$560 to Malli had been debited to Ralli's account
- 2 A payment of \$350 for rent had been entered on the debit side of the rent account as \$340.
- 3 The sales journal had been undercast by \$450.
- 4 Repairs to motor vehicle worth \$45 had been charged to motor vehicle account.
- 5 A cheque for \$445, being rent received from Bala, had only been entered in the cash book.
- 6 A purchase of fittings \$350 had been entered in the purchases account.
- 7 A cheque for \$56 received from a debtor had been correctly entered in the cash book but posted to the customer's account as \$50.

### Activity 4

Balentine Socks prepared their draft financial statements for the year ended 31 December 2018. They then discovered the following error in their inventory lists used to calculate their inventory at 31 December 2018. 2 000 pairs of merino socks that cost \$1.00 each were valued at \$20 000 in the inventory list.

Explain how this error will affect:

- a the value of closing inventory
- b the trial balance totals
- c the total for current assets at 31 December 2018?

#### Hakim

##### Statement of corrected profit for the year for the year ended 31 July 2018

	\$ (+)	\$ (-)	\$ Total
Profit for the year from draft income statement			3 500
Rent undercast (error 2)		10	
Sales undercast (error 3)	450		
Motor van repairs undervalued (error 4)		45	
Rent received not entered (error 5)	445		
Purchases overvalued (error 6)	350		
	<u>1 245</u>	<u>55</u>	<u>1 190*</u>
Corrected profit for the year			<u><u>4 690</u></u>

$$*\$1,245 - \$55 = \$1,190$$

- Errors 1 and 7 – these will not affect profit as they only affect statement of financial position accounts.
- Error 2 – rent is undercast by \$10 (\$350 – \$340). As it is an expense, the correction will decrease profit.
- Error 3 – sales are undercast. As sales is revenue, the profits will increase with the correction.
- Error 4 – repairs have not been entered. As repairs is an expense, the correction will decrease profits.
- Error 5 – no entry has been made for rent received which is an income; therefore, profits will increase with the correction.
- Error 6 – purchases have been overvalued. As purchases reduces profit, the correction will increase profit.



## Effect of correcting errors on a statement of financial position

A large quantity of data is usually involved in preparing a statement of financial position and this means that accounting errors may occur. Such errors could be genuine or attempts to conceal fraud. If errors are discovered after the preparation of draft financial statements, the statement of financial position must be amended. For example, a correction of profit for the year in the income statement will affect the equity section of the statement of financial position. Apart from capital, assets and liabilities may also need to be adjusted.

### → Worked example 4

#### Correction of errors and the statement of financial position

Meher's financial year ends on 31 July. As her trial balance totals did not agree, a suspense account was opened and draft financial statements prepared. After the errors shown below were discovered and corrected in the income statement, the adjusted profit for the year was calculated as \$23 000 for the year. However, no adjustments were made to the statement of financial position after the correction of the errors below.

- 1 The sales account was undercast by \$300.
- 2 Purchases returns worth \$570 were correctly entered in the supplier's account but debited to the sales returns account in error.
- 3 No entry was made for motor expenses of \$25 paid by cheque.
- 4 \$450 in cash was paid to a credit supplier and was entered correctly in the cash book, but no other entry was made.
- 5 Credit purchases of \$670 from Mosaic Ltd were correctly entered in the purchases account, but credited in Mosaic Ltd's account as \$760.
- 6 Meher deposited \$4 500 cash into the business bank account. The bank account was credited and capital account debited, in error.

This is an extract from the statement of financial position before the errors were corrected:

	\$
Current assets:	
Bank	600
Current liabilities:	
Trade payables	1 300
Capital	\$20 000

The statement of financial position will be affected in the following way after the correction of the errors:

- \$23 000 is added to capital as profit for the year for the year after correction of errors in the income statement.
- Errors 1 and 2 – these have been corrected and the corrected profit for the year of \$23 000 reflects these corrections.
- Error 3 – motor expenses have been considered to arrive at the corrected profit for the year. However, since the payment was made by cheque and the entry was completely omitted, the bank account should be decreased by \$25.
- Error 4 – the supplier received cash and therefore trade payables should be decreased by \$450. The cash book is correct.
- Error 5 – Mosaic is a supplier whose account was wrongly credited with \$760 instead of \$670, a difference of \$90; therefore, trade payables should be reduced by \$90.

→ Error 6 – this is an error of complete reversal and both accounts involved – the bank account and the capital account – are in the statement of financial position. Both these accounts will be increased by \$9 000 (\$4 500 x 2).

The new figure for bank = \$600 – \$25 + \$9 000 = \$9 575

The new figure for trade payables = \$1 300 – \$450 – \$90 = \$760

The new figure for capital = \$20 000 + \$23 000 + \$9 000 = \$52 000

The extract from the statement of financial position *after* the errors have been corrected:

	\$
Current assets:	
Bank	9 575
Current liabilities:	
Trade payables	760
Capital	\$52 000

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

1 The trial balance totals of Bayle's were:

- Debit \$40 000
- Credit \$35 000

The following errors were then discovered:

- A cheque received from L. Manal in full settlement of a debt of \$3 000 has been credited to K. Malan.
- Sales \$2 500 has been included as a debit balance

What will the corrected trial balance totals be?

- A \$37 500
- B \$42 500
- C \$43 000
- D \$45 500

[1]

2 The balance of the purchases account of \$40 000 has been entered on the wrong side of the trial balance. This is the only error.

To make the trial balance totals equal, which suspense account entry is required?

- A Credit \$40 000
- B Credit \$80 000
- C Debit \$40 000
- D Debit \$80 000

[1]

3 A suspense account is opened with a difference in trial balance totals. It was then found that a payment of \$500 to Jasmine, a credit supplier, has been entered correctly in the cash book, but credited in the purchases account.

Which of the following journal entries should be prepared to correct the error?

[1]

	Debit	Credit
<b>A</b>	Purchases \$500 Jasmine \$500	Suspense \$1 000
<b>B</b>	Suspense \$1 000	Purchases \$500 Jasmine \$500
<b>C</b>	Purchases \$500	Suspense \$500
<b>D</b>	Jasmine \$500	Suspense \$500

- 4** Which of the following errors will affect the trial balance?
- A** A casting error in the purchases account
  - B** Crediting the sales of a non-current asset to the sales account
  - C** Debiting sales to J. Petal's account instead of M. Patel's account
  - D** Making no entries to record a purchases invoice [1]
- 5** A trial balance has equal debits and credits of \$30 000. It was then discovered that commission received \$2 300 was wrongly credited to the discounts received account. What will the trial balance totals be after this error has been corrected?
- A** \$27 700
  - B** \$30 000
  - C** \$32 300
  - D** \$34 600 [1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6** Maria Matsa's financial year ends on 30 September. The trial balance prepared on 30 September 2002 showed a shortage on the credit side of \$788. Maria entered this in a suspense account and then prepared a draft trading account and profit and loss account (income statement). The following errors were later discovered:
- i** \$50 cash spent on stationery was entered in the cash book but not in the stationery account.
  - ii** The sales journal was undercast by \$1 000.
  - iii** \$240 received from Abdul Ahmed, a customer, had been credited to the account of Abdulla Ahmed, another customer, in the sales ledger.
  - iv** The total of the discount received column in the cash book of \$14 had been debited to the discount allowed account in the nominal (general) ledger.
  - v** \$95 cash paid to Joe Jones, a trade creditor, had been credited to his account in the purchases ledger.
  - a** Prepare the entries in Maria Matsa's journal to correct the above errors. Narratives are *not* required. [11]
  - b** Prepare the suspense account in Maria Matsa's ledger to show the required amendments. Start with the balance arising from the difference on the trial balance. [6]
  - c** For each error i–v state how the draft profit for the year will be affected when the errors are corrected. If the error does not affect the draft profit for the year, write 'no effect' [4]
- The first one has been completed as an example:  
Error i: Decrease by \$50.

(Adapted from Cambridge IGCSE Accounting 0452/3, October/November 2002, Q1)

7 Ismail Kahn is a sole trader.

a State one reason for preparing a trial balance. [1]

The following list of balances was taken from Ismail Khan's books on 30 April 2007:

	\$
Sales	125 000
Inventory	14 500
Purchases	76 000
Bank (overdraft)	2 300
Machinery	9 000
Trade receivables	1 700
Trade payables	2 800
Expenses	37 500
Capital	15 500
Drawings	8 000

b Prepare Ismail's trial balance at 30 April 2007. Include a suspense account to show any difference. [11]

After the trial balance had been prepared, the following errors were found.

i Cash sales of \$2 000 had been paid into the bank but had not been posted to the sales account.

ii Drawings of \$900 had been correctly entered in the cash book but posted to the drawings account as \$500.

iii The cash account of \$500 had been omitted from the list of balances.

c Prepare the journal entries, with narratives, required to correct **each** error. [9]

d State the balance on the suspense account **after** these journal entries have been posted to the ledger. [1]

(Adapted from Cambridge IGCSE, Accounting 0452/2, May/June 2007, Q5)

8 Larry's financial year ends on 31 December. His trial balance totals did not agree, and a suspense account was opened. Draft financial statements were prepared. The following errors were then discovered:

- The sales account was overcast by \$700.
- Purchases returns \$190 were correctly entered in the supplier's account but debited to the sales returns account in error.
- No entry was made for motor repairs worth \$250 paid by cheque.
- Cash received from a customer of \$950 was entered correctly in the cash book, but no other entry was made.
- Credit purchases of \$950 from Ibrahim were correctly entered in the purchases account, but credited in Ibrahim's account as \$590.
- Larry deposited \$9 500 cash into the business bank account. The bank account was credited and capital account debited, in error.

The profit for the year, after the correction of the errors above, was \$30 000. This is an extract from the statement of financial position before the errors were corrected:

	\$
Current assets:	
Bank	400
Trade receivables	1 800
Current liabilities:	
Trade payables	2 300
Capital	\$67 000

- a** Prepare an extract from the statement of financial position after the correction of the errors made. [15]
- 9** Uzma Khan runs a dress-making business. She maintains a full set of accounting records. Her financial year ends on 28 February. On 28 February 2014 she opened a suspense account and entered a credit balance of \$2 027.
- a** State **two** reasons why it was necessary for Uzma Khan to open a suspense account. [2]
- Uzma Khan discovered the following **errors** had been made in her accounting records.
- i** Rent of premises, \$250, had been debited to the rent account as \$520.
  - ii** \$400 withdrawn from the bank for personal use had been debited to the wages account.
  - iii** The total of the discount allowed column in the main cash book, \$43, had not been transferred to the discount allowed account in the ledger.
  - iv** \$2 000 received from Amina had been credited to the account of Mona as \$200.
- b** Prepare the entries in Uzma Khan's journal to correct the four errors. Narratives **are** required. [13]
- c** Complete the table below to show what effect **each** of the four errors had on Uzma Khan's profit for the year ended 28 February 2014. [6]

Effect on profit for the year			
Error	Overstated	Understated	No effect
	\$	\$	
i		\$270	
ii			
iii			
iv			

(Cambridge IGCSE Accounting 0452/21, May/June 2014, Q5)

- 10** Arrietty's draft income statement showed a profit for the year of \$26 800. The following errors were then discovered.
- i** Inventory, \$160, at a customer's premises at the year-end on a sale or return basis, had been forgotten and not included in the financial statements.
  - ii** The sales account had been undercast by \$1000.



- iii Goods, \$250, taken by Arrietty for her own use, had not been recorded in the books of account.
  - iv A cheque from a debtor, Alice, had been credited to the account of Alicia.
  - v A payment for vehicle repairs, \$300, had been credited to the vehicle repair account.
- a Complete the table below using a tick (✓) to indicate if **each** error would affect the balancing of the trial balance. The first has been completed as an example. [4]

Error	Affects balancing of trial balance	Does not affect balancing of trial balance
i		✓
ii		
iii		
iv		
v		

- b Complete the statement below to show the effect of **each** of these errors on the profit for the year. If an error has no effect, write No Effect. Show the corrected profit for the year. [7]

Statement of corrected profit	
	\$
Draft profit for the year	26 800
Error 1	.....
Error 2	.....
Error 3	.....
Error 4	.....
Error 5	.....
Corrected profit for the year	_____

- c Name the type of error made in Error 4. [1]  
(Cambridge IGCSE Accounting 0452/13, October/November 2014, Q4)

- 11 Monica has a shop. She writes up the books of account herself but is not an experienced bookkeeper. Her financial year ends on 28 February. The trial balance she prepared on 28 February 2011 showed a shortage on the debit side of \$720. Monica entered this in a suspense account and then prepared a draft income statement showing a profit for the year of \$3 600. The following errors were later discovered.
- A cheque payment of \$460 to repay a loan from Carlo has been correctly entered in the cash book but \$640 has been debited to his loan account.
  - Cash sales of \$850 have been completely omitted from the books.
  - A cheque payment for \$900 for goods has been entered in the cash book but no other entry has been made.

- The purchase of new display shelves for \$1 200 has been debited to the repairs account.
  - a Show the journal entries required to correct the above errors. The date and narrative are **not** required. [8]
  - b Prepare the suspense account in Monica's ledger from the journal entries you prepared in a. Dates are **not** required. [6]
  - c Prepare a statement to show Monica's profit for the year **after** correcting the errors 1–4. [5]
- (Adapted from Cambridge IGCSE Accounting 0452/11, May/June 2011, Q6)

## ? Chapter review questions

- 1 Explain two errors that affect the trial balance.
- 2 Explain what is meant by an error of complete reversal.
- 3 Name one type of error that is corrected using a suspense account. Choose from the following:
  - a omission
  - b commission
  - c original entry
  - d single entry.
- 4 Solomon Mills buys stationery worth \$500, paying by cheque. This is entered correctly in the cash book but is credited in the stationery account. Prepare a journal entry to correct this error.
- 5 Mariam received a cheque from a debtor for \$45. It was entered into Mariam's bank account as \$54. The trial balance did not balance and the difference was entered into a suspense account. Prepare the journal entry required to correct this error. A narrative is *not* required.
- 6 A purchases invoice was entered by mistake in the purchases returns journal. Name the type of error that has been made.
- 7 Abraham's journal shows the entry below. Name the error that the journal entry is correcting.

	Debit	Credit
	\$	\$
Kingston	600	
Kingsley		600
(Entry required to correct an error)		

- 8 It is found that a credit purchase was completely omitted from the books.
  - a State which type of error has taken place.
  - b Explain how this error affects the income statement.
  - c State whether or not this error affects the statement of financial position.
- 9 No adjustment was made for annual rent paid by cheque when preparing the financial statements. Identify which statements are correct.
  - a Profit for the year is overstated
  - b Profit for the year is understated
  - c Current assets are overstated
  - d Current assets are understated
  - e Non-current assets are overstated
  - f Non-current assets are understated
- 10 Sam's trial balance failed to balance. The debit column totalled \$12 250 and the credit column totalled \$12 200. The following errors were discovered and corrected.
  - No entry had been made in the sales account for cash sales, \$150.
  - The total of the discount allowed account, \$100, had been omitted from the trial balance.

Calculate the totals of the amended trial balance.

### Revision checklist



In this chapter, you have learnt:

- ✓ to correct errors that do not affect the trial balance
- ✓ to correct errors that affect the trial balance
- ✓ why a suspense account is opened
- ✓ how a suspense account is opened and closed
- ✓ how to correct errors using a suspense account
- ✓ which errors affect the profit or loss for an accounting period
- ✓ how to make adjustments to the profit or loss for an accounting period after the correction of errors
- ✓ which errors affect the statement of financial position
- ✓ how to make adjustments to the statement of financial position after the errors are corrected.



# Bank reconciliation

By the end of this chapter you will be able to:

- ★ explain the use and purpose of a bank statement
- ★ update the cash book for bank charges, bank interest paid and received, correction of errors, credit transfers, direct debits, dividends and standing orders
- ★ understand the purpose of, and prepare, a bank reconciliation statement to include bank errors, uncredited deposits and unpresented cheques.

## Use and purpose of a bank statement

In Chapter 5 we saw that monies coming into and out of a business are recorded in the cash book. Cash items are entered into the cash columns while cheques and other banking items are entered in the bank columns. The bank will also maintain an account for the business to record all the transactions the business has had with it.



BANK STATEMENT

SAND BANK LIMITED

77 Birdie Road, St Michael, Barbados



Telephone: 33-3612

e-mail: sandbank3@whatsit.net

In account with Bats R Us

Bats R Us Ltd

31 Worcester Road

Cheltenham

England

31 August 2020

Account Number: 4563542

Date	Particulars	Debit (Dr)	Credit (Cr)	Balance \$
2 Aug	Brought forward			434.00 cr
5 Aug	Cash	20.00		414.00 cr
5 Aug	Cash	40.00		374.00 cr
5 Aug	Cheque 054	37.20		336.80 cr
6 Aug	Cheque deposit		182.00	518.80 cr
10 Aug	Cash	24.00		494.80 cr
12 Aug	Cash deposit		89.00	583.80 cr
13 Aug	Cheque deposit		168.00	751.80 cr
13 Aug	Cash	24.00		727.80 cr
20 Aug	Cheque book	20.00		707.80 cr
20 Aug	Cheque deposit		154.00	861.80 cr
21 Aug	Cheque 055	24.00		837.80 cr
21 Aug	Cheque 056	144.00		693.80 cr
27 Aug	Cash deposit		146.00	839.80 cr
31 Aug	Cash	24.00		815.80 cr
31 Aug	Insurance paid direct	21.00		794.80 cr
31 Aug	Cheque deposit		32.00	826.80 cr

Dr = Overdrawn balance

**Key terms**

A **bank statement** is a copy of the customer's account as shown in the books of the bank.

**Bank reconciliation** is a process that explains the difference between the bank balance as shown in the bank statement, supplied by the business' bank on a particular date, and the corresponding amount shown in the business' cash book. It takes the form of a working document known as a bank reconciliation statement.

The bank sends its customers a **bank statement** at regular intervals. The bank statement is a copy of the bank's records of the business' account. It is maintained using the running balance method, similar to the one used in the statement of account explained in Chapter 4. A new balance is shown after every entry. This balance is often followed by the letters cr to show a credit balance, or dr to show an overdrawn balance.

## Bank reconciliation

If the cash book is up to date, the entries on the bank statement should be exactly the same as the ones in the business cash book. Therefore, the balance in the bank column of the cash book and the balance on the bank statement should be the same. However, sometimes this is not the case. When this happens, the balance in the bank column of the cash book should be reconciled with the balance in the bank statement, referred to as a **bank reconciliation**.

There are several reasons why the balance on the bank account may not be the same as the balance in the bank column of the cash book and these are described below.

### Transactions recorded by the bank but not by the business

- » **Bank charges and bank interest** – a bank charge is a fee the bank has charged, for example, fees for maintaining the account, overdraft processing fees and fees for cashing overseas cheques. The bank can also charge interest on loans and overdrafts.
- » **Standing orders** – the business can order its bank to pay a set amount of money regularly on a stated date to an individual or an organisation. For example, a firm might instruct its bank to pay an annual insurance premium, or a monthly loan repayment.
- » **Direct debits** – this represents an arrangement by a business with its bank for a creditor to transfer money from the business' account on pre-arranged dates. Businesses usually pay utilities bills this way. Direct debits are different from standing orders because the amount of a direct debit may vary from one month to the next, whereas a standing order involves a fixed amount of money.
- » **Dishonoured cheques** – cheques that the business has received from another person or company but which have been rejected for payment when the business deposited it. This may be because there are insufficient funds in the account of the drawer. However, there can be other reasons. For example, the cheque may have been written out incorrectly, the signature may be suspect, the word and figures may differ or the cheque may be out of date (usually, more than six months old).
- » **Electronic direct payment (bank transfers)** – it is now possible to transfer money from one bank account to another electronically via the internet, referred to as bank transfers. These are automatically recorded by the bank but may not be recorded by the business.

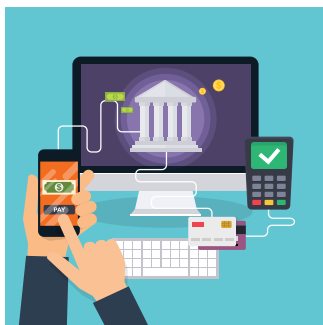
**Key term**

**Electronic direct payment** is the facility to transfer money from one bank account to another electronically via the internet.

**Drawer** is the person or company who writes a cheque.

**Payee** is the person or company who is paid when a cheque is cleared.

**Drawee** is the bank where the drawer has an account from which a cheque is to be paid.

**Key info**

There are normally three parties involved in a cheque transaction: the **drawer** who writes the cheque, the **payee**, who is paid when the cheque is cleared and the **drawee**, the bank where the drawer has an account from which the cheque is to be paid.

**Key term****Unpresented cheques**

are those issued by the business but not presented by the payee to the bank.

**Activity 1**

- 1 Give five reasons why a bank statement balance can differ from the balance in the cash book.
- 2 Explain the following terms:
  - a Direct debit
  - b Standing order
  - c Dishonoured cheque
  - d Unpresented cheque.

**Think about it!**

How would a bank record its customers' withdrawals? Why?

**Key info**

Remember that all entries in the business' cash book (bank columns) are reversed in the bank's record of the business' account. What the business debits the bank will credit, and what is credited by the business, the bank will debit.

Transactions recorded by the business but not by the bank

An uncredited cheque is one that has been received by the business from its trade receivables, paid into the bank and debited in the cash book. However, the cheque has not yet been cleared by the bank and entered in its records. These cheques will therefore not appear in the bank statement. Such cheques are known as 'uncredited deposits'.

**Unpresented cheques** are those issued by the business but not presented by the payee to the bank. Sometimes cheques received by the bank are not recorded by the bank due to a delay in the clearing of the cheque.

**Errors**

The final reason the balance on the bank account may not be the same as the balance in the bank column of the cash book is as a result of errors. These may be errors by:

- » the business – these errors should be corrected as soon as they are discovered
- » by the bank – the bank should be notified of these errors as soon as possible.

When the bank statement is compared with the bank column of the cash book, it will be found that a debit in the cash book will be a credit in the bank statement and vice versa. When deposits are made by the business into its bank account, its cash book will be debited, as the bank now owes this money to the business and is a debtor. The bank will, however, credit this amount as the business has now become one of the bank's creditors. This means a positive bank balance will appear as a debit balance in the cash book and a credit balance in the bank statement. An overdraft will appear as a credit balance in the cash book and a debit balance in the bank statement.

**Updating the cash book**

The first step in bank reconciliation is to compare the bank columns in the cash book with the bank statement for that period. The debit entries in the cash book should correspond to credit entries in the bank statement and the credit entries in the cash book should be compared with the debit entries in the bank statement. Put a tick against the entries that appear in both accounts. Circle the ones that do not. The circled entries in the bank statement are the ones missing from the cash book, so it is important to update the cash book and include the missing transactions. The circled entries in the debit column of the bank statement should now be included on the credit side of the cash book, for example, bank charges. The circled entries in the credit column of the bank statement should be entered on the debit side of the cash book, for example, a credit transfer.

**Activity 2**

- 1 State when a bank reconciliation statement is required.
- 2 Explain why a deposit in a bank account is debited in the business' cash book and credited in the business' account maintained by the bank.

### → Worked example 1

#### Simple updating of a cash book

Cash book (bank columns only)									
Date		Details		\$	Date		Details		\$
2019					2019				
Jan 1	Bal b/d	✓		3000	Jan 2	C Meena	✓		500
10	Jones	✓		500	14	James	✓		100
16	S. Mary	✓		<u>450</u>	31	Bal c/d			<u>3350</u>
				<u>3950</u>					<u>3950</u>

Bank statement					
2019			Withdrawals	Deposits	Balance
			\$	\$	\$
Jan 1	Balance b/d	✓			3 000
4	10987	✓	500		2 500
13	Jones	✓		500	3 000
16	James	✓	100		2 900
17	Credit transfer received			400	3 300
18	S. Mary	✓		450	3 750
31	Bank charges		100		3 650

This refers  
to a cheque  
number

A cash book has a debit balance of \$3350 on 1 February 2019. All the items in the cash book have been mentioned in the bank statement (there are no circles in the cash book). However, the following items are missing from the cash book and are circled in the bank statement: credit transfer received \$400 and bank charges \$100. The cash book needs to be updated.

Updated cash book (bank columns only)					
Date	Details	\$	Date	Details	\$
2019			2019		
Feb 1	Balance b/d	3 350	Feb 1	Bank charges	100
	Credit transfer received	<u>400</u>		Balance c/d	<u>3 650</u>
		<u>3 750</u>			<u>3 750</u>
Feb 1	Balance b/d	3 650			

### Activity 3

Extracts from Jason's cash book and the statement he received from his bank are shown below. At 1 January 2019 update the cash book.

Jason's cash book (bank columns only)					
Date	Details	\$	Date	Details	\$
2018			2018		
Dec 1	Bal b/d	1 650	Dec 5	Nina	350
Dec 6	M. Mistry	300	Dec 16	Vivek	140
Dec 18	J. Wood	450	Dec 20	S. Big	250
Dec 24	M. Baron	<u>120</u>	Dec 31	Bal c/d	<u>1 780</u>
		<u>2 520</u>			<u>2 520</u>

Bank statement				
2018		Dr	Cr	Balance
		\$	\$	\$
Dec 1	Bal b/d			1 650 cr
Dec 6	3408	350		1 300
Dec 8	Deposit		300	1 600
Dec 20	Vivek	140		1 460
Dec 21	Wood		450	1 910
Dec 23	S. Big	250		1 660
Dec 27	Deposit		120	1 780
Dec 28	Credit transfer received		200	1 980
Dec 31	Bank charges	60		1 920

#### Key info

It is the balance as per updated cash book that is mentioned as a current asset in the statement of financial position.

Most businesses wait until they receive a statement from the bank before balancing the cash book. They make the necessary adjustments from the statement and then balance the book. However, this is not always possible, and the cash book may have to be adjusted after it has been balanced.

## Bank reconciliation statement

If there are items circled in the cash book, then a bank reconciliation statement should be prepared. The purpose of the bank reconciliation statement is to reconcile (explain) the differences between the balance in the cash book and the balance on the bank statement.

### → Worked example 2

#### Simple bank reconciliation statement

Information given as at 31 December 2018:

- Cash at bank as per updated cash book \$750.
- Unpresented cheques \$250.
- Cheques paid into the bank but not yet entered in the bank statement \$160.
- Cash at bank as per bank statement \$840.



**Key info**

If the bank reconciliation statement starts with the balance as per bank statement, then unpresented cheques must be deducted and uncredited deposits must be added.

Bank reconciliation statement as at 31 December 2018	
Cash at bank as per cash book	\$ 750
→ Add: Unpresented cheques	250
	1 000
Less: Uncredited deposits not entered in cash book	160
Cash at bank as per bank statement	840
Deduct any items are circled on the debit side of the cash book: Uncredited deposits not entered.	

▲ A bank reconciliation statement

Add any items that are circled on the credit side of the cash book: unpresented cheques.

Start with cash at bank as per updated cash book.

This balance should agree with the balance on the bank statement.

Though the bank reconciliation statement started with balance as per updated cash book, it can also start with balance as per bank statement. In that case, the bank reconciliation statement will end with the balance as per updated cash book.

**Study tip**

It is a good idea to have a default method. Always start with balance as per updated cash book if you think that it is easier. Whichever method you use, always add and then deduct. That way you will not end up with a complex mathematical problem like two negatives!

**Think about it!**

During the bank reconciliation process the accountant realises that the bank has mistakenly processed a debit as a credit. In a group, discuss what actions you think the accountant will need to implement with the bank. What adjustments, if any, will the accountant make to the firm's accounts?

## Updating the cash book

We will now look at updating the cash book for credit transfers, interest received, direct debits, dividends and standing orders.

### → Worked example 3

This is a more complicated example involving credit transfers, interest received, direct debits, bank charges, dividends received and standing orders.

The Leather Trader					
Cash book (bank columns only)					
2018	Details	\$	2018	Details	\$
Jun 1	Balance B/D	7 900	Jun 3	S. Koh Ltd – supplier ✓	1 500
Jun 8	P. Masters ✓	500	Jun 4	C. Patel – repairs ✓	410
Jun 15	Sales ✓	1 900	Jun 16	P. Saghir – cleaning ✓	230
Jun 28	J. Kasim ✓	200	Jun 21	T. Afzal – supplier	800
Jun 30	K. Bandara	600	Jun 24	Hightec – IT service ✓	140
Jun 30	Sales	1 220	Jun 28	Telcel – telephone	300
			30	Balance c/d	8 940
		<u>12 320</u>			<u>12 320</u>
Jul 1	Balance b/d	8 940			

The Leather Trader					
Bank statement					
Date	Details	Debit	Credit	Balance	
2018		\$	\$	\$	
Jun 1	Balance			7 900	CR
Jun 9	Deposit ✓		500	8 400	
Jun 12	Cheque No. 6211 ✓	410		7 990	
Jun 17	Credit transfer ✓	230		7 760	
Jun 18	Deposit ✓		1 900	9 660	
Jun 18	Interest		60	9 720	
Jun 20	Dividends received		100	9 820	
Jun 26	Deposit ✓		200	10 020	
Jun 28	Credit transfer received		760	10 780	
Jun 29	Cheque No. 6213 ✓	140		10 640	
Jun 29	Cheque No. 6210 ✓	1 500		9 140	
Jun 30	Direct debit	700		8 440	
Jun 30	Standing order	250		8 190	
Jun 30	Bank charges	30		8 160	

The ticks shows all the entries where the bank statement and the cash book correspond.  
Items that are shown in the cash book but are not on the bank statement are:

- Uncredited deposits:
  - K. Bandara \$600
  - Sales \$1 220
- Unpresented cheques:
  - T. Afzal \$800
  - Telcel \$300

Items that are entered on the bank statement and not in the cash book are:

- Interest received \$60
- Dividends received \$100
- A credit transfer received of \$760
- A direct debit payment (Guard Insure) \$700
- Standing order \$250
- Bank charges deducted \$30

The Leather Trader					
Updated cash book (bank columns only)					
Date	Details	\$	Date	Details	\$
2018			2018		
Jun 30	Bal b/d	8 940	Jun 30	Guard Insure	700
	Interest received	60		Standing order	250
	Dividends received	100		Bank charges	30
	Cr transfer received	760		Balance c/d	8 880
		<u>9 860</u>			<u>9 860</u>
Jul 1	Balance b/d	8 880			

## 8 BANK RECONCILIATION

The bank reconciliation statement can be completed in one of two ways: starting with the updated cash book balance or starting with the balance as per bank statement.

Starting with the updated cash book balance

The Leather Trader		
Bank reconciliation statement as at 30 June 2018		
	\$	\$
Balance as per updated cash book		8 880
Add: unpresented cheques:		
T. Afzal	800	
Telcel	<u>300</u>	<u>1 100</u>
		9 980
Less: uncredited deposits not recorded		<u>1 820</u>
Balance as per bank statement		<u>8 160</u>

Starting with the balance as per bank statement

The Leather Trader		
Bank reconciliation statement as at 30 June 2018		
	\$	\$
Balance as per bank statement		8 160
Add: Uncredited deposits not entered		<u>1 820</u>
		9 980
Less: Unpresented cheques:		
T. Afzal	800	
Telcel	<u>300</u>	<u>1 100</u>
Balance as per updated cash book		<u>8 880</u>

### Activity 4

The following bank statement was received by M. Sodden on 3 July 2018:

M. Sodden				
Bank statement				
Date	Details	Debit	Credit	Balance
2018		\$	\$	\$
Jun 1	Balance			3 000 CR
Jun 11	Cash		750	3 750
Jun 17	Cheque 064	1 000		2 750
Jun 22	S. Swami		250	3 000
Jun 26	Dishonoured cheque	250		2 750
Jun 28	Insurance premium	750		2 000
Jun 29	Bank charges	50		1 950



M. Sodden					
Cash book (bank columns only)					
Date	Details	\$	Date	Details	\$
2018			2018		
Jun 1	Balance b/d	3 000	Jun 15	L. Lee	1 000
Jun 11	Sales	750	Jun 26	Dishonoured cheque	250
Jun 20	S. Swami	250	Jun 29	M. Beant	400
Jun 25	Lydia	<u>460</u>	Jun 30	Balance c/d	<u>2 810</u>
		<u>4 460</u>			<u>4 460</u>

- 1 Update the cash book at 1 July 2018.
- 2 Prepare a bank reconciliation statement reconciling the amended cash book balance with the bank statement balance.

## Treatment of errors committed in cash books or bank statements

Errors should be corrected when preparing the bank reconciliation statement.

- » Errors made by the bank – amounts debited in error by the bank are deducted from the balance as per cash book and those credited in error added to the balance as per cash book.
- » Errors made by the business in the cash book – if the error has resulted in the credit total being understated, then the amount should be entered on the credit side of the updated cash book to correct the error. If the error has resulted in the debit total being understated, then the amount should be entered on the debit side of the updated cash book to correct the error.

### → Worked example 4

Balakrishna					
Bank statement					
Date	Details	Debit	Credit	Balance	
2018		\$	\$	\$	
Jun 1	Balance			5 000	CR
Jun 11	Cash		150	5 150	
Jun 17	Malti	2 000		3 150	
Jun 22	S. Stanson		150	3 300	
Jun 26	Dolly	250		3 050	
Jun 28	Insurance premium	50		3 000	
Jun 29	Bank charges	50		2 950	



Balakrishna					
Cash book (bank columns only)					
Date	Details	\$	Date	Details	\$
2018			2018		
Jun 1	Balance b/d	5 000	Jun 15	Malti	2 000
Jun 11	Cash Sales	550	Jun 26	Dolly	250
Jun 20	S. Stanson	150	Jun 29	Moon	300
Jun 25	Blossom	<u>460</u>	Jun 30	Balance c/d	<u>3 610</u>
		<u>6 160</u>			<u>6 160</u>

Balakrishna discovered that he made an error in the 11 June entry. The amount should have been \$150 and not \$550 as recorded in the cash book.

Here is the updated cash book:

Balakrishna					
Cash book (bank columns only)					
Date	Details	\$	Date	Details	\$
2018			2018		
Jul 1	Balance b/d	3 610	Jul 1	Insurance premium	50
				Bank charges	50
				Correction of error	400
				Balance c/d	<u>3 110</u>
		<u>3 610</u>			<u>3 610</u>
Jul 1	Balance b/d	3 110			

Balakrishna			
Bank reconciliation statement as at 30 June 2018			
	\$		\$
Balance as per bank statement			2 950
Add: Uncredited deposits not entered			<u>460</u>
			3 410
Less: Unpresented cheques			<u>300</u>
Balance as per updated cash book			<u>3 110</u>

## Bank reconciliation statement and bank overdrafts

A bank overdraft is a temporary loan extended by the bank to help the business through a liquidity crisis. It allows the business to withdraw more than it has deposited. This means the bank statement will have a debit balance shown with a dr or (O/D) and the bank column of the cash book will have a credit balance.

The same steps should be followed when reconciling the bank statement with the cash book. The cash book should first be updated after the ticks and circles. The bank reconciliation should then be prepared. If this statement starts with the default, balance as per updated cash book, then the uncredited deposits should be added and unpresented cheques should be deducted. Care should be taken with calculations. Adding should always precede subtractions to avoid any errors.

### → Worked example 5

On 31 March 2018, Edward, a trader, had a credit balance of \$1 250 in the bank column of his cash book. This differed from the balance on his bank statement due to the following reasons:

- Unpresented cheques amounting to \$2 450.
- Uncredited deposits amounting to \$500 was not credited to his account in the bank statement.

Think about it!

What if the bank reconciliation statement started with the balance as per bank statement which was an overdraft? What would be added and what would be subtracted?

Edward	
Bank reconciliation statement as at 31 March 2018	
	\$
Cash at bank as per cash book	1 250 (O/D)
Add: uncredited deposits not credited	<u>500</u>
	1 750
Less: unpresented cheques	<u>2 450</u>
Balance as per bank statement	<u>700</u> Cr

The balance as per bank statement is not an overdraft.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- Kerry had a bank overdraft of \$2 300. She then paid an insurance premium by cheque \$400 and deposited \$600 into the bank. What was the amount of her overdraft after these transactions?  
 A \$2 100  
 B \$2 500  
 C \$2 600  
 D \$3 300 [1]
- A business received its bank statement which showed a debit balance of \$2 500. Other items listed in the statement but not in the business cash book were:
  - Direct debit \$60
  - A debtor's cheque was dishonoured \$100
 What was the balance in the cash book before it was updated?  
 A \$2 340 cr  
 B \$2 340 dr  
 C \$2 660 cr  
 D \$2 660 dr [1]
- Sawlee, a sole trader, updates her cash book from a bank statement she has received. Which of the following will decrease the bank balance in her cash book?  
 A Bank charges  
 B Cash sales banked  
 C Credit transfer  
 D Interest received [1]



- 4 Felix receives a cheque from a debtor for \$258. Felix banks it on the same day, after recording the receipt in the cash book. He notes, however, that a statement sent by the bank on that day does not include this \$258. How is the amount of \$258 shown in the bank reconciliation statement?
- A As an uncredited deposit not credited, added to the bank statement balance
  - B As an unpresented cheque, added to the bank statement balance
  - C As an uncredited deposit not credited, deducted from the bank statement balance
  - D As an unpresented cheque, deducted from the bank statement balance
- 5 Valerie's cash book (bank column) shows a debit balance of \$2 500. Her bank statement shows a credit balance of \$3 000. What is the reason for the difference?
- A Bank charges \$500 not mentioned in the cash book
  - B Rent paid by cheque \$250 entered on the wrong side of the cash book.
  - C Cheque \$500, from a customer, Ali, was not entered in the bank statement.
  - D Bill, a creditor, was paid by cheque \$500. He had not presented this cheque to the bank.

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 Ottoman compared his cash book with the statement from his bank at 30 September 2010 and found the balance shown on the bank statement did not agree with the balance in the bank column of his cash book.
- a Give **two** reasons why the balance shown in a cash book might not agree with the balance shown on a bank statement at the same date. [4]
- On 30 September 2010, the balance on Ottoman's cash book (bank column) was \$850 dr.
- The balance shown on his bank statement was \$1 660. The cash book was checked against the bank statement and the following differences were found:
- Cheques totalling \$250 issued to trade payables had not been presented for payment.
  - Rent received of \$800 paid directly into the bank on 30 September did not appear in the cash book.
  - Bank charges of \$60 were shown on the bank statement but had not been entered in the cash book.
  - Cash sales recorded as \$1 200 were shown on the bank statement correctly as \$1 500.
  - A cheque received from Hans for \$480 and deposited at the bank on 28 September had been entered in the cash book but has not yet been shown on the bank statement.
- b Make any additional entries which are required in Ottoman's cash book. Balance the cash book at 30 September 2010 and find the adjusted balance carried down. [8]
- c Prepare a bank reconciliation statement to reconcile the adjusted cash book balance with the bank statement balance at 30 September 2010. [7]

*(Adapted from Cambridge IGCSE Accounting 0452/11, October/November 2010, Q3)*

- 7** Peter Dalmini's cash book (bank column) had a debit balance of \$515 on 30 April 2003. This did not agree with the bank statement of the same date, which showed a balance of \$290. The cash book was checked against the bank statement and the following differences were found:
- Cheques totalling \$620 issued to trade payables had not been presented to the bank for payment.
  - An amount of \$950 paid into the bank did not appear on the bank statement.
  - Cash sales deposited into the bank amounting to \$390 had been omitted from the cash book.
  - The bank had received \$150 by credit transfer (bank giro) from Klerk for Dlamini's account. Dlamini had not been advised.
  - A cheque for \$315 received from Joseph had been paid into the bank but it had now been returned unpaid. No action has been taken by Dlamini.
  - The following transaction by the bank had not been recorded in the cash book: bank charges \$120.
- a** Prepare an updated and balanced cash book. [6]
- b** Prepare a correctly headed statement to reconcile the adjusted cash book balance with the bank statement balance at 30 April 2003. [9]

(Adapted from Cambridge O Level Accounting, 7710/2, May/June 2003, Q1)

- 8** Mai Wang is a sole trader who keeps a full set of double entry records including a three column cash book.
- On 1 July 2011 Mai Wang had \$250 cash in hand and a bank overdraft of \$4500. Mai Wang's transactions for the month of July 2011 included the following:

Jul 2	Cash sales, \$342, of which \$300 was paid into the bank on that date
Jul 9	Received a cheque from Mark Fu in settlement of his account of \$150 less 2 per cent cash discount
Jul 15	Withdrew \$500 from the bank for personal use
Jul 23	Paid Sally Tan \$468 by cheque after deducting cash discount of 2½ per cent cash discount
Jul 29	A cheque received in June for \$330 from Mulyani Ltd was dishonoured and returned by the bank
Jul 30	Paid all the remaining cash into the bank except \$100

- a** Enter the above transactions in Mai Wang's cash book. Balance the cash book at 31 July and bring down the balances on 1 August 2011. [10]
- b** State the bank balance that should be shown in the statement of financial position of Mai Wang at 31 July 2011. State whether it is an asset or a liability. [2]
- c** Explain the meaning of each of the following terms:
- i** Bank reconciliation statement [2]
  - ii** Uncredited deposits [2]
  - iii** Unpresented cheques [2]

(Adapted from Cambridge IGCSE Accounting 0452/23, October/November 2011, Q1)



- 9 Walek sells goods for cash and on credit. He puts the cash receipts in a box and pays the total into his bank account each month. He pays the cheques received from his credit customers into the bank on the day he receives them. On 1 September 2012 Walek's cash book showed a debit balance at the bank of \$2400.

Walek had the following transactions in September 2012.

		\$
Sept 3	Cheque received from Lashki	640
Sept 4	Sold goods on credit to Sharon	420
Sept 9	Purchased goods on credit from Bruton	1 980
Sept 14	Paid two weeks' wages by cheque	250
Sept 16	Cheque received from Yovell	370
Sept 28	Paid two weeks' wages by cheque	280
Sept 29	Paid cheque to Bruton	1 980
Sept 30	Cash sales for the month	3 560

On 21 September the bank returned Yovell's cheque dishonoured.

- a Make the necessary entries in the bank columns of Walek's cash book to record the above transactions. Balance the cash book and bring down the balance on 1 October 2012. [8]
- b From the information given and the entries in the cash book, make the entries in the following accounts in Walek's ledger to record the transactions for September 2012. [11]
- Sales account
  - Purchases account
  - Wages account
  - Lashki account
  - Sharon account
  - Yovell account
  - Bruton account

At 30 September Walek had recorded the cash sales in his cash book, but had not deposited the money in the bank. The cheque payable to Bruton dated 29 September was not cleared by the bank until 6 October. The bank statement at 30 September showed a balance at the bank of \$2 510.

- c Prepare a bank reconciliation statement for Walek at 30 September 2012. [4]
- d Explain why items are recorded on the opposite side of the cash book to that on which they appear on the bank statement. [4]

*(Adapted from Cambridge IGCSE Accounting 0452/11, October/November 2012, Q3)*

## ? Chapter review questions

- 1 Explain the following terms:
  - a Uncredited deposits not credited
  - b Standing order
  - c Overdraft
  - d Unpresented cheques
- 2 Complete the following sentences:
  - a A debit in the cash book will be shown as a \_\_\_\_\_ on the bank statement.
  - b \_\_\_\_\_ is one item for which the cash book may need to be adjusted when updating it from a bank statement.
  - c The bank balance in Justin's cash book was \$3 000 (dr). Cheques worth \$400 were paid into his bank account but were not entered on his bank statement. No other amendments were made. The balance shown in Justin's bank statement was \_\_\_\_\_.
  - d The account which is brought up to date before a bank reconciliation statement is prepared is the \_\_\_\_\_ account.
  - e \_\_\_\_\_ is one reason why the balance in Natasha's bank statement is \$20 less than the balance in her cash book.

## Revision checklist

In this chapter, you have learnt:

- ✓ about the use and purpose of a bank statement
- ✓ terminology related to banking and accounting
- ✓ how to update and make adjustments to the cash book
- ✓ the purpose of a bank reconciliation statement
- ✓ how to prepare a bank reconciliation statement.

# Control accounts



By the end of this chapter you will be able to:

- ★ understand the purposes of purchases ledger and sales ledger control accounts
- ★ identify the books of prime entry as sources of information for the control account entries
- ★ prepare purchases ledger and sales ledger control accounts to include credit purchases and sales, receipts and payments, cash discounts, returns, irrecoverable debts, dishonoured cheques, interest on overdue accounts, contra entries, refunds and opening and closing balances (debit and credit within each account).

## Purposes of purchases ledger and sales ledger control accounts

A control account is a summary account containing totals for transactions stored in the ledger to which that control account belongs. For example, a sales ledger will have a **sales ledger control account** and a purchases ledger will have a **purchases ledger control account**. The control account provides a cross-check on each, in other words, to control them.

A control account is used mainly in a manual accounting system to speed up location of errors revealed by a trial balance whose totals are not in agreement. In a business that has numerous transactions, it will take a long time to check all the accounting records to locate these errors. This is because these two areas of the business (sales and purchases) contain a large volume of transactions. A control account does this. If the sales ledger control account does not agree with the sales ledger for instance, the sales ledger needs to be checked to locate errors. However, like a trial balance, the control account can only check for arithmetical accuracy; errors such as omission or original entry are not revealed by control accounts.

Control accounts contain aggregated totals for transactions that are individually stored in the sales and purchases ledgers. For example, while the sales ledger control account can reveal at a glance how much the business is owed, the sales ledger contains details of how much is owed from each credit customer. The closing balance of the control account is compared to the total of all the closing balances of the accounts in the ledger which it controls. For example, the sales ledger control account closing balance is compared to the total of all the closing balances of the individual customers in the sales ledger. If they are the same, this is the figure of the total debts owing to the business from customers. However, if they are different, errors have been made and the sales ledger accounts should be checked.

### Key terms

The **sales ledger control account** is an account used to record the totals of the books of prime entry, related to credit sales, to check the accuracy of the sales ledger. It is also known as the total trade receivables account.

The **purchases ledger control account** is an account used to record the totals of the books of prime entry, related to credit purchases, to check the accuracy of the purchases ledger. It is also known as the total trade payables account.



Think about it!

What would be the other name for the sales ledger control account?



The figures used in the control accounts are generated from the books of prime entry. The total credit purchases figure in the purchases ledger control account, for example, will be taken from the purchases journal and the payments included in 'bank' in the control account can be traced back to the credit (payments) side of the cash book bank column.

A control account is a memorandum account and is therefore not a part of the double entry system. It is an account of totals taken from the books of prime entry.

### Activity 1

- 1 Define a control account.
- 2 Explain one reason why a control account is like a trial balance.
- 3 Explain one reason why a control account is different from a trial balance.

## Uses of control accounts

Control accounts are used in the following ways:

- » To help locate errors by acting as a trial balance for the sales and purchases ledgers.
- » The person who prepares the control account is usually a senior member of the finance department and is not the same person who maintains the corresponding ledger. This reduces the risk of fraud as the ledgers can be monitored constantly.
- » Control accounts are a fast information tool used by managers. For example, the sales ledger control account is used to quickly calculate the total trade receivables (debtors) on a given day. It is not necessary to total up all the closing balances in the sales ledger accounts to arrive at this figure.
- » Control accounts can help to speed up the preparation of draft financial statements.
- » Control accounts provide a summary of the transactions involving the business' trade payables and trade receivables for each accounting period.

### Activity 2

- 1 Name the control account that helps provide the figure of the total debt owing by the business to its trade payables.
- 2 State two reasons why a control account is prepared.

## Books of prime entry as sources of information for the sales ledger control account entries

At any given time, the sales ledger control account shows the total owed the business by its trade receivables. The account is prepared at the end of a financial period. The account balance should agree with the total of the individual credit customers' balances taken from the sales ledger. The entries in the account are totals taken from the books of prime entry related to trade receivables.

The sources of the entries are shown in Table 9.1.

**Table 9.1** Information sources for the sales ledger control account entries

Entries in the sales ledger control account	Side of the sales ledger control account the entries are found on	Source of the entries
Balance b/d	debit	List of trade receivables balances prepared at the end of the previous accounting period or previous accounting period's control account closing balance
Sales	debit	Total credit sales from the sales journal
Cash	credit	Total cash received from credit customers, taken from the debit side of the cash book (cash column)
Bank	credit	Total receipts from credit customers, taken from the debit side of the cash book (bank column)
Sale returns	credit	Total sales returns from sales returns journal
Irrecoverable debts	credit	Total taken from the general journal
Discounts allowed	credit	Total taken from the discounts column on the debit side of the cash book
Dishonoured cheques	debit	Bank column of cash book (credit side)
Refunds to trade receivables	debit	Cash book – cash or bank columns
Interest charged on overdue accounts	debit	Total posted from the general journal
Balance c/d	credit	Total of the list of trade receivables balances prepared at the end of the current accounting period or the balancing figure of the control account prepared for the current accounting period

### Study tip

Whatever increases debts owing to the business is entered on the debit side of the sales ledger control account and whatever decreases debts owing is entered on the credit side.

## → Worked example 1

### Preparation of the sales ledger control account

Donnelley prepares control accounts every month. He provides the following information:

2019		\$
Aug 1	Sales ledger balances	5 000
Aug 31	Totals for August:	
	Sales journal	20 000
	Return inwards	2 400
	Discounts allowed	450
	Irrecoverable debts	600
	Cash received from trade receivables	5 000
	Cheques received from trade receivables	10 000
	Cash refunds to trade receivables	25
	Dishonoured cheques (included in the cheques received figure above)	100
Aug 31	Sales ledger balances	?

#### Donnelley Sales ledger control account

Date	Details	\$	Date	Details	\$
2019			2019		
Aug 1	Balance b/d	5 000	Aug 31	Return inwards	2 400
Aug 31	Sales	20 000		Discounts allowed	450
	Cash refunds	25		Irrecoverable debts	600
	Bank (dishonoured cheques)	100		Cash	5 000
				Bank	10 000
			Aug 31	Balance c/d	<u>6 675</u>
		<u>25 125</u>			<u>25 125</u>
Sept 1	Balance b/d	6 675			

### Activity 3

- 1 A. Sheikh prepares control accounts monthly. Prepare the sales ledger control account from the following information:

2018		\$
Jun 1	Sales ledger balances	3 500
Jun 30	Totals for June:	
	Sales journal	30 000
	Return inwards	1 000
	Discounts allowed	500
	Irrecoverable debts	50
	Cash and cheques received from customers	20 000
	Cash refunds to trade receivables	65
	Dishonoured cheques (included in the cheques received figure, above)	370

- 2 State one reason for **each** statement.
- a Cash and cheque receipts appear on the credit side of the sales ledger control account.
  - b Dishonoured cheques appear on the debit side of the sales ledger control account.
- 3 Calculate the total trade receivables of A. Sheikh on 30 June 2018.
- 4 State what is meant by the term irrecoverable debt. State why an irrecoverable debt reduces the amount owed to A. Sheikh by his trade receivables.

## Books of prime entry as sources of information for the purchases ledger control accounts entries

At any given time, the purchases ledger control account shows the total owed by the business to its trade payables. The account is prepared at the end of a financial period. The account balance should agree with the total of the individual credit suppliers' balances taken from the purchases ledger. If they are equal, the figure represents the total debt owing by the business to its trade payables on a given day. If they are not equal, an error has been committed, either in the purchases ledger or in the control account itself, and further investigation will be necessary to detect the source of the errors. The entries in the account are totals taken from the books of prime entry related to trade payables.

The sources of the entries are shown in Table 9.2 on the next page.

**Table 9.2** Information sources for the purchases ledger control account entries

Entries in the purchases ledger control account	Side of the purchases ledger control account the entries are found on	Source of the entries
Balance b/d	credit	List of trade payables balances prepared at the end of the previous accounting period or the closing balance on the previous accounting period's control account
Purchases	credit	Total credit purchases from the purchases journal
Cash	debit	Total cash paid to credit suppliers, taken from the credit side of the cash book (cash column)
Bank	debit	Total payments to credit suppliers, taken from the credit side of the cash book (bank column)
Purchases returns	debit	Total purchases returns from purchases returns journal
Discounts received	debit	Total taken from the discounts column on the credit side of the cash book
Refunds from trade payables	credit	Cash book – cash or bank columns
Interest charged on overdue accounts	credit	Total taken from the general journal
Balance c/d	debit	Total of the list of trade payables balances prepared at the end of the current accounting period or the balancing figure of the control account prepared for the current accounting period

## → Worked example 2

### Preparation of the purchases ledger control account

Sacha, a sole trader, prepares control accounts monthly. She provides the following information for the month of July 2019:

2019		\$
Jul 1	Purchases ledger control account balance	500
Jul 31	Totals for July:	
	Purchases journal	25 000
	Purchases returns journal	500
	Cheques paid to suppliers	15 000
	Discounts received	300
	Interest charged by suppliers	50
	Cheque refunds from trade payables	120



**Study tip**

As a rule, whatever increases trade payables would appear on the credit side of the purchases ledger control account and whatever decreases trade payables would appear on the debit side of the purchases ledger control account.

**Sacha****Purchases ledger control account**

Date	Details	\$	Date	Details	\$
2019			2019		
Jul 31	Purchases returns	500	Jul 1	Balance b/d	500
	Bank	15 000		Purchases	25 000
	Discounts received	300		Interest charged	50
	Balance c/d	<u>9870</u>		Bank (refunds)	<u>120</u>
		<u>25 670</u>			<u>25 670</u>
			Aug 1	Balance b/d	9870

**Think about it!**

As a group, discuss why suppliers would charge interest. Why does this interest charged increase the amount owed by the business to its trade payables?

**Activity 4**

Demi, a sole trader, prepares control accounts monthly. She provides the following information for the month of June 2018:

2018		\$
Jun 1	Purchases ledger control account balance	6 500
Jun 30	Totals for June:	
	Purchases journal	20 900
	Purchases returns journal	1 300
	Credit suppliers paid by credit transfer	9 000
	Cheque refunds from trade payables	150
	Interest charged by suppliers	10
	Discounts received	500

- 1 Prepare Demi's purchases ledger control account for the month of June 2018.
- 2 Calculate the total amount of debt that Demi owes her suppliers on 30 June 2018.

## Opening and closing balances – sales ledger control accounts

Sales ledger control accounts usually have opening and closing debit balances. However, occasionally, a credit balance may be found. This credit balance shows that a customer, who is normally a debtor, is now owed money and is a creditor. The reasons for this are:

- » the customer overpaid a debt
- » the payment of the debt qualified for cash discount, but it was not deducted at the time of payment
- » the customer returned goods after making payment
- » the customer may have paid in advance for inventory he or she is buying.

It is essential to separate the closing and opening debit balances from the credit balances as they represent two different types of debts. The debit balance is the money owed by trade receivables and the credit balance is the money owing to trade receivables. The more unusual credit balance is entered on the credit side if it is an opening entry and on the debit side if it is a closing entry.

After this is done, the account is balanced to obtain the closing debit balance.

### → Worked example 3

Dominic is a sole trader who maintains monthly control accounts. He provides the following information:

2018		\$
Jun 1	Sales ledger balance (dr)	3 500
	Sales ledger balance (cr)	350
Jun 30	Totals for June:	
	Sales journal	15 000
	Return inwards	800
	Discounts allowed	300
	Irrecoverable debts	650
	Cash and cheques received from credit customers	16 000
	Sales ledger credit balances	150

Dominic					
Sales ledger control account					
Date	Details	\$	Date	Details	\$
2018			2018		
Jun 1	Balance b/d	3 500	Jun 1	Balance b/d	350
June 30	Sales	15 000	Jun 30	Return inwards	800
	Balance c/d	150		Discount allowed	300
				Irrecoverable debts	650
				Cash/bank	16 000
				Balance c/d	<u>550</u>
		<u>18 650</u>			<u>18 650</u>
Jul 1	Balance b/d	550	Jul 1	Balance b/d	150

## Opening and closing balances – purchases ledger control accounts

Purchases ledger control accounts usually have opening and closing credit balances. However, occasionally, a debit balance may occur. This debit balance shows that a supplier, who is normally a creditor, now owes the business money and is a debtor.

The reasons for this occurrence are:

- » an overpayment of a debt to a supplier
- » the payment of a debt qualified for cash discount, but it was not deducted at the time of payment
- » the business returned goods after making payment
- » the business has paid in advance for inventory it is buying.

It is essential to separate the opening and closing debit balances from the credit balances as they represent two different types of debts. The debit balance is the money owed by suppliers to the business and the credit balance is the money owing by the business to its trade payables. The more unusual debit balance is entered on

the debit side if it is an opening entry and on the credit side if it is a closing entry. After this is done, the account is balanced to obtain the closing credit balance.

Table 9.3 shows how to treat opening and closing balances in sales ledger control accounts.

**Table 9.3** Treating opening and closing balances in sales ledger control accounts

Opening Balances: on the first day of the accounting period – balance b/d	A credit balance will appear on the credit side of the account	A debit balance will appear on the debit side of the account
Closing balance: on the last day of the accounting period – balance c/d	A credit balance will appear on the debit side of the account	A debit balance will appear on the credit side of the account

## Set offs or contra entries in control accounts

Some businesses may find that they have customers who are also their suppliers. In such a case, **set offs** may happen due to inter-indebtedness between the business and its customer/supplier.

For example if a business buys goods from Melra and Melra buys goods from the business, a set off could occur. Melra's accounts will appear in the sales ledger *and* the purchases ledger of the business.

Set offs are also known as inter-ledger transfers. It makes sense that only the difference between the two debts need be paid. For example, if Melra owes the business \$4 560 for goods she bought and the business owes Melra \$4 060 for goods bought from Melra, then the set off is \$4 060. When Melra pays the difference of \$500, both debts will be settled. Set offs decrease the debt owed and therefore will appear on the credit side of the sales ledger control account and on the debit side of the purchases ledger control account.

### Key term

The **set off** is the smaller of the two debts that make up the inter-indebtedness between a supplier and a customer.

## → Worked example 4

Sal, a sole trader, provides the following information:

2019		\$
Jul 11	Bought inventory on credit from Val	5 000
Jul 15	Sold goods on credit to Val	4 500
Jul 23	The balance of Val's account in the purchases ledger was set off against her account in the sales ledger and Sal sent a cheque to Val	500

### Sal's sales ledger

#### Val's account

Date	Details	\$	Date	Details	\$
2019			2019		
Jul 15	Sales	<u>4 500</u>	Jul 23	Purchases ledger	<u>4 500</u>



**Sal's purchases ledger**

**Val's account**

Date	Details	\$	Date	Details	\$
2019			2019		
Jul 23	Sales ledger	4 500	Jul 11	Purchases	5 000
	Bank	<u>500</u>			
		<u>5 000</u>			<u>5 000</u>

A journal entry is made to record the transfer of \$4 500 on 31 July as it is a one-off transaction. This entry serves as a source of the two entries for \$4 500 made in the sales ledger control account on the credit side and in the purchases ledger control account on the debit side.

**→ Worked example 5**

Benny, a sole trader, prepares control accounts monthly. He provides the following information for the month of October 2019:

2019		\$
Oct 1	Purchases ledger control account balance (cr)	1 000
Oct 1	Purchases ledger control account balance (dr)	230
Oct 31	Totals for October:	
	Purchases journal	18 000
	Purchases returns journal	800
	Payments made to credit suppliers by credit transfer	8 000
	Discounts received	100
	Set offs against balances in the sales ledger control account	500
	Decrease in provision for doubtful debts	1 000
	Purchases ledger debit balances	40

**Study tip**

An increase or decrease in the provision for doubtful debts should *not* be included in the control accounts, though you may frequently come across it in questions on control accounts.

**Benny's nominal (general) ledger**

**Purchases ledger control account**

Date	Details	\$	Date	Details	\$
2019			2019		
Oct 1	Balance b/d	230	Oct 1	Balance b/d	1 000
Oct 31	Purchases returns	800	Oct 31	Purchases	18 000
	Bank	8 000		Balance c/d	40
	Discounts received	100			
	Sales ledger control account	500			
	Balance c/d	<u>9 410</u>			
		<u>19 040</u>			<u>19 040</u>
Nov 1	Balance b/d	40	Nov 1	Balance b/d	9 410

### Activity 5

- 1 Prepare a purchases ledger control account from the following information:

2019		\$
Jul 1	Purchases ledger control account balance (cr)	5 500
Jul 1	Purchases ledger control account balance (dr)	500
Jul 31	Totals for July:	
	Purchases journal	25 000
	Purchases returns journal	500
	Credit suppliers paid by credit transfer	15 000
	Discounts received	300
	Interest charged by suppliers	50
	Purchases ledger debit balances	1 000

- 2 Calculate the total amount of debt owing by the business at 31 July.  
 3 State the total amount owing to the business by its suppliers at 31 July.  
 4 State three reasons why a supplier's account could have a debit balance.

## Exam-style questions

The following multiple choice questions should be completed in no more than five minutes. You must choose the one most appropriate answer.

- 1 Which of the following is *not* a use of control accounts:  
**A** To help identify errors in the sales and purchases journals  
**B** To help identify errors in the sales and purchases ledgers  
**C** To help managers find total trade receivables and trade payables on a given day  
**D** To help speed up the process of preparing draft financial statements [1]
- 2 Look at the information in the table. Which of the sources shown is incorrect? [1]

	Entries in the sales ledger control account	Source of the entries
<b>A</b>	Balance b/d	List of trade receivables balances prepared at the end of the previous accounting period
<b>B</b>	Bank	Total cheque receipts from customers, taken from the debit side of the cash book (bank column)
<b>C</b>	Cash	Total cash received from suppliers, taken from the debit side of the cash book (cash column)
<b>D</b>	Sales	Total credit sales from the sales journal

- 3 Look at the information in the table. Which of the sources shown is incorrect? [1]

	Entries in the purchases ledger control account	Source of the entries
A	Bank	Total cheque payments to trade payables, taken from the debit side of the cash book (bank column)
B	Discounts received	Total taken from the discounts column on the credit side of the cash book
C	Purchases returns	Total purchases returns, from purchases returns journal
D	Refunds from trade payables	Cash book – cash or bank columns

- 4 Which statement is not a reason for a sales ledger control account to have an opening credit balance? [1]
- A The customer may have paid in advance for inventory bought by them
  - B The debtor overpaid a debt
  - C The payment of the debt qualified for cash discount, but it was not deducted at the time of payment
  - D The supplier returned goods after making payment

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 Fatima Ayub is a trader. She maintains a full set of accounting records and prepares control accounts for her sales ledger and purchases ledger at the end of every month.

- a State **two** reasons why Fatima Ayub prepares control accounts. [2]
- b Explain why the information for the preparation of a purchases ledger control account is obtained from the books of prime (original) entry and not from the purchases ledger accounts. [2]

Fatima Ayub provided the following information:

		\$
Apr 1	Debit balances in the purchases ledger	38
	Credit balances in the purchases ledger	4 260
Apr 30	Totals for the month	
	Cheques received from credit customers	5 340
	Cheques paid to credit suppliers	3 705
	Credit purchases	6 680
	Cash purchases	355
	Returns by credit customers	235
	Returns to credit suppliers	243
	Discounts allowed	127
	Discounts received	95
	Interest charged by supplier on overdue account	11
	Contra entry	320
May 1	Debit balances in purchases ledger	22
	Credit balances in purchases ledger	?



- c Select the relevant figures and prepare Fatima Ayub's purchases ledger control account for the month ended 30 April 2012. Balance the account and bring down the balances on 1 May 2012. [12]
- d State two reasons why it is possible to have a debit balance brought down on a purchases ledger control account. [2]
- e Explain the meaning of a contra entry in connection with control accounts and explain why such an entry may be necessary. [2]

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2012, Q2)

- 7 The following information was obtained from the books of Arden.

2015		\$
Feb 1	Trade receivables balance	14 900 Dr
	Trade payables balance	17 160 Cr
Feb 28	Cheques received from trade receivables	45 800
	Cheque from trade receivable later dishonoured	200
	Cheques paid to trade payables	32 500
	Discount allowed	2 700
	Discount received	910
	Purchases returns	3 800
	Irrecoverable debts	1 800
	Cash sales	10 500
Mar 1	Trade receivables balance	12 600 Dr
	Trade payables balance	8 450 Cr

- a Prepare the purchases ledger control account showing the credit purchases made in the month of February 2015. [6]
- b Prepare the sales ledger control account showing the credit sales made for the month of February 2015. [7]

Additional information:

Payments for February	\$
Wages	15 200
General expenses	7 900

	1 Feb 2015	28 Feb 2015
	\$	\$
Inventory	9 350	8 650
Non-current assets (at valuation)	18 000	17 200
General expenses owing	2 300	1 600

- c Prepare the income statement for the month ended 28 February 2015. [6]
- d State two benefits to Arden of using Information Communication Technology (ICT) in his book-keeping and accounting. [2]

(Adapted from Cambridge O Level Accounting 7110/21, May/June 2015, Q2)

**8** Amira's financial year ends on 30 September. She buys and sells on both cash and credit terms and maintains a full set of accounting records. Control accounts are prepared at the end of each month.

**a** Name the book of prime entry which Amira would use to obtain the following information when preparing her sales ledger control account. [4]

	Book of prime entry
Cheque refund to credit customer	
Irrecoverable debts written off	
Returns by credit customers	
Interest charged on customer's overdue account	

**b** State two reasons why Amira prepares a purchases ledger control account. [2]  
Amira provided the following information for September 2016.

		\$
Sept 1	Debit balances in purchases ledger	93
Sept 1	Credit balances in purchases ledger	4 210
Sept 30	Totals for the month	
Sept 30	Credit purchases	5 366
Sept 30	Cash purchases	1 469
Sept 30	Cheques paid to credit suppliers	3 705
Sept 30	Cheques received from credit customers	6 102
Sept 30	Discount allowed	204
Sept 30	Discount received	95
Sept 30	Returns to credit suppliers	197
Sept 30	Interest charged by supplier on overdue account	12
Sept 30	Cash refund received from credit supplier	150
Sept 30	Contra entry	494
Oct 1	Debit balances in purchases ledger	68
Oct 1	Credit balances in purchases ledger	?

**c** Select the relevant figures and prepare the purchases ledger control account for the month of September. Balance the account and bring down the balances on 1 October 2016. [12]

**d** Suggest one advantage of paying credit suppliers before the due date. [1]

**e** Suggest one disadvantage of paying credit suppliers before the due date. [1]

(Adapted from Cambridge IGCSE Accounting 0452/21, October/November 2016, Q1)

## ? Chapter review questions

- 1** Explain what is meant by:
  - a** set off
  - b** purchases ledger control account
  - c** sales ledger control account
  - d** debit balance
  - e** credit balance



- 2 Complete the table below by naming the sources used to prepare a sales ledger control account:

	Source used to prepare sales ledger control account
Credit sales	
Return inwards	
Discounts allowed	
Set off	
Cheques received from trade receivables	

- 3 The following information is provided.  
Prepare a sales ledger control account for the month of June 2018.

2018		\$
Jun 1	Sales ledger account balance (dr)	34 500
Jun 30	Totals for the month:	
	Credit sales	23 500
	Returns inwards	2 400
	Cash and cheques received	35 600
	Discounts allowed	100
	Increase in provision for doubtful debts	60

- 4 Complete the table below by naming the sources used to prepare a purchases ledger control account:

	Source used to prepare purchases ledger control account
Credit purchases	
Returns outwards	
Interest charged by suppliers	
Set off	
Discounts received	

- 5 State four advantages of preparing control accounts.  
6 Explain why the information used to prepare a purchases ledger control account is obtained from the books of prime entry and *not* the purchases ledger.

## Revision checklist

In this chapter, you have learnt:

- ✓ about the sales ledger control account and why it is prepared
- ✓ about the purchases ledger control account and why it is prepared
- ✓ the uses of control accounts
- ✓ the sources of entries in the sales ledger control account
- ✓ the sources of the entries in the purchases ledger control account
- ✓ how to prepare sales ledger and purchases ledger control accounts
- ✓ why there could be two opening or closing balances in control accounts and how to record them
- ✓ what is meant by a set off is and how to record it.



# SECTION 4

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## Accounting procedures

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### Chapters

- 10 Capital and revenue expenditure and receipts
- 11 Accounting for depreciation and disposal of non-current assets
- 12 Other payables and receivables
- 13 Irrecoverable debts and provision for doubtful debts
- 14 Valuation of inventory

This section covers year-end adjustments such as making provisions for depreciation and doubtful debts, as well as accruals and prepayments. You will learn how important it is to differentiate between capital and revenue expenditure and income, the effect of their incorrect treatment on profit and asset valuation, how to record entries for irrecoverable debts and the recovery of irrecoverable debts written off. Finally, you will learn how to value inventory and prepare inventory valuation statements, as well as the importance of correctly valuing inventory to ensure financial statements are accurate and reliable.

# Capital and revenue expenditure and receipts



By the end of this chapter you will be able to:

- ★ distinguish between and account for capital expenditure and revenue expenditure
- ★ distinguish between and account for capital receipts and revenue receipts
- ★ calculate and comment on the effect on profit of incorrect treatment
- ★ calculate and comment on the effect on asset valuations of incorrect treatment.

## Capital and revenue expenditure

### Key term

**Capital expenditure** is money spent to purchase or improve a productive asset with the intention of increasing its efficiency or capacity to generate income for more than one accounting period.

**Capital expenditure** is the amount spent by a business to acquire, improve or extend the life of non-current assets such as property, equipment and machinery. It is non-recurring by nature and is recorded in the statement of financial position of a business. New projects or investments undertaken by a business are treated as capital expenditure as they increase the efficiency and scope of the business to earn more profits. Capital intensive businesses have some of the highest levels of capital expenditure. Examples of capital intensive businesses are those concerned with telecommunications, large-scale manufacturing and oil exploration.

The one-off costs incurred in the acquisition of non-current assets should also be included as capital expenditure, for example, transportation costs, legal fees and installation costs.

### → Worked example 1

Kokulan Ltd bought a machine for \$44 900. The business paid carriage of \$450, road charges of \$40 and installation charges of \$2 000. It also had to pay legal fees of \$300.

The total capital expenditure was:

$$\$44\,900 + \$450 + \$40 + \$2\,000 + \$300 = \$47\,690$$

Included in capital expenditures are amounts spent on:

- » upgrading an existing asset so that it is better than the one that currently exists, for example, adding a new wing to an office block
- » preparation costs for an asset to be used in the business, for example, reinforcing the factory floor before installing a new machine
- » adapting an asset to be used differently, for example, turning a container into an office
- » restoring an asset to extend its useful life.
- » cost of acquiring **intangible assets** like patents or goodwill.

### Key term

**Intangible assets** are assets that are non-physical in nature.



**Study tip**

When trying to decide if an expense is capital expenditure, ask yourself these questions:

- 1 Are the benefits of the expense likely to extend beyond the current year? If yes, it is capital expenditure.
- 2 Are the expenses incurred to get an asset operational? If yes, it is capital expenditure.

**Key term**

**Revenue expenditure** is expenditure incurred in the day-to-day running of the business.



▲ Restoring an asset to extend its useful life

As these assets are purchased with the intention of using them to generate income over their economic life, businesses cannot charge the full cost of the asset to profits in the year of purchase. Instead the business must spread the cost in the form of depreciation (see Chapter 11 for more on depreciation) over the years the asset is used. The expense of using the asset should therefore be matched to the revenue it generates.

**Revenue expenditure** is a short-term expense incurred to meet the operational costs of running the business on a day-to-day basis. The benefit attained from this expenditure is completely exhausted during the year in which it is incurred. Revenue expenditure is normally recurring, compared to the one-off nature of most capital expenditure. While capital expenditure is meant to *extend* a business' ability to earn income, revenue expenditure is meant to *maintain* the business' ability to operate. It includes ordinary repair and maintenance needed to keep an asset working in its current condition and not to improve or extend its economic life.

Revenue expenditure is charged to profit in the income statement as soon as it is incurred. Once again, the matching principle is being used as expenses are linked to revenues earned in an accounting period. Examples of revenue expenditure include purchase of goods and raw materials, salaries, postage, rent, travelling expenses, stationery purchased and wages.

## → Worked example 2

A school bought a soft drink dispenser for the students to use. The expenses incurred were:

	\$
Cost of dispenser	9 000
Cost of drink bottles	1 000
Cost of transportation	300
Cost of installation	250

The capital expenditure = \$9 000 + \$300 + \$250 = \$9 550

Revenue expenditure = \$1 000

**Think about it!**

Why would the cost of drink bottles be treated as revenue expenditure?

### Activity 1

Peter bought a motor vehicle for his trading business. He incurred the expenditure shown. Copy the table and place a tick in the appropriate column to indicate whether each item is revenue or capital expenditure.



Cost	Revenue expenditure	Capital expenditure
Buying the motor vehicle		
Paying on-road costs such as registration		
Petrol		
Repairs to motor vehicle one year later		
Installation of GPS system to keep track of motor vehicle movement		
Painting the company logo on the motor vehicle		
Two years later – repainting the logo on the motor vehicle to touch it up		
Three years later – replacing the tyres		
Four years later – redoing the interior of the vehicle to convert it into a goods carrier		

#### Key term

Money received from the non-operating activities of the business is called **capital receipts**.

#### Key info

The benefits received from a capital receipt are enjoyed over a long period of time. Other sources of capital receipts are:

- an issue of shares
- an issue of debentures
- a loan taken from a bank
- additional capital introduced by the owner
- an insurance claim.

## Capital and revenue receipts

**Capital receipts** are funds received by the business that are not part of its operating activities. Capital receipts are non-recurring and non-routine.

When a non-current asset is sold, the money received is a capital receipt. This receipt is not entered in the income statement but is credited to the non-current asset in the nominal (general) ledger, reducing the value of the non-current asset. However, if a profit or loss is made on the sale of the asset, it is entered in the income statement prepared in the year the asset is sold (see Chapter 11).

**Key terms**

**Revenue receipts** are recurring in nature. They are income generated from the main operating activities of a business.

**Service business** is one that earns income by providing services, not physical products, for example, a bank.

**Revenue receipts** arise from the normal operating activities of the business and are recurring. Therefore, income received from the day-to-day activities of the business such as sales revenue, commission receivable or rent receivable, make up the revenue receipts of a business. Revenue receipts are entered in the income statement prepared by the business at the end of the financial year.

Some examples of revenue receipts are:

- » sales revenue received by a trading or manufacturing business
- » fees received by a **service business**
- » discounts received from suppliers or trade payables
- » earnings from investment income
- » rent received.

## Effect of incorrect treatment on profits

### Incorrect treatment of expenditure

Capital expenditure is entered in the non-current asset section of the statement of financial position, whereas revenue expenditure is charged against profits in the income statement. If capital expenditure is treated as revenue expenditure, then expenses in the income statement will be overstated and profits will therefore be undervalued. However, if revenue expenditure is treated as capital expenditure, expenses in the income statement will be understated and therefore profits will be overvalued.

#### → Worked example 3

An error occurred when \$400 paid for machinery repairs was wrongly debited to the machinery account. Here is the effect of this error:

**In the income statement:**

Machinery repairs, being an expense is not charged to profits

Profit for the year will be overstated by \$400\*

\* In Chapter 11, you will learn that this figure will change if depreciation has been charged on machinery.

### Incorrect treatment of receipts

#### → Worked example 4

A proprietor sold a motor vehicle for its net book value, \$5000, and deposited the money into the business bank account.

The business' trainee accountant debited bank correctly, but credited sales in error.

The result will be:

**In the income statement:**

Sales will be overstated by \$5000 as the sales account was credited. Therefore, profits will be overstated by \$5000

### Activity 2

Look again at Worked example 4. State whether the receipt of \$5 000 was (when correctly treated) a capital receipt or a revenue receipt.

- 1 State which item is a capital receipt. Why?
- 2 State which item is a revenue receipt. Why?

## Effect of incorrect treatment on asset valuation

### Incorrect treatment of expenditure

If revenue expenditure is treated as capital expenditure, then the statement of financial position will be incorrect as the assets within it will be overvalued. If, on the other hand, capital expenditure is treated as revenue expenditure, then assets in the statement of financial position will be undervalued.

### → Worked example 5

Using the example in Worked example 3, the effect of the error is:

#### In the statement of financial position:

Machinery, a non-current asset, will include the figure for machinery repairs

The non-current assets will be overvalued by \$400\*

\* In Chapter 11, you will learn that this figure will change if depreciation has been charged on machinery.

### Incorrect treatment of receipts on asset valuation

If a capital receipt is a result of a non-current asset disposal, then the non-current asset section of the statement of financial position will show the effect of the disposal as a deduction. In such a case, if the receipt of money from the sale of a non-current asset is not deducted from the non-current asset, but treated as revenue income, then the non-current asset section of the statement of financial position will be overvalued and the profits will be overstated.

### → Worked example 6

Using information from Worked example 4, the effect on the statement of financial position is:

#### In the statement of financial position:

Non-current assets will be overstated by \$5 000 as the sale of the motor vehicle was not deducted

### Activity 3

The following error was made in the books at Youth Traders:

\$3 500 paid for gym equipment was wrongly debited to gym equipment repairs.

- 1 State whether the purchase of gym equipment is revenue or capital expenditure.
- 2 State whether the repairs to the gym equipment are revenue or capital expenditure.
- 3 Explain the effect of the error on the financial statements of Youth Traders.

### → Worked example 7

A business sold one of its motor vehicles at net book value for \$4 500 for cash. The cash account was correctly debited. However, the sales account was credited in error. The result of this error:

In the income statement:	In the statement for financial position:
Sales will be overstated by \$4 500 as the sales account was credited.	The motor vehicle account will be overstated by \$4 500 as the sale was not deducted.
The profit will be overstated by \$4 500.	The total assets will be overstated by \$4 500.

### Activity 4

Look again at Worked example 7.

- 1 State whether the sale of the motor vehicle should not be included in sales.
- 2 State whether the receipt of \$4 500 was (when correctly treated) a capital receipt or a revenue receipt.
- 3 State the gross profit will be affected as a result of the error.
- 4 State the name of the section of the statement of financial position in which motor vehicles are recorded.
- 5 Name one other item in the statement of financial position, apart from assets, that will be affected by this error.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Which item is a capital receipt?  
 A Commission received  
 B Money received from sale of machinery  
 C Rent received  
 D Sales revenue [1]
- 2 Transportation costs of machinery purchased for the factory was entered in the carriage inwards account. How did this error affect the financial statements of the business? [1]

	Income statement	Statement of financial position
A	Profit overstated	Non-current assets understated
B	Profit understated	Non-current assets overstated
C	Profit overstated	Non-current assets overstated
D	Profit understated	Non-current assets understated

- 3 \$470 was paid to repaint the factory building. Which account should be deleted?  
 A Improvement to buildings account  
 B Land and buildings account  
 C Loose paint account  
 D Repairs and maintenance account [1]



- 4 A business provides the following information regarding its expenditure for the year ended 31 March 2018:

	\$
Machinery	56 000
Employees' salaries	39 000
Purchases	37 000
Office rent	30 000
Motor vehicle	25 000
Petrol	600

What was the value of the capital expenditure?

- A \$81 000  
 B \$95 000  
 C \$106 600  
 D \$131 600 [1]
- 5 Which item is not classified as capital expenditure?
- A Cost of installing a new non-current asset  
 B Cost of repairing a non-current asset  
 C Legal fees in connection with purchase of non-current asset  
 D Purchase of a non-current asset [1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 Ishan owns a grocery store. Complete the table below, placing a tick in the correct column to indicate whether the item is capital expenditure or revenue expenditure. [4]

Item	Capital expenditure	Revenue expenditure
New display furniture		
New cash till		
Installing new display furniture		
Purchase of inventory		

- 7 Hayden paid \$10 000 for a new vehicle. The invoice he received showed the following items:

	\$
Motor vehicle	9 500
Licence plates	200
Annual warranty of fitness	50
Insurance for one year	200

Calculate:

- a Total capital expenditure [2]  
 b Total revenue expenditure [2]
- 8 a Define the following terms:
- i Capital receipts  
 ii Capital expenditure  
 iii Revenue receipts  
 iv Revenue expenditure [4]

- b** On 31 March 2014 Leroy Smith discovered that an item of revenue expenditure had been recorded as capital expenditure. Complete the following table by putting ticks (✓) in the correct columns to indicate the effect of this error on the non-current assets and the profit for the year. [2]

Non-current assets at 31 March 2014		Profit for the year at 31 March 2014	
Overstated	Understated	Overstated	Understated

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2014, Q2 e & f)

- 9** Ravi is a retailer of garden furniture. Complete the table below, using a tick (✓) to indicate how each item would be classified. The first one has been completed as an example. [5]

	Capital receipt	Revenue receipt	Capital expenditure	Revenue expenditure
Rent received		✓		
Proceeds of sale of vehicle				
Purchase of goods for resale				
Discount allowed				
Discount received				
Legal fees on purchase of property				

(Adapted from Cambridge IGCSE Accounting 0452/11, May/June 2013, Q2 a)

- 10** Complete the following sentences using the following words: capital; current; non-current; overstated; revenue; understated
- ..... expenditure relates to the purchase of an asset which will last for more than 12 months.
- ..... expenditure relates to the day-to-day running costs of the business or the purchase of a ..... asset.
- A capital receipt arises when a ..... asset is sold.
- If an item of capital expenditure is wrongly recorded as revenue expenditure profit will be .....
- If an item of revenue expenditure is wrongly recorded as capital expenditure profit will be.....

(Adapted from Cambridge IGCSE Accounting 0452/11, October/November 2015, Q6 a)



- 11 The following trial balance was extracted from the books of Robbie McDonald at 30 September 2010.

	Dr	Cr
	\$	\$
Capital		85 000
Drawings	5 100	
Premises at cost	58 000	
Motor vehicle at cost	6 000	
Equipment at valuation	3 000	
Provision for depreciation of motor vehicle		1 200
Provision for doubtful debts		372
Trade receivables	17 600	
Irrecoverable debts recovered		160
Trade payables		16 250
Bank overdraft		7 728
Inventory at 1 October 2009	19 500	
Revenue		216 000
Purchases	176 000	
Wages	28 200	
Property tax and insurance	8 900	
Administration expenses	<u>4 410</u>	
	<u>326 710</u>	<u>326 710</u>

Additional information:

- Because of an oversight the inventory on 30 September 2010 was not valued. Robbie marks up all his inventory by 25 per cent.
  - During the year ended 30 September 2010 Robbie took goods costing \$1 900 for his own use. No entries have been made in the accounting records.
  - The motor vehicle is being depreciated at 20 per cent per annum using the reducing balance method.
  - Equipment was valued at \$2 340 on 30 September 2010. There were no sales or purchases of equipment during the year.
  - The provision for doubtful debts is to be maintained at 2 per cent of the trade receivables.
  - A bank statement received on 30 September 2010 included an entry for bank interest of \$1 550. No entries have been made in the accounting records.
  - The property tax and insurance includes \$2 400 for insurance of the premises. This represents insurance cover for the sixteen months to 31 January 2011.
- Prepare the income statement of Robbie McDonald for the year ended 30 September 2010.

The value of the inventory on 30 September 2010 should be clearly shown in the income statement.

[20]

(Adapted from Cambridge IGCSE Accounting 0452/21, October/November 2010, Q1)



## ? Chapter review questions

- 1 Complete the table below, placing a tick in the correct column to indicate whether each item is capital or revenue expenditure.

Item	Capital expenditure	Revenue expenditure
a Wages paid to factory workers		
b Purchase of office furniture		
c Paying the factory power bill		
d Payment of carriage to transport saleable goods to the customer		
e Payment of salary to construction business' project manager for work on a customer's factory extension		
f Payment of salary to construction business' project manager for work on business' own factory extension		
g Petrol charges for company vehicle		
h Purchase of a used packaging machine for the factory		

- 2 Explain the following terms:

- a Capital expenditure
- b Revenue expenditure
- c Capital receipts
- d Revenue receipts
- e Error of principle

- 3 A business treated an item of capital expenditure as revenue expenditure. Which effects did this error have?

- 1 Non-current assets are overstated
  - 2 Non-current assets are understated
  - 3 Profit for the year is overstated
  - 4 Profit for the year is understated
- a 1 and 3
  - b 1 and 4
  - c 2 and 3
  - d 2 and 4

## Revision checklist

In this chapter, you have learnt:

- ✓ what is meant by capital expenditure
- ✓ that capital expenditure is recorded in the statement of financial position
- ✓ what is meant by revenue expenditure
- ✓ that revenue expenditure is recorded in the income statement
- ✓ to explain capital receipts and revenue receipts
- ✓ the effect of treating capital expenditure as revenue expenditure on profits and asset valuation
- ✓ the effect of treating revenue expenditure as capital expenditure on profits and asset valuation
- ✓ the effect of treating capital receipts as revenue receipts on profits and asset valuation
- ✓ the effect of treating revenue receipts as capital receipts on profits and asset valuation.



# Accounting for depreciation and disposal of non-current assets

By the end of this chapter you will be able to:

- ★ define depreciation
- ★ explain the reasons for accounting for depreciation
- ★ name and describe the straight-line, reducing balance and revaluation methods of depreciation
- ★ prepare ledger accounts and journal entries for the provision of depreciation
- ★ prepare ledger accounts and journal entries to record the sale of non-current assets, including the use of disposal accounts.

## Key term

**Depreciation** is an operational expense that represents the spreading of the cost of a non-current asset over the estimated working life of the asset.

**Residual value** is an estimate of the value of a non-current asset at the end of its working life. Also known as scrap value.

## Depreciation

**Depreciation** is the estimated loss in value of a non-current asset over its useful life. It allocates a non-current asset's cost to expenses over the accounting periods of the asset's probable use. This allows a business to write off the cost of the non-current asset over the period of its working life. Depreciation is a non-cash transaction as it does not represent a cash outflow. Hence, it does not provide a cash fund that can be used in the future to replace the non-current asset.

A motor vehicle, as an example of a non-current asset, may cost \$50 000 to buy when new. Five years later the business may only be able to sell it for \$10 000, its **residual value**. Its value has decreased over time from \$50 000 to \$10 000. This decrease in value of non-current assets is known as depreciation. Since the residual can only be estimated at the time the asset is bought, depreciation can only be an estimate. When an asset increases in value, it is known as appreciation. Appreciation frequently applies to buildings and land, which tend to increase in value. However, most assets tend to depreciate.

## Activity 1

- 1 State whether the purchase of a non-current asset is capital or revenue expenditure. Give a reason for your answer.
- 2 State whether depreciation is treated as revenue or capital expenditure. Give a reason for your answer.

## Reasons for accounting for depreciation

**Economic reasons** – an asset can depreciate when a newer and better model becomes available, rendering the existing asset obsolete. For example, a computer system may, in time, become obsolete.

**Time factors** – sometimes a non-current asset has a legal life in years of usage. For example, leases on buildings and land where the title to the asset is held for a period and, once this time has expired, the asset no longer belongs to the lessee (the person granted the lease). The term amortisation is sometimes used instead of the word depreciation in respect of these assets.



▲ Depletion of a mine

**Physical factors** – physical deterioration due to wear and tear from usage, erosion, rot, rusting and so on, will cause an asset to be less useful for its intended purpose.

**Depletion factors** – some non-current assets are used up (become depleted) but not in the sense of inventory that is sold (inventory is not a non-current asset). Natural resources such as those obtained by mining, for example, become scarcer as they are extracted; therefore, a mine will depreciate over its economic life.

## Activity 2

- 1 Give examples from businesses that would experience:
  - a depreciation due to economic factors
  - b depreciation due to time factors
  - c depreciation due to physical factors
  - d depreciation due to depletion.
- 2 Define:
  - a obsolescence (when an asset becomes obsolete)
  - b amortisation of a lease.

### Key info

Financial statements present a 'true and fair view' when they are an accurate representation of the business' accounts and no material errors or omissions have occurred.

### Key info

Remember that the main causes of an asset losing value are: economic factors, time factors, physical factors and depletion factors.

### Think about it!

In pairs, discuss why it is important for the income statement to show depreciation as an expense.

### Key term

**Net book value** is the net value of the non-current asset. It is calculated by subtracting accumulated depreciation from the cost of the asset.

Accountants are very careful to ensure that they value everything in the business correctly and tend to be very conservative when making their evaluation. It is always better to underestimate the value of an asset rather than overestimate it. Both the income statement as well as the statement of financial position should show a 'true and fair view' of the performance and financial position of a business. When non-current assets are depreciated, they are shown at a lower value. In Chapter 26, which covers accounting principles, you will learn that this is when the prudence principle overrides the historic cost principle.

Similarly, when depreciation is treated as an expense in the income statement, the profit for the year is not overstated. This is an example of the matching principle (see Chapter 26). Due to this principle being used, depreciation is charged as an expense in the income statement based on an estimate of how much of the overall economic usefulness of the non-current asset has been used up in that year.

## Reasons for providing for depreciation

Provision for depreciation is made annually for the following reasons:

- » To spread the cost of the asset over the years it is used.
- » To ensure the income statement shows a 'true and fair view' of the expenses for the period. Since the asset is being used to generate income, a figure representing the 'cost' of this asset should be charged to the profits of the period in question. This is in keeping with the matching principle and the prudence principle (see Chapter 26) which states that profits should not be overstated.
- » To ensure the statement of financial position shows a 'true and fair view' of the non-current assets. The prudence principle states that assets should not be overstated. The provision for depreciation is deducted from the historic cost of the non-current assets and, therefore, the assets are shown at **net book value** in the statement of financial position.

### Study tip

It is important to differentiate between the reasons for depreciation (such as economic factors and physical factors) and the reasons for providing for depreciation.

### Key term

**Provision for depreciation** is an account used to accumulate estimated depreciation of an asset over the years of its useful life.

### Study tip

As depreciation is an estimate, round it up to a whole number.

### Key term

**Straight-line method of depreciation** results in the same annual depreciation expense over the economic life of a non-current asset.

- » Since the profit for the year is reduced by the increase in the provision for depreciation, the owner is not encouraged to make excessive cash drawings which would be detrimental to the business.

## Calculating depreciation

The aim of **provision for depreciation** is to spread the cost of the non-current asset over the accounting periods that asset is being used for. However, it is difficult to do this accurately because residual value and estimated working life are hard to predict. All that a business can do is to estimate depreciation. The business will consider the following when choosing the best method for providing for depreciation:

- » the useful economic life of the asset
- » what the asset's estimated residual value is
- » how useful the asset is in each year of its life.

There are three ways of calculating depreciation:

- 1 Straight-line
- 2 Reducing balance method
- 3 Revaluation method.

Once the business has chosen a method to depreciate its non-current assets, it should not change its method. This is due to the principle of consistency (see Chapter 26).

## Straight-line method

When the **straight-line method** is used, an estimate is made of how long the asset is likely to last. Using a motor vehicle as an example, let us assume that it cost \$50 000 and will last ten years. At the end of this period it will have a scrap value of \$5 000.

$$\text{\$50 000 (original cost)} - \text{\$5 000 (scrap value)} = \text{\$45 000} \div 10 \text{ (number of years)} = \text{\$4 500}$$

Each year \$4 500 will be written off (written down from) the value of the vehicle and will be regarded as an expense. Hence, the asset will be depreciated by \$4 500 every year for ten years. This method is used when the asset is expected to be used equally over its life to generate income.

## → Worked example 1

### With no residual value

A machine is bought for \$4 500. Its estimated useful life is five years. Calculate the annual instalment of depreciation using the straight-line method of depreciation.

$$\text{Annual instalment} = \frac{\text{Cost}}{\text{Years of use}} = \frac{4\,500}{5} = \text{\$900}$$

The amount for depreciation is \$900.

This amount can also be expressed as a percentage of total cost as follows:

$$\text{Annual depreciation} = 20 \text{ per cent of cost } (900 \div 4\,500 = 0.2 \times 100)$$

### Key info

Depreciation can also be calculated as a percentage of the cost price when using the straight-line method.

**Key info**

The formula to use when there is residual value is:

$$\text{Annual depreciation} = \frac{\text{Cost of asset} - \text{residual value}}{\text{Estimated years of use}}$$

**→ Worked example 2****With residual value**

A machine is bought for \$4 500. It is estimated that it could be sold for \$500 after five years.

$$\text{Annual depreciation charge} = \frac{\$4\,500 - \$500}{5} = \$800$$

**Activity 3**

- 1 Calculate annual depreciation using the straight-line method for a motor vehicle that cost \$3 000 and has an estimated life of ten years. Give your answer as an amount and a percentage.
- 2 Calculate annual depreciation using the straight-line method for fixtures that cost \$5 000 and have an estimated life of ten years with a residual value of \$500.
- 3 A business bought a motor vehicle for \$6 000 and depreciates its non-current assets at five per cent per annum using the straight-line method. Calculate the annual depreciation charge.
- 4 A business provides for depreciation on its machinery at ten per cent per annum of the cost of the machinery in existence at the end of the financial year. It finds that it has charged machinery repairs \$450 to the machinery account. Explain how such an error affected the business' profits of \$3 500. State whether this error had any effect on the statement of financial position of the business. To answer these questions, complete the statements below.
  - a Ten per cent of 450 = \_\_\_\_\_
  - b The profits would have been overvalued by \_\_\_\_\_, being the amount that was not included in the expenses for the year. However, the depreciation for machinery for the year would have been overvalued by \$\_\_\_\_\_ since the machinery was overvalued by \$450; therefore, the profit should have been: \$3 500 – \$450 + \$45 = \$\_\_\_\_\_

Note: In question 4 in the activity above, not only are the expenses in the income statement understated, and therefore affect the correct valuation of the profit for the year (as shown in the answer above), but the non-current assets in the statement of financial position would be overvalued as well, by the amount of \$405 (\$450 – \$45)

**Key info**

The five per cent depreciation charge, referred to in Activity 3, is usually decided on by using past experience.

**Reducing balance method**

This is sometimes known as the diminishing balance method. This method is used when an asset's economic use is greater in the early years compared to the later years of its life.

The business will therefore charge larger amounts by way of depreciation to the income statement when the asset is new. For example, a motor vehicle is bought on 1 January 2018 for \$50 000. It is decided to charge ten per cent per annum as depreciation. At the end of the first year, 2018, depreciation will be ten per cent of \$50 000 (\$5 000). The statement of financial position will therefore show the asset at a net book value of \$45 000 (\$50 000 – \$5 000). At the end of the second



## Key term

**Reducing balance method of depreciation** results in diminishing annual depreciation expenses over the economic life of a non-current asset.

year, 2019, depreciation will be ten per cent of \$45 000 (\$4 500). This asset will be shown on the statement of financial position at the end of the second year at a net book value of \$45 000 – \$4 500 depreciation = \$40 500.

Each year depreciation is calculated as 10 per cent of the net book value of the asset, so the depreciation charge gets smaller each consecutive year.

As vehicles and other mechanical assets are likely to need repairs more frequently as they get older, many businesses use the **reducing balance method** of calculating depreciation. Each year, the amount of depreciation written off will diminish, or get smaller. As depreciation reduces with each consecutive year, the repairs, and other running costs, are likely to increase as the asset gets older.

## → Worked example 3

### Reducing balance method

A motor vehicle is bought for \$6 700 and it is decided to depreciate this vehicle using the reducing balance method at 20 per cent per annum. The annual depreciation for the first three years of the life of the vehicle are calculated below.

	\$
Cost	6 700
Less: depreciation for year 1 @ 20 per cent of \$6 700	<u>1 340</u>
Net book value (NBV)	5 360
Less: depreciation for year 2 @ 20 per cent of \$5 360	<u>1 072</u>
NBV (or written down value)	4 288
Less: depreciation for year 3 @ 20 per cent of \$4 288	<u>*858</u>
NBV	<u>3 430</u>

\*\$858 is rounded off to the nearest whole number.

Therefore, the depreciation for the first three years is \$1 340, \$1 072 and \$858.

## → Worked example 4

A large manufacturing company purchased a machine for \$16 000. The machine will be used for four years, and then disposed of for an estimated amount of \$1 000. If the reducing balance method was used the machine would be depreciated at the rate of 50 per cent.

Depreciation calculation using the straight-line method:

$$\text{Annual depreciation} = \frac{\text{Cost price} - \text{disposal value}}{\text{Number of years use}}$$

$$\frac{\$16\,000 - \$1\,000}{4 \text{ years}} = \frac{15\,000}{4} = \$3\,750 \text{ depreciation per year}$$

Comparison of straight-line method and reducing balance method

Straight-line method		Reducing balance method	
	\$		\$
Cost	16 000		16 000
Depreciation: year 1	<u>3 750</u>	(50 per cent of \$16 000)	<u>8 000</u>
Value after year 1	12 250		8 000
Depreciation year 2	<u>3 750</u>	(50 per cent of \$8 000)	<u>4 000</u>
Value after year 2	8 500		4 000
Depreciation year 3	<u>3 750</u>	(50 per cent of \$4 000)	<u>2 000</u>
Value after year 3	4 750		2 000
Depreciation 4	<u>3 750</u>	(50 per cent of \$2 000)	<u>1 000</u>
Disposal value	<u>1 000</u>		<u>1 000</u>

This worked example shows that, using the reducing balance method, the annual depreciation charge is much higher in the earlier years than in the later years, compared to the depreciation charge using the straight-line method.



**Think about it!**

'The residual value will technically never be reduced to zero, when using the reducing balance method.'

As a group, discuss if this statement is true.

**Activity 4**

Some machinery was bought for \$8 900 and it was decided to depreciate it at 25 per cent using the reducing balance method. Calculate the annual provision for depreciation charged to the income statement for the first three years of its life.

**Key term**

**Revaluation method of depreciation** is a method in which annual depreciation of an asset is calculated as the difference in its value at the end of the year compared to the start of the year.

**Revaluation method of depreciation**

For some assets, it is impossible to estimate depreciation except by revaluing them at the end of each year. This happens, for example, in cases where assets are individually of little monetary value but collectively of considerable value, such as a collection of loose tools. This method is also used when it is difficult or time-consuming to keep detailed records of inexpensive assets.

With the **revaluation method of depreciation**, the asset is revalued at the end of the financial year. The end of year value is then subtracted from the value at the beginning of the year. If the value at the end of the year is less than the value at the beginning of the year, the result is a depreciation charge.

**→ Worked example 5**

A business that started operations on 1 January 2018 bought containers costing \$4 400. On 31 December 2018, the estimated value of the containers was \$800. Containers bought during the year ended 31 December 2019 cost \$4 200. Estimated value of containers at 31 December 2019 was \$4 000.

Containers account					
Date	Details	\$	Date	Details	\$
2018			2018		
Jan 1	Cash/bank	4 400	Dec 31	Income statement	3 600
			Dec 31	Balance c/d	800
		<u>4 400</u>			<u>4 400</u>
2019			2019		
Jan 1	Balance b/d	800	Dec 31	Income statement	1 000
	Cash/bank	4 200	Dec 31	Balance c/d	4 000
		<u>5 000</u>			<u>5 000</u>
2020					
Jan 1	Balance b/d	4 000			

The depreciation charge for the year ended 31 December 2018 was \$3 600 and for the year ended 31 December 2019 it was \$1 000.

**Key info**

Whatever method a business chooses to use for calculating depreciation, this should not be changed without a good reason. This is in keeping with the principle of consistency (see Chapter 26).

**Activity 5**

You are given the following information:

	\$
Value of crates at 1 January 2018	5 600
Value of crates at 31 December 2018	5 300
Crates purchased on 4 October 2019	2 900
Value of crates at 31 December 2019	7 000

Prepare a crates account showing the amount of depreciation charged to the income statement, using the revaluation method.

### Activity 6

Melanie, a sole trader, purchased a computer for \$6 000 on 1 January 2018. It was expected to have a useful life of three years. It was not expected to have any scrap value at the end of its useful life.

- 1 Calculate the depreciation charge for the computer for each of the years ended 31 December 2018, 2019 and 2020, based on:
  - a the straight-line method
  - b the reducing balance method using the rate of 50 per cent per annum.
 Show your workings.
- 2 Amana started a business on 1 January 2018 with \$450 of loose tools. During the year ended 31 December 2018, tools costing \$56 were purchased. On 31 December 2018 the value of loose tools was \$480. Calculate depreciation on loose tools charged to the income statement for the year ended 31 December 2018.

## Recording depreciation

Depreciation, whether it is calculated using the straight-line method or the reducing balancing method, is recorded in the same way. Two ledger accounts will be used:

- » the non-current asset account, which is used to record purchases and disposals of the asset. This account will always have a debit balance. Only the cost price of the asset is mentioned in this account
- » the provision for depreciation account used to record depreciation charged every year. Depreciation accumulates in this account. It will always have a credit balance.

### Key term

#### Accumulated depreciation

is the total depreciation charged to the income statement, from the time the asset was bought and made available for use, to the present time.

The balances of each account are shown in the statement of financial position. The difference between the two accounts is calculated and shown as the asset's net book value. Since it is the **accumulated depreciation** that is shown in the statement of financial position, the net book value of the asset will be used (both cost and net book value are shown) instead of its historic value.

## Ledger accounts and journal entries for the provision for depreciation

When we talk about provisions in accounting, we are referring to the accounting procedure of holding back value out of profits to provide for an anticipated loss for some reason, for example, depreciation. The event has not *yet* happened, but through their past experience and knowledge of the business, managers will provide for things that they anticipate *will* happen.

There are all sorts of things that might be provided for, for example, the loss of ticket sales for a cricket match that is rained off. Sometimes, insurance is taken out for such an occurrence. The two most common types of provision, though, are a provision for depreciation and provision for doubtful debts (see Chapter 13).

The relevant entries for the provision of depreciation are described below.

### Entries in the non-current asset account

Double entry at the time an asset is purchased:

- » The asset account is debited and the seller's account credited if the asset is bought on credit. If the asset was purchased for cash or by cheque payment, the relevant column in the cash book will be credited.
- » At the end of the year: the asset account is balanced and the balance is carried down as a debit balance.



### Entries in the provision for depreciation account

At the end of the year, the account will be credited with the depreciation charge for the year. It is then balanced. This balance, which is a credit balance, is carried down to the next accounting period. The entries remain the same whether the straight-line method or the reducing balance method is used. If the revaluation method is used, the asset account is prepared as shown in Worked example 5 on page 159.

In Chapter 6, we learnt that one of the uses of the trial balance is to provide information for the preparation of financial statements. Both the asset account, which appears in the debit column of the trial balance, and the provision for depreciation account, which appears in the credit column, will be used in the statement of financial position.

The depreciation charge for the year is entered twice: in the statement of financial position, where it is added to accumulated depreciation (if any) *and* in the income statement as an expense (see Worked example 6 below).

The journal entry to record the provision for depreciation during the year is shown below.

#### Key info

It is important to differentiate between accumulated depreciation and depreciation for the year.

	Dr	Cr
	\$	\$
Income statement	XX	
Provision for depreciation account		XX

### → Worked example 6

A business purchases a car for cash \$7 000 on 1 January 2018. The business' financial year ends on 31 December. It is to be depreciated at the rate of five per cent per annum using the straight-line method.

#### Car account for the first three years

Date	Details	\$	Date	Details	\$
2018			2018		
Jan 1	Cash	7 000			

#### Provision for depreciation of car account

Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Balance c/d	<u>350</u>	Dec 31	Income statement	<u>350</u>
2019			2019		
Jan 1	Balance b/d	350	Jan 1	Balance b/d	350
Dec 31	Balance c/d	<u>700</u>	Dec 31	Income statement	<u>350</u>
		<u>700</u>			<u>700</u>
2020			2020		
Jan 1	Balance b/d	700	Jan 1	Balance b/d	700
Dec 31	Balance c/d	<u>1 050</u>	Dec 31	Income statement	<u>350</u>
		<u>1 050</u>			<u>1 050</u>
2021			2021		
Jan 1	Balance b/d	1 050	Jan 1	Balance b/d	1 050

## Recording provision for depreciation in the statement of financial position

The cost, the accumulated depreciation and the net book value are shown in the non-current asset section. An extract from the statement of financial position showing the effect of providing for depreciation is shown below.

### Key info

The asset account need not be balanced at the end of the year if there is just one entry in the account.

Statement of financial position as at 31 December ... (extract)			
Non-current assets	Cost	Accumulated depreciation	Net book value
2018	\$	\$	\$
Car	<u>7 000</u>	<u>350</u>	6 650
2019			
Car	<u>7 000</u>	<u>700</u>	6 300
2020			
Car	<u>7 000</u>	<u>1 050</u>	5 950

## Recording provision for depreciation in the income statement

This is an extract from the income statement showing the effect of providing for annual depreciation:

Income statement for the year ended ... (extract)	
Less: EXPENSES	\$
2018	
Provision for depreciation of car	350
2019	
Provision for depreciation of car	350
2020	
Provision for depreciation of car	350

The charge for depreciation is an expense deducted from the gross profit.

### Activity 7

Forest Timber bought two computers paying by cheque for \$10 000 on 2 January 2018. It depreciates its non-current assets using the straight-line method. The computers have an estimated life of four years and each will have a scrap value of \$1 000 at the end of that time.

- Prepare the following for the years ended 31 December 2018, 2019:
  - Computer account
  - Provision for depreciation of computer account.
 Also prepare:
  - the statement of financial position extract recording the balances above
  - an extract of the income statement recording the relevant entry from the above.
- The accumulated depreciation was \$45 000 at 31 December 2018 and the depreciation charge for the year ended 31 December 2019 is \$4 000. Complete the following sentences:  
 The amount for depreciation that will be deducted from cost to arrive at the net \_\_\_\_\_ in the statement of financial position is \_\_\_\_\_ and the amount charged to the income statement as an expense is \_\_\_\_\_.

If an asset is purchased *during* an accounting period, either of the following options may be used by a business to calculate the depreciation charge for the year:

- » Option 1 – The date the asset is purchased is ignored and a whole year's depreciation is provided for, even though the asset was not in use through the year. This is the method normally used.
- » Option 2 – Depreciation is provided on the basis of 'one month's ownership is equal to one month's depreciation'. For example, if the asset was bought in July, only half a year's depreciation is provided for in the first year ended 31 December.

**Study tip**

Read the question very carefully to decide which method to use. Normally, if dates are mentioned, option 2 should be used.

Once an option is decided upon, the business should stick to it due to the principle of consistency (see Chapter 26).

## Ledger accounts and journal entries to record the sale of non-current assets

When a business disposes of non-current assets, the original cost and the accumulated depreciation to the date of disposal must be deleted from the accounting records and transferred to a disposal account. The proceeds from the sale are also entered in the disposal account. The account is then balanced and the balancing figure will show a profit on disposal (if proceeds from the sale are higher than the net book value) or a loss on disposal (if proceeds from the sale are less than the net book value). If the estimated provision for depreciation was correctly calculated and provided for, the account closes, with no profit or loss on disposal. However, this is rarely the case.

The following journal entries will be made to transfer the relevant amounts from the asset account and the provision for depreciation of the asset account.

Journal entry to record deletion of the asset being sold from the records by transferring the relevant figures to the disposal account:

The journal entries		
	Dr	Cr
	\$	\$
1 Disposal account	XX	
Asset account		XX
2 Provision for depreciation of asset account	XX	
Disposal account		XX

(The two entries are posted to remove the disposed asset accounts from the ledgers.)

The amount the asset is sold for will be a capital receipt. If the asset is sold for cash or cheque payment, the cash book is debited and the disposal account credited. If the asset is sold on credit, the buyer's account is debited and the disposal account is credited.

### → Worked example 7

A car was bought for \$5 500 on 4 January 2018. Depreciation is calculated on the assets in existence at the end of the year using the straight-line method at ten per cent per annum. The asset was sold on 5 October 2020 for \$2 000.

The following are entries in the relevant ledger accounts to record the information given above.

Car account					
Date	Details	\$	Date	Details	\$
2018			2020		
Jan 4	Cash/bank	<u>5 500</u>	Oct 5	Disposal of car	<u>5 500</u>
Provision for depreciation of car accounts					
Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Bal c/d	<u>550</u>	Dec 31	Income statement	<u>550</u>
2019			2019		
Dec 31	Bal c/d	1 100	Jan 1	Bal b/d	550
		<u>1 100</u>	Dec 31	Income statement	<u>550</u>
					<u>1 100</u>
2020			2020		
Oct 5	Disposal of car	<u>1 100</u>	Jan 1	Bal b/d	<u>1 100</u>
Disposal of car account					
Date	Details	\$	Date	Details	\$
2020			2020		
Oct 5	Car account	5 500	Oct 5	Provision for depreciation of car	1 100
			Oct 5	Cash/bank	2 000
			Dec 31	Income statement (loss)	2 400
		<u>5 500</u>			<u>5 500</u>

The profit or loss on the sale of the asset is transferred to the income statement only at the end of the financial year. In the example above, there was a loss on disposal as the accumulated depreciation (an aggregate of the estimated annual depreciation) was under-provided. If there is an over-provision of depreciation, there will be a profit on the sale of the asset.

If a business disposes of say, two cars out of the five cars it has in its fleet, then there will be a balance carried down in the asset account. Care should be taken to transfer the right amounts from the asset and provision for depreciation accounts as there will also be accumulated depreciation in the provision account to carry forward to the next accounting period.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Rotunda Ltd. purchased machinery for \$30 000 on 1 January. Two years later the machinery has a book value of \$24 000. Depreciation was calculated using the straight-line method. What is the annual rate of depreciation?
- A 10 per cent  
B 20 per cent  
C 25 per cent  
D 30 per cent [1]

- 2 Why does a business provide for depreciation of its non-current assets?
- A To charge the cost of the non-current asset against the profits in the year it is purchased  
B To ensure that cost of the asset is spread over the years of the economic life of the asset  
C To ensure that the assets are shown in the statement of financial position at cost  
D To fund the replacement of the asset [1]

- 3 Sweta, a sole trader, has not allowed for depreciation of her non-current assets in her financial statements. How will her financial statements be affected? [1]

	Non-current assets	Profit for the year
A	Understated	Overstated
B	Overstated	Overstated
C	Understated	Understated
D	Overstated	Understated

- 4 Which of the following assets should best be depreciated using the revaluation method?
- A Loose tools  
B Machinery  
C Motor vehicle  
D Office furniture [1]

- 5 Office equipment bought for \$20 000 is depreciated using the reducing balance method. The rate of depreciation applied is ten per cent. What is the net book value of the equipment at the end of two years?
- A \$16 000  
B \$16 200  
C \$17 000  
D \$18 000 [1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 On 1 April 2011 Lynne purchased two motor vehicles for business use on credit from Villa Motors Limited. The vehicles cost \$12 000 each. Depreciation is charged on the motor vehicles at 20 per cent per annum by the reducing balance method. A full year's depreciation is charged in the year of purchase



but no depreciation is charged in the year of sale. On 23 January 2013 one of the motor vehicles was sold for \$6 500.

- a Prepare the journal entry to record the purchase of the motor vehicles on 1 April 2011. Dates and narratives are *not* required. [2]
- b Prepare the provision for depreciation account for the years ended on 31 March 2012 and 2013. [5]
- c Prepare the disposal account. [5]
- d State two other methods of depreciation. [2]

*(Adapted from Cambridge O Level Principles of Accounts 7110/21, May/June 2013, Q4)*

- 7 Sparky Ltd set up business on 1 May 2008 with the following assets:

	\$
Property (land and buildings)	150 000
Computer equipment	40 000
Inventory	70 000

Sparky Ltd decided on the following policy for depreciation:

- Land costing \$80 000 was not to be depreciated.
  - Buildings are to be depreciated at 2 per cent per annum on cost using the straight-line method.
  - Computer equipment is to be depreciated at 25 per cent per annum using the diminishing (reducing) balance method.
- a State two causes of depreciation. [2]
  - b Explain why Sparky Ltd does *not* depreciate each of the following:
    - i Land
    - ii Inventory (stock in trade) [4]
  - c Explain why depreciation is an application of the matching principle. [2]
  - d Calculate the depreciation on property (land and buildings) for the year ended 30 April 2009. [1]

On 30 April 2010 Sparky Ltd sold some of the computer equipment for \$7 000. The computer equipment had cost \$12 000 on 1 May 2008. Sparky Ltd charges a full year's depreciation in the year of disposal.

- e Prepare the disposal account on 30 April 2010 recording the disposal of the computer equipment. [5]

During the year ended 30 April 2010, Sparky Ltd carried out work on the buildings:

- i built an extension
  - ii redecorated the interior
  - iii installed air conditioning.
- f State whether each item, i–iii above, is capital expenditure or revenue expenditure.

*(Adapted from Cambridge O Level Principles of Accounts, 7110/21, May/June 2010, Q2)*

- 8 Ajith has a financial year end of 31 December. He provided the following information at 1 January 2013.

	\$
Fixtures and fittings at cost	31 200
Accumulated depreciation	9 702

Ajith depreciates his fixtures and fittings at the rate of 20 per cent per annum on the reducing balance basis. He provides a full year's depreciation in the year of purchase and none in the year of disposal.

On 1 June 2013 he sold some fixtures and fittings which had cost \$1 200 when bought on 15 May 2011. He received a cheque for \$600 in settlement.

On 1 August 2013 he bought new fixtures and fittings, \$2 500, paying in cash.

**a** Calculate the accumulated depreciation provided on the fixtures and fittings sold on 1 June 2013. [3]

**b** Prepare the following ledger accounts for the year ended 31 December 2013. Where necessary balance the account and bring down the balance on 1 January 2014. [15]

- Fixtures and fittings account
- Provision for depreciation account
- Disposal account

**c** Prepare the following extracts from Ajith's financial statements using your answer to b). [4]

- Ajith – Extract from income statement for the year ended 31 December 2013.
- Ajith – Extract from statement of financial position at 31 December 2013.

*(Adapted from Cambridge IGCSE Accounting 0452/13, October/November 2014, Q5)*

**9** Grindle is a trader. He provided the following information for his business.

- Fixtures and fittings at cost were: 1 January 2015 – \$17 200; 31 December 2015 – \$17 600
- On 1 March 2015 new fixtures and fittings, cost \$3 600, were bought on credit from Bill.
- On 1 August 2015 some fixtures and fittings, which were brought in 2014, were sold.

**a** Prepare the fixtures and fittings account for the year ended 31 December 2015. Show the transfer to the disposal account. Bring down the balance on 1 January 2016. [6]

Grindle also provided the following information.

Fixtures and fittings are depreciated at the rate of 10 per cent per annum on the straight line basis. A full year's depreciation is charged in the year of purchase and none in the year of disposal.

**b** Calculate the depreciation charge for the year ended 31 December 2015. [2]

**c** Prepare the provision for depreciation of fixtures and fittings account for the year ended 31 December 2015. Bring down the balance on 1 January 2016. [4]

**d** State whether the purchase of the fixtures and fittings was capital expenditure or revenue expenditure. [1]

**e** State the effect this purchase had on Grindle's capital. [1]

**f** Complete the following table by placing a tick (✓) in the correct box to indicate the effect of depreciation charge on Grindle's capital. [1]

Increase	Decrease

*(Adapted from Cambridge IGCSE Accounting 0452/11, October/November 2016, Q4)*

## Chapter review questions

- 1 Name:
  - a two non-current assets
  - b three reasons why a non-current asset depreciates
  - c two reasons why a provision for depreciation is made
  - d two examples of assets that depreciate due to depletion
  - e one other term for residual value
  - f one asset that has become obsolete
  - g three methods of calculating depreciation
  - h two assets that are depreciated using the revaluation method.
- 2 Complete the following sentences:
  - a Depreciation is one of the \_\_\_\_\_ of running a business.
  - b An asset may depreciate and become obsolete as a result of \_\_\_\_\_ reasons.
  - c With the \_\_\_\_\_ method of calculating depreciation, the asset is reassessed for value at the end of the financial year.
  - d Property is more likely to \_\_\_\_\_.
  - e When an asset is completely out of date it is said to be \_\_\_\_\_.
  - f The straight-line method is also called the \_\_\_\_\_ method.
  - g With the \_\_\_\_\_ method, depreciation diminishes each year.
  - h Whichever method of calculation is used, the result is shown in a \_\_\_\_\_ account.
  - i When an asset \_\_\_\_\_ value, it is said to have depreciated.
  - j Depreciation due to \_\_\_\_\_ deterioration is an example of wear and tear due to normal usage.
- 3 A car was bought for \$6 000 on 1 January 2018. It was sold on 6 October 2020 at a profit of \$450. The car was depreciated at ten per cent using the reducing balance method on assets in use at the end of the year. Calculate the price at which the car was sold.
- 4 On 1 June 2018, Carla, a sole trader, purchased machinery on credit from Absolem Machinery Company for \$15 000. She calculates depreciation on machinery using the straight-line method at ten per cent per annum at the end of each financial year. No depreciation is provided for in the year of disposal, but depreciation is provided in the year it is purchased. On 1 September 2019, one third of the machinery was sold for \$1 000 cash. Prepare the following accounts in the ledger of Carla for each of the years ended 31 May 2019 and 31 May 2020:
  - a Machinery account
  - b Provision for depreciation of machinery account
  - c Disposal of machinery account.

## Revision checklist

In this chapter you have learnt:

- ✓ that depreciation is the loss in value of non-current assets over a period of time
- ✓ that depreciation is an expense even though no money has been spent
- ✓ that depreciation must be accounted for accurately for the statement of financial position to be accurate
- ✓ what is meant by the straight-line, reducing balance and revaluation methods of depreciation
- ✓ how to prepare ledger accounts and journal entries to record the provision of depreciation of non-current assets
- ✓ how to prepare ledger accounts and journal entries to record the sale of non-current assets
- ✓ how to use disposal accounts.



# Other payables and other receivables

## Key terms

An **accrued expense** is an expense owing either at the beginning or at the end of the financial year. It is recognised in the financial records of a business before it is paid for. It is recorded in the business' statement of financial position as a current liability.

An **accrued income** is an income owing either at the beginning or at the end of the financial year. It is recognised in the financial records of a business before it is received. It is recorded in the business' statement of financial position as a current asset.

A **prepaid expense** is an expense paid in advance, for the next financial year. It is recorded on the business' statement of financial position as a current asset.

A **prepaid income** is an income received in advance, for the next financial year. It is recorded on the business' statement of financial position as a current liability.

A **year-end adjustment** is an adjustment made to the financial records of a business so that a 'true and fair view' of the profit or loss for the financial year in question, is shown.

By the end of this chapter you will be able to:

- ★ recognise the importance of matching costs and revenues
- ★ prepare ledger accounts and journal entries to record accrued and prepaid expenses
- ★ prepare ledger accounts and journal entries to record accrued and prepaid incomes.

## Importance of matching costs and revenues

In the previous chapters, we have seen that any income received and expense paid belonged to the accounting period for which the financial statements were prepared. Therefore, the figure for salaries in the trial balance at 31 December 2018, for instance, represented the amount paid to staff as salaries for the accounting year ending on 31 December 2018. Sales revenue included in this trial balance was the income earned from sales, cash and credit, for the accounting year ended 31 December 2018. No mention has been made for any rent, for example, that was not paid but due, or salaries paid in advance for the next accounting period.

This is not realistic, because in the business world expenses and income will often be **prepaid** or **accrued**. However, as the income statement, which is affected as a result, is prepared for a financial year, only expenses and income relating to that specific year should be included, to arrive at the right profit or loss for the year. Accrued expenses should be recorded in the financial year in which they occur rather than in the following year when they will be paid. Similarly, a prepayment, which represents an expense paid in advance of receiving the benefit of the expense, or income for which goods and services are yet to be delivered, should not be included in the income statement of the year in which they have been paid (see Chapter 26, Matching principle). Therefore, adjustments should be made to these expenses and income so that the income statement contains the expenses and income for the year it is meant. These are known as **year-end adjustments**.

### Activity 1

- 1 Define:
  - a accrued expense
  - b accrued income
  - c a year-end adjustment
  - d a prepayment.
- 2 Name the principle that is applied when a year-end adjustment for accruals and prepayments is made.

### Think about it!

Do you think that annual depreciation, which you learnt in the previous chapter, will be a year-end adjustment? Why?

## Recording accrued and prepaid expenses

### Accrued expenses

Expenses are transferred from the nominal (general) ledger to the income statement at the end of an accounting period. Since the income statement is prepared for a set accounting period, usually a year, it is important that only those expenses, whether paid or not, incurred in that period should be included to arrive at the right profit for the year; the expenses still owing should be included or else the profit will be overstated.

#### → Worked example 1

Abraham's financial year ends on 31 August. He has premises that he rents for \$1 200 a year. During the financial year ended 31 August 2019 Abraham made the following payments:

<b>2018</b>	<b>\$</b>
Sept 30	250
Oct 31	250
Dec 4	250
<b>2019</b>	
Jun 16	250

<b>Rent account</b>					
<b>Date</b>	<b>Details</b>	<b>\$</b>	<b>Date</b>	<b>Details</b>	<b>\$</b>
2018					
Sept 30	Cash/bank	250			
Oct 31	Cash/bank	250			
Dec 4	Cash/bank	250			
2019			2019		
Jun 16	Cash/bank	250			
Aug 31	Bal c/d (Accrual)	200	Aug 31	Income statement	1 200
		<u>1 200</u>			<u>1 200</u>
			Sept 1	Bal b/d (Accrual)	200

The example above shows that the rent still owing, which should be included in the income statement for the year ended 31 August 2019, is \$200. As the amount paid is only \$1 000, the rent accrued amounting to \$200 should be added. Hence, rent in the expenses section of the income statement for the year will be \$1 200, which is the figure that Abraham has contracted to pay his landlord. This is the figure that appears on the credit side of the rent account as a transfer to the income statement. However, as only \$1 000 was paid, \$200 is entered on the debit side. This balancing figure represents rent still owing and is a liability (it is a credit balance).

**Key info**

The adjusting entry for an accrued expense made at the end of the year is to debit the expense account with the accrual and carry down this amount as a credit balance. Debits, as we know, increase expense accounts and credits increase liabilities. Rent has increased by \$200 and the current liabilities have also increased, by the same amount, as an 'other payables'.



Steps to take to record an accrual of an expense:

- 1 Recognise that there is an accrual.
- 2 When the expense is paid, debit the expense account and credit the cash book with the amount paid (on 30 September, 31 October, 4 December and 16 June).
- 3 The adjusting entry made at the end of the year is to debit the expense account with the accrual and carry down this amount as a credit balance. Debits, as we know, increase expense accounts and credits increase liabilities.
- 4 The (rent) expense in the income statement is now debited with the accrual (\$200) to arrive at the right expense (\$1 200).
- 5 To summarise, \$1 000 was debited when it was paid (on 30 September, 31 October, 4 December and 16 June) *plus* \$200, the accrual, was debited as a year-end adjustment.
- 6 This accrual is a short-term liability which is shown in the current liability section of the statement of financial position.

Extracts of the income statement and the statement of financial position to reflect the year-end adjustment in the example, above.

Abraham	
Income statement for the year ended 31 August 2019 (extract)	
	\$
Expenses: rent	1 200

Abraham	
Statement of financial position as at 31 August 2019 (extract)	
	\$
Current liabilities:	
Other payables: rent accrued	200

**Activity 2**

Prepare the ledger account for the following items, including the balances transferred to the income statement and the balances carried down to 2019. The financial year ended on 31 December 2018.

- Telephone charges – paid in 2018: \$350; owing at 31 December 2018: \$35.
- Rates – paid in 2018: \$550; owing at 31 December 2018: \$20.

Often a business may have an opening accrual. This is the closing credit balance of the previous accounting period and is therefore to be brought down on the credit side of the expense account in the current accounting period. This credit balance represents expenses still owing at the end of the last accounting period.

**Study tip**

It is very important to get the financial year right. In Worked example 2, the financial year starts on 1 January. The accrual at 31 December 2018 is a closing balance for the previous year and is therefore the opening balance for the year ending 31 December 2019.

## → Worked example 2

### Accrued expenses owing at the start of the year

General expenses – paid during 2019: \$140; owing at 31 December 2018: \$35; owing at 31 December 2019: \$30.

General expenses account					
Date	Details	\$	Date	Details	\$
2019			2019		
Mar 1	Cash	140	Jan 1	Balance b/d	35
Dec 31	Balance c/d	<u>30</u>	Dec 31	Income statement	<u>135</u>
		<u>170</u>			<u>170</u>
			2020		
			Jan 1	Balance b/d	30

### Activity 3

- Look again at Worked example 2 above. State which item was the balancing (missing) figure in this example?
- Complete the ledger account for rent shown below, including the balance transferred to the income statement and the balance carried down to 2020. The financial year ended on 31 December 2019.

At 31 December 2018	Rent owing \$30
31 January 2019	Paid rent by cash \$100
31 March 2019	Paid rent by cheque \$150
31 October 2019	Paid rent by cash \$100
30 November 2019	Paid rent by cash \$250

The business rented the premises for \$1 000 per annum.

Rent account					
Date	Details	\$	Date	Details	\$
2019			2019		
Jan 31	Cash	_____	Jan 1	Bal b/d	_____
Mar 31	Bank	_____	Dec 31	Income statement	_____
Oct 31	Cash	_____			_____
Nov 30	Cash	_____			_____
Dec 31	Bal c/d	* _____			_____
		_____	2020		
			Jan 1	Bal b/d	* _____

#### Working

\* Amount owing as at 31 December 2019  
 = \$1 000 + \$30 – (\$100 + \$150 + \$100 + \$250)  
 = \$ \_\_\_\_\_

- Prepare the ledger account for electricity, including the balance transferred to the income statement and the balance carried down to 2020. The financial year ended on 31 December 2019. The electricity charges were \$900 per year.

At 31 December 2018	Electricity owing \$50
3 February 2019	Paid electricity by cash \$150
31 August 2019	Paid electricity by cheque \$250
4 October 2019	Paid electricity by cash \$90
28 November 2019	Paid electricity by cash \$150

#### Think about it!

Look again at Activity 3, question 2. What information, given in other examples on expenses accrued, was missing? What information, not given in other examples on expenses accrued, was given?

**Study tip**

Missing information can be worked out, if you use the format of an expense account. Usually all other information will be given except for the one missing entry. The missing entry is the balancing figure.

## Prepaid expenses

As mentioned earlier, all expenses are transferred to the income statement at the end of an accounting period. Due to the matching principle, only those expenses incurred during the year should be included in the income statement. Hence, prepaid expenses that are paid in advance for the next financial year should not be included in the income statement, as this will cause the profit to be understated. A year-end adjustment is necessary to ensure the right figure is used as expenses in the income statement.

### → Worked example 3

Sheldon, a sole trader, has given the following information regarding rent for the year ended 31 December 2018:

**Rent:** Paid \$600 cash on 4 April 2018; prepaid as at 31 December 2018, \$50.

Rent account					
Date	Details	\$	Date	Details	\$
2018			2018		
Apr 4	Cash	600	Dec 31	Income statement	550
		—	Dec 31	Balance c/d	<u>50</u>
		<u>600</u>			<u>600</u>
2019					
Jan 1	Balance b/d	50			

Worked example 3 shows that the \$50 rent has been paid for the next financial year and should therefore be deducted from the amount paid \$600, as a year-end adjustment, so that the right figure \$550 is transferred to the income statement as rent for the year. This is in keeping with the matching principle. The debit balance \$50 is brought down on the debit side of the account for the next accounting period as a prepayment. This amount represents a payment for rent not yet used. The landlord is now a debtor and for a short period owes Sheldon \$50. Hence it is a current asset.

Using Worked example 3 again, here are the steps to take to record a prepayment of an expense:

- 1 Recognise that there is a prepayment.
- 2 When the rent is paid (4 April), debit the rent account and credit the cash book with the amount paid.
- 3 The adjusting entry made at the end of the year is to credit the expense account with the prepayment and carry down this amount as a debit balance. Credits, as we know, decrease expense accounts and debits increase assets.
- 4 The expense account (rent) in the income statement is now credited with the prepayment (\$50) to arrive at the right expense (\$550).

Extracts of the income statement and the statement of financial position to reflect the year-end adjustment in Worked example 3:

**Key info**

The adjusting entry for a prepaid expense made at the end of the year is to credit the expense account with the prepayment and carry down this amount as a debit balance. Credits, as we know, decrease expense accounts and debits increase assets. Rent has decreased by \$50 and current assets have increased, by the same amount, as an 'other receivables'.

Sheldon	
Income statement for the year ended 31 December 2018 (extract)	
	\$
Expenses: rent	550

Sheldon	
Statement of financial position as at 31 December 2018(extract)	
	\$
Current assets:	
Other receivables: rent prepaid	50

**Activity 4**

Prepare the ledger accounts for motor expenses and rent, including the balances transferred to the income statement and the balances carried down to 2019. The financial year ended on 31 December.

- Motor expenses: Paid in 2018 \$260; prepaid as at 31 December 2018 \$50.
- Rent: Paid in 2018 \$600; prepaid as at 31 December 2017 \$45; prepaid as at 31 December 2018 \$50.

## Recording accrued and prepaid incomes

### Accrued income

The main source of revenue for a sole trader is sales. Accrued income from sales is already represented by trade receivables in the trial balance. However, there may be other sources of income, such as interest receivable, that may accrue at the end of the financial year. The matching principle applies to income as it did to expenses; therefore, income for the current year only is transferred to the income statement for the current year. If income is owing at the end of the current financial year, it should be added to the amount already received, before being transferred to the income statement. This is to ensure that profits are not understated.

### → Worked example 4

Rent receivable – Rent received in cash \$560 on 7 March 2018; owing at 31 December 2018 \$70.

Rent receivable account					
Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Income statement	630	Mar 7	Cash	560
		—	Dec 31	Balance c/d	70
		<u>630</u>			<u>630</u>
2019					
Jan 1	Balance b/d	70			

Worked example 4 shows that the \$70 rent receivable is still owing, which should be included in the income statement for the year ended 31 December 2018. As the amount received is only \$560, when the total rent receivable for the year is \$630, the rent receivable accrued amounting to \$70 should be added. Hence rent receivable in the income section of the income statement for the year will be \$630. This is the figure that appears on the debit side of the rent receivable account as a transfer to the income statement. However, as only \$560 was paid, \$70 is entered on the credit side. This balancing figure represents rent receivable still owing and is a current asset (it is a debit balance).

Using Worked example 4, here are the steps to take to record an accrual of a revenue:

- 1 Recognise that there is an accrual.
- 2 When the income is received (on 7 March), credit the income account and debit the cash book with the amount received.
- 3 The adjusting entry made at the end of the year is to credit the income account with the accrual (\$70) and carry down this amount as a debit balance. Credits, as we know, increase income accounts and debits increase assets.
- 4 The rent receivable account in the income statement is now credited with the accrual (\$70) to arrive at the right income.

### Key info

The adjusting entry made for an accrued income at the end of the year is to credit the income account with the accrual (\$70) and carry down this amount as a debit balance. Credits, as we know, increase income accounts and debits increase assets. The rent receivable has increased by \$70 and the current assets have increased, by the same amount, as an 'other receivables'.

Extracts of the income statement and the statement of financial position to reflect the year-end adjustment in the example, above:

Income statement for the year ended 31 December 2018 (extract)	
	\$
Income: rent receivable	630

Statement of financial position as at 31 December 2018 (extract)	
Current assets:	\$
Other receivables: rent receivable accrued	70

**Think about it!**

Working in a group, answer these questions:

What is the treatment for income accrued at the start of the financial year?

Which side of the income account would it appear on? Why?

**Activity 5**

- 1 Prepare the ledger accounts for the following items, including the balances transferred to the income statement and the balances carried down to 2019. The financial year ended on 31 December 2018.
  - a Commission receivable: Received during the year \$980, owing at 31 December 2018 \$100.
  - b Interest receivable: Received during the year \$230, owing at 31 December 2018 \$60.
- 2 Explain what is meant by 'accrued income'.
- 3 Explain why accrued income is recorded as income in the income statement, even though the income is not received.
- 4 Explain why accrued income is shown as a current asset in the statement of financial position.

**Prepaid income**

Sometimes income is received that is paid in advance for the next accounting period. This happens when a customer has not received a good or service by the end of the financial year, but has already paid for it.

Due to the matching principle, only that income receivable during the year should be included in the income statement: prepaid income that is received in advance for the next financial year, should not be included in the income statement or else the profit will be overstated. A year-end adjustment is necessary to ensure the right figure is used as income in the income statement.

**→ Worked example 5**

Ali receives commission for jobs that he undertakes. His financial year ended on 31 December 2018.

Information available:

Received cash on 3 July \$500, received cheque on 7 September \$230, prepaid at 31 December 2018 \$45.

**Commission receivable account**

Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Income statement	685	Jul 3	Cash	500
Dec 31	Balance c/d	<u>45</u>	Sept 7	Bank	<u>230</u>
		<u>730</u>			<u>730</u>
			2019		
			Jan 1	Balance b/d	45

Worked example 5 shows that the \$45 commission receivable has been received for the next financial year. This should therefore be deducted from the income received, a total of \$730, as a year-end adjustment so that the correct figure \$685 is transferred to the income statement as commission receivable for the year. This is due to the matching principle. The credit balance \$45 is brought down on the credit side of the account for the next accounting period as a prepayment. This amount represents a receipt of commission not yet earned. Hence Ali is now a creditor and for a short period owes his customer \$45 – it is therefore a current liability.



Using Worked example 5, here are the steps to take to record a prepayment of an income:

- 1 Recognise that there is a prepayment.
- 2 When the commission is received (on 3 July and 7 September), credit the commission receivable account and debit the cash book with the amount received.
- 3 The adjusting entry made at the end of the year is to debit the income account with the prepayment and carry down this amount as a credit balance. Debits, as we know, decrease income accounts and credits increase liabilities.
- 4 The commission receivables account in the income statement is now debited with the prepayment (\$45) to arrive at the right income (\$685).

### Key info

The adjusting entry for prepaid income made at the end of the year is to debit the income account with the prepayment and carry down this amount as a credit balance. Debits, as we know, decrease income accounts and credits increase liabilities. Commission receivable has decreased by \$45 and current liabilities have increased by the same amount, as an 'other payables'.

Extracts of the income statement and the statement of financial position to reflect the year-end adjustment in the example above:

Ali	
Income statement for the year ended 31 December 2018 (extract)	
	\$
Income: commission receivable	685

Ali	
Statement of financial position as at 31 December 2018 (extract)	
	\$
Current liabilities:	
Other payables: commission receivable prepaid	45

### Activity 6

- 1 Define income prepaid.
- 2 Alex rents out his office. His financial year ended on 31 December 2018. Information available: Rent owing at 1 January 2018, \$75; rent received during the year ended 31 December 2018, \$260; rent owing at 31 December 2018, \$50. Prepare the ledger account for rent receivable, including the balance transferred to the income statement and the balance carried down to 2019.

### → Worked example 6

Jayden has an accounting year end of 31 August.

On 1 October 2018, he paid \$2 400 cash for 12 months' rent to 30 September 2019.

On 1 October 2019, he paid \$1 200 by cheque for one year's rent starting on that date. (He rents one room fewer.)

This is the rent account for the year ended 31 August 2020:

Jayden					
Rent account					
Date	Details	\$	Date	Details	\$
2019			2020		
Sept 1	Balance b/d	200	Aug 31	Income statement	1 300
Oct 1	Bank	<u>1 200</u>	Aug 31	Balance c/d	<u>100</u>
		<u>1 400</u>			<u>1 400</u>
2020					
Sept 1	Balance b/d	100			



## 12 OTHER PAYABLES AND OTHER RECEIVABLES

### Working

Financial year 1 September 2018 to 31 August 2019												
S	O	N	D	J	F	M	A	M	J	J	A	S
Fin Year starts											Fin Year ends	Prepaid c/d = \$200
On 1 October 2018, he paid \$2 400 cash for one year's rent up to 30 September 2019. Prepaid one month's rent = $1 \div 12 \times 2\,400 = \$200$												

Financial year 1 September 2019 to 31 August 2020												
S	O	N	D	J	F	M	A	M	J	J	A	S
Fin Year starts											Fin Year ends	Prepaid c/d = \$100
Prepaid b/d = \$200	On 1 October 2019, he paid \$1 200 by cheque for one year's rent starting on that date. Prepaid one month's rent = $1 \div 12 \times 1\,200 = \$100$											

### Key info

It is important to get the financial year right.

At the start of the year: start with the balance b/d (if any). The following will be helpful:

Opening balances	Expenses	Income
Balance b/d (accrual)	On credit side	On debit side
Balance b/d (prepaid)	On debit side	On credit side
Closing balances		
Balance c/d (accrual)	On debit side	On credit side
Balance c/d (prepaid)	On credit side	On debit side

- During the year – a payment will be entered on the debit side and a receipt will be entered on the credit side of the account.
- At the end of the year – end with the balance c/d. Refer to the table for guidance.
- Balance the account – the balancing figure is the amount to be transferred to the income statement.
- Don't forget to carry down the balance to the new financial year as a balance b/d. Be careful **not** to use the figure meant for the income statement. As both amounts are recorded on the same day, it is a common error.

### Activity 7

- 1 Prepare the ledger account for the following, including the balance transferred to the income statement and the balance carried down to 2019. The financial year ended on 31 December 2018.

Rates: Owing as at 31 December 2017, \$35. On 31 March 2018 paid \$600 for 12 months.

- 2 Hassan's financial year ends on 30 June. He rents out part of his office building to Sharda.

Hassan provides the following information:

2018		\$
Jul 1	Sharda paid Hassan by cheque	500
Sept 1	Sharda paid rent for 12 months to 31 August 2019 by cheque	7 500

Prepare the Rent received account as it would appear in Hassan's ledger for the year ended 30 June 2019. Show the amount transferred to the income statement and the balance brought down on 1 July 2019.

### → Worked example 7

Celia's financial year ends on 30 June. The trial balance on 30 June 2018 included the following:

	Debit
	\$
Rent	750
Electricity	50
Rates	140

At 30 June 2018, Celia owed \$45 for electricity and \$30 for rates. \$60 of the rent was prepaid.

Financial statements at 30 June 2018:

Celia	
Income statement for the year ended 30 June 2018 (extract)	
	\$
Expenses:	
Rent (\$750 - \$60)	690
Electricity (\$50 + \$45)	95
Rates (\$140 + \$30)	170

Celia	
Statement of financial position as at 30 June 2018 (extract)	
	\$
Current assets:	
Other receivable: rent prepaid	60
Current liabilities:	
Other payables (\$30 + \$45)	75

If there are several 'other payables' or 'other receivables', they should be added as shown above.

### Activity 8

- 1 Explain why expenses accrued are added and expenses prepaid are subtracted from the amounts in the trial balance.
- 2 Explain why a prepaid expense is recorded as a current asset in the statement of financial position. How will a prepaid income be shown?
- 3 Explain why an accrued expense is recorded as a current liability in the statement of financial position. How will an accrued income be shown?
- 4 Herman's financial year ends on 31 August. His trial balance at 31 August 2018 had the following balances in the debit column:

	Debit
	\$
Internet charges	240
Sundry expenses	170
Rent	200

At 31 August 2018, Herman owed \$40 to his internet provider and \$20 as sundry (various small) expenses. He had paid \$50 rent in advance for the following year. For the year ended 31 August 2018, prepare the relevant extracts of:

- a the income statement
- b the statement of financial position.

## Stationery account

The inventory of stationery at the start of an accounting period is entered in the stationery account on the debit side as a balance b/d from the previous accounting period. This is because the benefit from the inventory that has already been paid for will be received not in the year it was paid for, but in the following year.

### → Worked example 8

Eureka Motors bought stationery worth \$600 from Stationery Inc on 1 June 2018, the day they started business. On 31 May 2019, at the end of the financial year, stationery worth \$100 remained unused.

Here is the stationery account:

Eureka Motors Stationery account					
Date	Details	\$	Date	Details	\$
2018			2019		
Jun 1	Stationery Inc	600	May 31	Income statement	500
				Balance c/d	100
2019		<u>600</u>			<u>600</u>
Jun 1	Balance b/d	100			

Stationery expense for the year of \$500 will be listed with other expenses in the income statement. The stationery that has remained unused will be listed as a current asset in the statement of financial position.

### Activity 9

- 1 Explain why stationery is not included as purchases in the trading account.
- 2 Name three items of stationery that a lawyer's office uses.
- 3 A business paid \$350 for stationery during the year ended 30 June 2018, and had \$45 worth unused at the end of the financial year. Prepare a stationery account and relevant extracts of the financial statements.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 On 23 December 2018, Royston receives a cheque from a tenant. This is rent due to the business for the period 1 January to 31 July 2019. How is this treated in Royston's financial statements for the year ended 31 December 2018?  
 A Accrued expense  
 B Accrued income  
 C Prepaid expense  
 D Prepaid income [1]
- 2 Desdemona, a sole trader, incorrectly entered an accrued expense of \$550 as a prepayment in the income statement. What is the effect on her profit for the year?  
 A Overstated by \$550  
 B Understated by \$550  
 C Overstated by \$1 100  
 D Understated by \$1 100 [1]
- 3 Bessy's financial year ends on 30 September. On 1 September 2018 cash of \$1 200 was paid for insurance for six months. Which item was recorded in Bessy's statement of financial position at 30 September 2019?  
 A A prepayment of \$200  
 B An accrual of \$200  
 C A prepayment of \$1 000  
 D An accrual of \$1 000 [1]
- 4 Sandra lets part of her business premises at a monthly rent of \$400. On 1 January, the tenant owed two months' rent. During the year ended 31 December 2018, the tenant paid rent of \$4 000. Which value for rent receivable was credited in Sandra's income statement for the year ended 31 December 2018?  
 A \$3 200  
 B \$4 000  
 C \$4 800  
 D \$5 200 [1]



- 5 Novac and daughters have not adjusted their financial statements for internet charges accrued at the end of the financial year. Which effects will this have? [1]

	Profit for the year	Current liabilities
A	understated	understated
B	overstated	understated
C	overstated	overstated
D	understated	overstated

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 The following balances were taken from the books of Sally on 1 May 2018.

	\$
Molly Traders' account	200 cr
Motor vehicle expenses account	1 000 dr

The following transactions took place during the year ended 30 April 2019.

**2018**

- May 10 Paid Molly Traders its outstanding balance by cheque, deducting 2 per cent cash discount.  
Aug 20 Paid motor vehicle repairs by cheque, \$140

**2019**

- Apr 16 Purchased inventory on credit, from Molly Traders, \$230  
Apr 25 Purchased more inventory from Molly Traders on credit, \$1 000, less 15 per cent trade discount

Additional information:

- Sally prepared financial statements on 30 April 2019.
- Motor vehicle expenses \$110, were accrued on 30 April 2019.
  - a Prepare the Molly Traders account for the year ended 30 April 2019. Balance the account and bring down the balance on 1 May 2019. [5]
  - b Prepare the motor vehicle expenses account for the year ended 30 April 2019. Make the transfer to the income statement. Balance the account and bring down the balance on 1 May 2019. [5]

**7** The following account appeared in the ledger of Adil Shanker.

Rent and rates account							
Date	Details		\$	Date	Details		\$
2013				2013			
Jun 1	Balance – rates b/d		70		Balance – rent b/d		120
2014				2014			
May 31	Bank – rent	1 800		May 31	Income statement		
	– rates	<u>770</u>	2 570		– rent	1 440	
					– rates	<u>840</u>	2 280
					Balance – rent c/d	<u>240</u>	
			<u>2 640</u>				<u>2 640</u>
2014							
Jun 1	Balance – rent b/d		240				

- a** Explain the following entries in the above rent and rates account and state the section of the statement of financial position on 31 May 2013 where each would have appeared.
- i** 1 June 2013 Balance – rates \$70 [3]  
**ii** 1 June 2013 Balance – rent \$120 [3]
- b** Explain the following entries in the rent and rates account.
- i** 31 May 2014 Bank \$2 570 [2]  
**ii** 31 May 2014 Income statement \$2 280 [2]
- c** Explain how matching principle was applied in the preparation of the rent and rates account. [2]  
*(Adapted from Cambridge IGCSE Accounting 0452/21, October/November 2014, Q4 a, b & c)*

**8** Mary started business on 1 January 2012, renting premises at \$12 000 per annum, paid by instalments on the first day of January, April, July and October. On 1 August 2012 Mary let part of the premises to another business for \$5 400 per annum, to be paid by instalments on the first day of August, November, February and May.

Mary paid the rent on 1 January, 1 April and 1 July 2012.

The tenant paid rent to Mary on 1 August and 1 November 2012.

- a** Prepare the rent payable account for the year ended 31 December 2012. Balance the account and bring the balance down on 1 January 2013. [5]  
**b** Explain the meaning of the balance on 1 January 2013. [2]  
**c** Prepare the rent received account for the year ended 31 December 2012. Balance the account and bring the balance down on 1 January 2013. [5]  
**d** Explain the meaning of the balance on 1 January 2013. [2]  
 Mary bought a motor vehicle, \$15 000.



- e** State the section of Mary's statement of financial position where this will be shown. [1]

*(Adapted from Cambridge O Level Principles of Accounts 7110/21, May/June 2013, Q1 a, b, c, d & e)*

- 9 a** Explain the difference between a prepayment and an accrual. [2]

- b** An insurance account showed a prepayment of \$180 on 1 July 2013.

A payment, \$2 340, for insurance was made on 2 August 2013. There was a prepayment of \$195 showing on the account on 30 June 2014. Prepare the insurance account for the year ended 30 June 2014.

Bring down the balance on 1 July 2014. [5]

- c i** Name the section of the income statement in which insurance appears. [1]

- ii** Name the principle being applied when a prepayment is calculated. [1]

*(Adapted from Cambridge IGCSE Accounting 0452/13, October/November 2014, Q3)*

- 10 a** Explain what is meant by the term 'other payable'. [2]

- b** Khalim has a furniture business and pays the fuel expenses of running a motor van. At 1 May 2010 he had accrued fuel expenses of \$30. For the year ended 30 April 2011 he paid fuel expenses of \$340 by cheque and at 30 April 2011 he had an unpaid bill for fuel of \$50.

Prepare Khalim's fuel expenses account for the year ended 30 April 2011.

Show the transfer to the income statement for the year and any balance

carried down at 1 May. [6]

*(Cambridge IGCSE Accounting 0452/11, May/June 2011, Q4 a & b)*



## ? Chapter review questions

- 1 Calculate the following amounts (prepare relevant accounts as your working):
  - a Wages to be entered in the income statement: At 1 January 2018, a trader owed wages of \$1 000. During the year ended 31 December 2018 wages of \$4 000 were paid. At 31 December 2018 wages of \$1 200 were owed.
  - b Rent paid during the year: Honey started a business on 1 January 2018 using rented premises. At 31 December 2018, Honey owed \$1 400 for rent. The rent charged to the income statement for the year ended 31 December 2018 was \$6 000.
  - c Rent in the income statement: Belinda, a sole trader, owed \$400 rent at 1 January 2018. She paid rent of \$1 700 in cash during the year. At the end of the year rent of \$250 was paid in advance.
  - d Paid for electricity during the year: Juggi, a sole trader, owed \$2 000 for electricity at 1 October 2018 and \$2 500 at 30 September 2019. The income statement for the year ended 30 September 2019 showed an expense for electricity of \$15 500.
  - e Insurance in the income statement: Jolly brothers paid \$2 000 for insurance in the year ended 31 December 2019. A prepayment of \$400 was brought forward from the previous year ended 31 December 2018. There were no closing balances at 31 December 2019.
  - f Rent in the income statement: Delany, a sole trader, had a credit balance of \$500 in his rent account on 1 July 2018. During the year ended 30 June 2019, he paid \$3 000 rent. At 30 June 2019, he owed \$100 rent.
  - g Rent in the income statement for the year ended 31 December 2018: On 1 May 2018 a business rented a block of offices at an annual rent of \$24 000 payable quarterly in arrears. The following payments were made:

	\$
<b>2018</b>	
Aug	6 000
Nov	6 000
<b>2019</b>	
Feb	6 000
May	6 000

- h Internet charges in the income statement: Anna, a sole trader, paid internet charges of \$4 000 for the year ended 31 December. The first financial statements are prepared for the ten-month period ended 31 October.
- i Telephone charges in the income statement: Suki, a sole trader, owed \$300 for telephone charges in respect of 2018. During 2019, Suki paid \$2 000 for telephone charges. On 31 December 2019, she owed \$700 for telephone charges.

### Revision checklist



In this chapter, you have learnt:

- ✓ about the importance of matching costs and revenues
- ✓ to prepare ledger accounts to record accrued and prepaid expenses
- ✓ to prepare ledger accounts to record accrued and prepaid incomes.
- ✓ to show the effect of accrued and prepaid expenses on financial statements
- ✓ to show the effect of accrued and prepaid income on financial statements
- ✓ to calculate accrued and prepaid expenses
- ✓ to calculate accrued and prepaid income
- ✓ to prepare a stationery account.

# Irrecoverable debts and provision for doubtful debts

By the end of this chapter you will be able to:

- ★ understand the meaning of irrecoverable debts and recovery of debts written off
- ★ prepare ledger accounts and journal entries to record irrecoverable debts
- ★ prepare ledger accounts and journal entries to record recovery of debts written off
- ★ explain the reasons for maintaining a provision for doubtful debts
- ★ prepare ledger accounts and journal entries to record the creation of, and adjustments to, a provision for doubtful debts.



## Irrecoverable debts and recovery of debts written off

### Irrecoverable debts

Trade receivables are businesses or individuals who have received goods or a service from the business on credit, with the understanding that payment is due within the credit period.

Some debts that are owed to a business may be irrecoverable (most frequently referred to as a bad debt) or doubtful. An **irrecoverable debt** is one that quite simply is not going to be paid. It is an expense that results from a credit customer's failure to pay the amount owed to the business from a credit sale. Perhaps the debtor has died or moved away and not left behind the money to pay the debt. Perhaps the debtor just cannot afford to pay.

Businesses will be aware that a certain percentage of its debts will be irrecoverable, despite all steps taken to recover them. An irrecoverable debt is a normal business expense, given the fact that most businesses sell on credit to attract and keep customers.

### Irrecoverable debt recovered

A debt that is reasonably expected to be uncollectable is written off as an irrecoverable debt. This write-off is based on a judgement that may turn out to be wrong. At some later date, the debtor may pay all or some of the debt. This is known as an **irrecoverable debt recovered**.

## Recording irrecoverable debts

When a credit sale is made, it is recorded as a debit in a customer's account in the sales ledger. When it is clear that the debt is not going to be paid by the customer and is irrecoverable, the debt has to be written off. The general journal entry required to record this is:

#### Key terms

An **irrecoverable debt** is a debt that will never be paid.

**Irrecoverable debts recovered** are debts that were written off as irrecoverable, but are now paid.

### 13 IRRECOVERABLE DEBTS AND PROVISION FOR DOUBTFUL DEBTS

- » Debit: irrecoverable debts account with the amount owed.
- » Credit: the debtor's account with the amount owed.

The customer's account is now closed.

At the end of the year, the balance on the irrecoverable debts account is transferred to the income statement as an expense, reducing profits. The general journal entry is:

- » Debit: income statement with the total of the irrecoverable debts account.
- » Credit: the irrecoverable debts account with the total.

The irrecoverable debts account is now closed.

#### → Worked example 1

On 12 February 2018, one of the business' trade receivables, Penny, stopped trading, owing the business \$700. The general journal entry required to record the transaction is:

General journal				
Date	Details		Debit	Credit
2018			\$	\$
Feb 12	Irrecoverable debts		700	
	Penny			700
(Debt owing from Penny, written off as bad. See letter in file no. xx/99)				

The ledger accounts to which the general journal entry is posted:

Sales ledger					
Penny's account					
Date	Details	\$	Date	Details	\$
2018			2018		
Jan 1	Balance b/d	<u>700</u>	Feb 12	Irrecoverable debt	<u>700</u>
Nominal (general) ledger					
Irrecoverable debts account					
Date	Details	\$	Date	Details	\$
2018			2018		
Feb 12	Penny	<u>700</u>	Dec 31	Income statement	<u>700</u>

Sometimes part of an outstanding debt is paid and the remainder is written off as an irrecoverable debt. For example, if a business ceases trading and the owner sells the firm's assets at some later date to pay off part of the debts to its trade payables.

The general journal entry necessary to write off a debt that is partially repaid is as follows:

- » Debit: cash if cash is received, or
- » Debit: bank if cheque was received
- and
- » Debit: irrecoverable debts with unpaid portion
- » Credit: the debtor/customer with the full amount outstanding.

### Activity 1

- 1 Sam owed the business \$350. His debt had to be written off as irrecoverable. Prepare the general journal entry to do this.
- 2 Define:
  - a an irrecoverable debt
  - b trade receivables.
- 3 Denny paid the business \$4 500 cash in full settlement of a debt he owed amounting to \$5 000. The unpaid amount is to be written off as an irrecoverable debt. Prepare the general journal entry to record this.



### → Worked example 2

On 1 January 2018, Ian owed the business \$840. On 1 June 2018, he paid only \$168 by cheque in full settlement. The general journal entry required to record this is:

General journal			
Date	Details	Debit	Credit
2018		\$	\$
Jun 1	Bank account	168	
	Irrecoverable debts account	672	
	Ian's account		840
(Irrecoverable debt written off on receipt of \$168)			

Sales ledger			
Ian's account			
Date	Details	\$	
2018			
Jan 1	Balance b/d	840	
		<u>840</u>	
Date	Details		\$
2018			
Jun 1	Irrecoverable debts	672	
	Bank		<u>168</u>
			<u>840</u>

Nominal (general) ledger			
Irrecoverable debts account			
Date	Details	\$	
2018			
Jun 1	Ian's account	<u>672</u>	
Date	Details		\$
2018			
Dec 31	Income statement		<u>672</u>

## Recording recovery of debts written off

As mentioned above, sometimes a debt that is written off is later paid.

When the debt is paid, the entry to be posted is:

- » Debit: the cash book.
- » Credit: irrecoverable debts recovered account.

Another method is to post two entries: one for reinstating the debt and the other to record payment.

The entry to reinstate the debt is:

- » Debit: the debtor's account.
- » Credit: irrecoverable debts recovered account.

The entry to record payment is:

- » Debit: cash or bank.
- » Credit: the debtor's account.

The advantage of this second method is that a record is maintained in the debtor's account of the debt being honoured. This will act as a guide for granting the debtor credit in the future.

The debtor's account is closed off. The irrecoverable debts recovered account is transferred to the credit of the income statement as an income and the profit for the year is increased.



### → Worked example 3

Shanti owed Hassan Shoes \$500. Her debt was written off as irrecoverable. On 4 October 2018, she paid Hassan \$500 in cash in full settlement of this debt.

General journal			
Date	Details	Debit	Credit
2018		\$	\$
Oct 4	Cash	500	
	Irrecoverable debts recovered		500
(Irrecoverable debt recovered from Shanti, see letter in file no. XX/90)			

or

General journal			
Date	Details	Debit	Credit
2018		\$	\$
Oct 4	Shanti	500	
	Irrecoverable debts recovered		500
Oct 4	Cash	500	
	Shanti		500
(Irrecoverable debt recovered from Shanti, see letter in file no. XX/90)			

Posting the second method to the ledgers:

Sales ledger					
Shanti's account					
Date	Details	\$	Date	Details	\$
2018			2018		
Oct 4	Irrecoverable debts recovered	<u>500</u>	Oct 4	Cash	<u>500</u>
Nominal (general) ledger					
Irrecoverable debts recovered account					
Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Income statement	<u>500</u>	Oct 4	Shanti	<u>500</u>

The irrecoverable debts recovered amount has been credited to the income statement.

## Avoiding irrecoverable debts

### Key term

**Credit control** is a form of credit management whereby credit is extended to creditworthy customers and denied to those who do not pay their debts. It involves establishing a credit limit for each customer and thereafter, constantly monitoring the customers' accounts in the sales ledger.

As the possibility of irrecoverable debts arises when credit is extended to customers, the best way to avoid irrecoverable debts is to sell only for cash or cheque payments. However, credit is widely offered. Businesses can lose customers to competitors if they choose not to sell on credit. All they can do is take steps to reduce the risk of irrecoverable debts by means of **credit control**. The business can assess the creditworthiness of a potential customer by asking for trade references or pay for a credit check. A lower credit limit for new customers could be set until trust is built in the ability of the customer to pay their debts on time. An up-to-date record of what a customer owes should be maintained and a note should be made of any customers approaching their credit limit.

Other means of avoiding debts:

- » The business should draw up clear terms and conditions and inform its customers of them, perhaps by publishing them on their website or invoices.
- » Customers should be reminded that the business has a right to charge interest on late payments (even if the business has no intention of implementing this). This is a good way of minimising late payments or irrecoverable debts as it motivates customers to pay on time.
- » Invoices and statements of account should be sent promptly. An offer of discounts for early payment displayed on the invoice or the statement of account is a good way of encouraging customers to pay on time.
- » The statement of account is also a means of chasing payments, as is phoning the debtor as soon as the debt becomes due. Reminder letters can also be sent, though these often tend to be ignored.

- » To prevent a debt from increasing, no further goods should be sold to the customer on credit.
- » If the customer's reason for non-payment is faulty goods, it is important to address this and resolve it quickly, especially if the business wants to retain the customer.

If all these measures prove useless, an alternative is to negotiate part-payments.

#### Activity 2

- 1 State what is meant by the term 'irrecoverable debt recovered'.
- 2 State is meant by the term 'part payment'?
- 3 Prepare the relevant general journal entries to record the following: Melissa's debt of \$300 was written off as unrecoverable on 14 April 2018. However, on 5 May 2018, she paid the amount she owed.
- 4 List five ways a business can try to avoid irrecoverable debts.

#### Key term

A **provision for doubtful debts** is an estimate of the proportion of trade receivables who will not pay.

## Provision for doubtful debts

The financial statements of a business should portray a 'true and fair view' of the business' profits and its assets and liabilities. This means that a business should try to anticipate expenses that may arise in the normal course of its operations so that its profit is not overstated. This is in keeping with the prudence principle (see Chapter 26). A **provision for doubtful debts** is the estimated amount of the proportion of trade receivables that will turn out to be an irrecoverable debt.

The provision for doubtful debts is a trade receivable contra account and therefore always has a credit balance. When the provision is made, the income statement is debited and the provision for doubtful debts account is credited. This provision appears in the statement of financial position as a deduction from trade receivables; therefore, the trade receivables is reported at a lower figure, an application of the prudence principle. The provision for doubtful debts should be made in the same period that the debts for which the provision is made were incurred, not in the year the debt became irrecoverable. In this way, revenues are matched with all relevant expenses in the income statement, as with the matching principle (see Chapter 26). Both the profit and the asset, the trade receivables, will not be overstated.

As the provision can only be an estimate, it is difficult to decide on the amount. The business could do one of the following to arrive at the amount of the provision:

- » Use past experience to estimate what percentage of trade receivables will not pay.
- » Look at each debt to determine whether it will be paid or not. A total is made of any doubtful debts to arrive at the amount of the provision.
- » Use an ageing schedule. As a rule, the older a credit sale is, the less likely it will be paid for. Debts are sorted by age and a greater percentage of the older debts are factored into the calculation of the provision, compared to a lower percentage for the group with newer trade receivables.



### Activity 3

- 1 Explain what is meant by a provision for doubtful debts.
- 2 List three ways a provision can be established.
- 3 Due to the provision, the asset trade receivables is lowered. State which accounting principle is being applied.
- 4 Due to the provision, the profit for the year is lowered in the year the sale is made. State which accounting principle is being applied.

## Recording a provision for doubtful debts

Once the amount of the provision is decided on, the following accounting entries should be posted:

- » Debit: the income statement with the amount of the provision.
- » Credit: the provision for doubtful debts account.

### → Worked example 4

The trade receivables at 31 August 2018 amounted to \$14 000. From past experience, it is decided that one per cent of these debts will prove to be irrecoverable.

#### Nominal (general) ledger

##### Provision for doubtful debts account

Date	Details	\$	Date	Details	\$
2018			2018		
			Aug 31	Income statement	140

The income statement extract:

Income statement for the year ended 31 August 2018 (extract)		\$
Expenses – provision for doubtful debts		140

The statement of financial position extract:

Statement of financial position as at 31 August 2018 (extract)		
Current assets:	\$	\$
Trade receivables	14 000	
Less: provision for doubtful debts	<u>140</u>	13 860

### Activity 4

- 1 On 30 June 2019, Li Ching's trade receivables were \$24 000. It was decided to provide for doubtful debts at two per cent of trade receivables. Prepare the provision for doubtful debts account as well as relevant extracts of the financial statements.
- 2 Trade receivables at 31 August 2018 were \$14 000. Irrecoverable debts for the year were \$600. It is decided that one per cent of the remaining trade receivables will prove to be irrecoverable. Prepare a journal entry to record the irrecoverable debts. Prepare a provision for doubtful debts account. Note: The provision for doubtful debts will be one per cent of (\$14 000 – \$600).



3 Calculate the provision for doubtful debts at three per cent of remaining trade receivables in each of the following:

<b>a</b>		<b>\$</b>
Trade receivables at 31 December 2018 (in the trial balance)	20 000	
Irrecoverable debts written off during the year ended 31 December 2018 (in the trial balance)	600	
<b>b</b>		<b>\$</b>
Trade receivables at 31 December 2019 (in the trial balance)	20 000	
Irrecoverable debts written off at the end of the year ended 31 December 2019 (in the notes after the trial balance)	600	

Think about it!

The provision is calculated on remaining trade receivables. Why?

### Study tip

Use the term 'trade receivables' in the details column of the debit entry (in the irrecoverable debts account), if the names of the trade receivables have not been given.

## Irrecoverable debts in the trial balance

If irrecoverable debts are mentioned in the trial balance, it means that they are already written off from the trade receivables figure in the trial balance. Therefore, a provision for doubtful debts is calculated on this trade receivables figure. However, if adjustments are to be made for both irrecoverable debts and the provision for doubtful debts, they are mentioned in the further information box *after* the trial balance. In this case, irrecoverable debts must be deducted from trade receivables, before the provision is calculated.

## Adjusting a provision for doubtful debts

Once a business has decided on a method of providing for doubtful debts, usually a percentage of the trade receivables, they may continue to provide for doubtful debts using the same percentage. However, the value of trade receivables may change from year to year. One year they may increase, increasing the provision, and another year they may decrease, with a resulting decrease in the provision.

## Increasing the provision for doubtful debts

If for any reason, the business decides to *increase* the provision for doubtful debts, adjustments are made to it at the end of the financial year as follows:

The general journal entry is:

- » Debit: the income statement with the increase in provision.
- » Credit: the provision for doubtful debts account.

The *difference* between the old provision and the new provision is added to the expenses in the income statement.

The *new* provision is transferred to the statement of financial position and is deducted, as usual, from trade receivables.

### Key info

An increase in the provision for doubtful debts reduces profits.

## → Worked example 5

Leena has the following balances on 1 January 2018:

Provision for doubtful debts \$250.

On 31 December 2018 her trade receivables amounted to \$3 000.

She wishes to maintain a provision for doubtful debts at ten per cent of her trade receivables.

### Provision for doubtful debts account

Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Bal c/d	300	Jan 1	Bal b/d	250
			Dec 31	Income statement	50
		<u>300</u>			<u>300</u>
			2019		
			Jan 1	Bal b/d	300

### Working

Provision at 31 December = 10 per cent x \$3 000 = \$300

Increase in Provision = \$300 – \$250 = \$50

Extract from income statement:

Income statement for the year ended 31 December 2018 (extract)		\$
Expenses: increase in provision for doubtful debts		50

Extract from statement of financial position:

Statement of financial position as at 31 December 2018 (extract)		\$
Current assets:		
Trade receivables		3 000
Less: provision for doubtful debts		300

## Activity 5

1 Hussein has the following balances:

On 1 January 2018: Provision for doubtful debts \$155.

On 31 December 2018: Trade receivables \$4 000.

He wishes to maintain a provision for doubtful debts at five per cent of closing trade receivables. Prepare a provision for doubtful debts account and show the relevant extracts of the income statement and the statement of financial position.

2 Jason has the following balances:

At 31 December 2018: Trade receivables \$3 000.

At 31 December 2019: Trade receivables \$5 000.

He maintains a provision for doubtful debts at six per cent of closing trade receivables. Prepare a provision for doubtful debts account and show the relevant extracts of the income statement and the statement of financial position.

### Key info

A decrease in the provision for doubtful debts increases profits.



### Decreasing the provision for doubtful debts

If, for any reason, the business decides to *decrease* the provision for doubtful debts, adjustments are made to it at the end of the financial year, as follows:

The general journal entry is:

- » Debit: the provision for doubtful debts account.
- » Credit: the income statement with the decrease in provision.

The *difference* between the old provision and the new provision is to be added to the gross profit in the income statement.

The *new* provision is transferred to the statement of financial position and is deducted, as usual, from trade receivables.

### → Worked example 6

Jose had trade receivables of \$3 000 as at 31 January 2018 and \$2 000 as at 31 January 2019. He provides for doubtful debts at the end of each year at five per cent of closing trade receivables.

#### Jose

#### Provision for doubtful debts account

Date	Details	\$	Date	Details	\$
2019			2018		
Jan 31	Income statement	50	Feb 1	Bal b/d	150
Jan 31	Bal c/d	100			
		<u>150</u>	2019		<u>150</u>
			Feb 1	Bal b/d	100

#### Working

Provision at 31 January 2018 = 5 per cent x \$3 000 = \$150

Provision at 31 January 2019 = 5 per cent x \$2 000 = \$100

Decrease in provision = \$150 – \$100 = \$50

Extract from the income statement:

Income statement for the year ended 31 January 2019 (extract)		\$
Gross profit		xx
Add: decrease in provision for doubtful debts		50

Extract from the statement of financial position:

Statement of financial position as at 31 January 2019 (extract)		\$
Current assets:		
Trade receivables	2 000	
Less: provision for doubtful debts	<u>100</u>	1 900

### Activity 6

- Mary has trade receivables amounting to \$3000 at 31 December 2018. Her provision for doubtful debts account has a credit balance of \$400. She wishes to provide for doubtful debts at ten per cent of closing trade receivables. Prepare a provision for doubtful debts account and the relevant extracts of the income statement and the statement of financial position at 31 December 2018.
- Lulu, a sole trader, started business on 1 January 2017. She provides for doubtful debts at ten per cent of remaining trade receivables. She provides the following information:

Year to 31 December	Trade receivables before irrecoverable debts have been written off	Irrecoverable debts to be written off
	\$	\$
2017	3 000	300
2018	4 000	500
2019	200	100

Prepare a provision for doubtful debts account for each of the years ending 31 December 2017, 2018 and 2019. Prepare the relevant extracts of the income statement and the statement of financial position at 31 December of each year, 2017, 2018 and 2019.

### Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- Kusum gives you the following information:

2018		\$
1 May	Trade receivables	1 600
	Credit sales during May	4 600
31 May	Trade receivables	700

How much did Kusum receive during May?

- A \$2 300
- B \$3 900
- C \$5 050
- D \$5 500

[1]

- Su Jin provided the following information:

	\$
Provision for doubtful debts 31 March 2018	2 000
Trade receivables at 31 March 2019	50 000

The provision for doubtful debts is maintained at five per cent of trade receivables at the end of each year. What was the change in the provision for doubtful debts account in the year ended 31 March 2019?

- A Decrease by \$500
- B Increase by \$500
- C Increase by \$2 500
- D Remain at \$2 000

[1]



### 13 IRRECOVERABLE DEBTS AND PROVISION FOR DOUBTFUL DEBTS

- 3 Neil is a sole trader who makes a provision for doubtful debts at ten per cent of trade receivables on 31 December. He provides the following information:  
Trade receivables at 31 December 2018: \$30 000  
Trade receivables at 31 December 2019: \$40 000  
What was recorded for doubtful debts in Neil's income statement for the year ended 31 December 2019?

- A Credited with \$1 000  
B Debited with \$1 000  
C Credited with \$4 000  
D Debited with \$4 000

[1]

- 4 Which of the following is correct?

[1]

	Increases profits	Decreases current assets
A	Irrecoverable debts	Irrecoverable debts recovered
B	Increase in provision for doubtful debts	Decrease in provision for doubtful debts
C	Decrease in provision for doubtful debts	Increase in provision for doubtful debts
D	Irrecoverable debts recovered	Irrecoverable debts recovered

- 5 Garry is a sole trader who makes a provision for doubtful debts as a year-end adjustment. On 31 December 2017, his provision for doubtful debts was \$800. He provided the following information:

Year ended 31 December	Trade receivables	
2018	\$50 000	Increase in provision \$200
2019	\$36 000	Decrease in provision \$280

Which of the following is correct?

[1]

	Trade receivables at 31 December 2017	Percentage used to calculate provision
A	\$20 000	2 per cent
B	\$20 000	4 per cent
C	\$40 000	4 per cent
D	\$40 000	2 per cent

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 On 1 January 2018, Pat's business had trade receivables of \$9 400 and the provision for doubtful debts was five per cent of the trade receivables. At 31 December 2018, irrecoverable debts of \$640 were written off and \$140 was received in respect of irrecoverable debts previously written off. On the same day, trade receivables totalled \$11 000 and it was decided to increase the provision for doubtful debts to eight per cent of trade receivables, based on the growth of irrecoverable debts.

Prepare:

- A the provision for doubtful debts account for the year ended 31 December 2018  
B the entry for irrecoverable debts and provision for doubtful debts in the income statement for the year ended 31 December 2018  
C the general journal entry for irrecoverable debts recovered.

[4]

[4]

[3]

- 7** The financial year of Nawaz ends on 31 August. He sells on credit terms and maintains a provision for doubtful debts.
- a** State the meaning of the following terms:
- i** Irrecoverable debts
  - ii** Irrecoverable debts recovered
  - iii** Provision for doubtful debts [3]
- b** Name two accounting principles which Nawaz is applying by maintaining a provision for doubtful debts. [2]
- c** Suggest two ways in which Nawaz could reduce the possibility of irrecoverable debts. [2]

Nawaz provided the following information.

	\$
On 1 September 2015	
Provision for doubtful debts	1 450
During the year ended 31 August 2016	
Debts written off	2 064
On 31 August 2016	
Trade receivables	79 650

On 31 August 2016 it was decided to write off \$250 owed by Uzma. The provision for doubtful debts was adjusted to 2 per cent of the remaining trade receivables.

- d** Prepare journal entries on 31 August 2016 to record the following:
- Writing off the bad debt
  - Closing the irrecoverable debts account
  - Adjusting the provision for doubtful debts
- Narratives are not required. [6]
- e** Prepare an extract from the statement of financial position on 31 August 2016 to show the trade receivables. [2]

*(Adapted from Cambridge IGCSE Accounting 0452/21, October/November 2016, Q4)*

## Chapter review questions

- 1 Complete the sentence below:
  - a Trade \_\_\_\_\_ are individuals or firms that owe the businesses money.
  - b An irrecoverable debt is a \_\_\_\_\_ that results from a customer's failure to pay.
  - c A business should be aware that a certain \_\_\_\_\_ of its customers are not likely to pay the money they owe.
  - d On the basis of past \_\_\_\_\_ a business will make a provision for irrecoverable debts.
  - e The irrecoverable debts account shows the amount by which the \_\_\_\_\_ in the accounting period will decrease.
  - f Purchasing on \_\_\_\_\_ allows a customer time to pay their outstanding debt.
  - g A provision for doubtful debts has to be \_\_\_\_\_ if the current provision is insufficient.
  - h A provision for doubtful debts is recorded in the \_\_\_\_\_ section of the statement of financial position.

- 2 Joey started business on 1 January 2017. He adjusted his provision for doubtful debts at the end of each year on a percentage basis, in accordance with the current economic climate. The following details are available for the three years ended 2017, 2018 and 2019:

Year	Irrecoverable debts written off year to 31 December	Trade receivables at 31 December	Percentage provision for doubtful debts
2017	147	4 000	6
2018	300	5 000	7
2019	400	4 500	4

Prepare a provision for doubtful debts account for each of the years ending 31 December 2017, 2018 and 2019. Prepare the relevant extracts of the income statement and the statement of financial position at 31 December of each year, 2017, 2018 and 2019.

- 3 Explain the difference between irrecoverable debts and a provision for doubtful debts.
- 4 State three methods a business could use to calculate the amount of its provision for doubtful debts.
- 5 State one reason why suppliers should send statements of accounts to their trade receivables.

## Revision checklist

In this chapter, you have learnt:

- ✓ what is meant by irrecoverable debts and recovery of debts written off
- ✓ to prepare ledger accounts and journal entries to record irrecoverable debts
- ✓ to prepare ledger accounts and journal entries to record the recovery of debts written off
- ✓ how to avoid irrecoverable debts
- ✓ the reasons for maintaining a provision for doubtful debts
- ✓ how to prepare ledger accounts and journal entries to record the creation of a provision for doubtful debts
- ✓ how to prepare ledger accounts and journal entries to record adjustments to provision for doubtful debts.



# Valuation of inventory

By the end of this chapter you will be able to:

- ★ understand the basis of the valuation of inventory at the lower of cost and net realisable value
- ★ prepare simple inventory valuation statements
- ★ recognise the importance of valuation of inventory and the effect of an incorrect valuation of inventory on gross profit, profit for the year, equity and asset valuation.

## Valuation of inventory

### Key term

**Cost of sales** is opening inventory plus net purchases plus carriage inwards, less closing inventory.

### Key info

The inventory at the end of the financial year is called closing inventory and becomes the next financial year's opening inventory.

### Key info

Inventory is valued at cost and net realisable value, whichever is lower.

### Key term

**Net realisable value** (NRV) is the estimated saleable value of the inventory in question, less a reasonable estimate of costs associated with the completion and eventual sale of goods.

### Think about it!

Work with a partner to come up with a formula for net realisable value.

At the end of an accounting period, a trader will physically count the goods that remain unsold. He 'takes inventory'. Therefore, inventory is a complete list of goods on hand and includes primarily, for a sole trader, goods bought for resale that have remained unsold at the end of the accounting period. This is also known as closing inventory, because inventory-taking is carried out at the end of the financial year. For a manufacturer, inventory includes raw materials and work in progress (unfinished goods) as well as finished goods not sold.

A business should correctly value their inventory at the end of each accounting period. This is because it forms an important part of the **cost of sales** – a significant item reported in the business' trading account section of the income statement. As inventory is often also the largest current asset of a business, a correct valuation will ensure that the statement of financial position accurately reflects the financial position of the business.

## Methods of valuing inventory

There are two methods of valuing inventory:

- » **At cost** – this includes, in addition to cost price, all those costs necessary to acquire the inventory and convert it to a saleable condition. Hence the following costs, if incurred, will be added to the cost price to arrive at inventory at cost:
  - » carriage inwards
  - » import duties
  - » packaging and handling.
- » **Net realisable value** (or NRV) – this is the estimated saleable value of the inventory in question, less a reasonable estimate of costs associated with the completion and eventual sale of the goods.

If the net realisable value of inventory declines to less than its cost, the business must value that inventory at net realisable value. This is in keeping with the prudence principle (you will learn more about this in Chapter 26) which requires assets to be undervalued, rather than overvalued.

Costs are generally lower than net realisable value. However, a business may find itself in a situation where its inventory has an uncertain future because the business does not know whether it will sell. Some of the reasons that could contribute to this situation are a major price fall, defects or damage, over-supply or even obsolescence (meaning the product is out of fashion or no longer used).

### → Worked example 1

Some inventory costing \$400 was damaged. \$100 must be spent to bring the inventory into saleable condition. This inventory can then be sold for \$300.

$$\begin{aligned}\text{The net realisable value} &= \text{saleable value} - \text{costs of making inventory saleable} \\ &= \$300 - \$100 \\ &= \$200\end{aligned}$$

The inventory cost \$400.

The inventory should be valued for \$200, the net realisable value (NRV), which is lower than the cost.

#### Study tip

Remember that NRV is different from net book value (NBV). NRV is the estimated saleable value of inventory, less a reasonable estimate of costs associated with the completion and eventual sale of the goods. NBV is the difference between the cost of an asset and its accumulated depreciation.

### Activity 1

- 1 Explain the term 'net realisable value'.
- 2 Explain why inventory is valued at the lower of cost and net realisable value.
- 3 Inventory costing \$600 was damaged. It was decided to spend \$120 to get the inventory into a saleable condition. The inventory could then be sold at an estimate price of \$630.
  - a Calculate the net realisable value of the inventory.
  - b State the value of the inventory. Give a reason for your answer.

## Inventory valuation statements

A business usually has different items that make up its inventory. Each item should be valued separately and a statement prepared to prepared the total value of closing inventory.

### → Worked example 2

After taking a physical count of the items in her warehouse, Sita provides the following information:

Item	Net realisable value	Cost
	\$	\$
1	560	500
2	230	400
3	170	240

Sita			
Inventory valuation statement			
Item	Net realisable value	Cost	Value
	\$	\$	\$
1	560	500	500 (cost is lower)
2	230	400	230 (NRV is lower)
3	170	240	170 (NRV is lower)
Total value of inventory = \$900			

#### Key info

It is incorrect to add the cost price of *all* the inventory items and compare it to the total net realisable value of *all* the inventory items taken together to decide which is lower.

## Activity 2

Chang's inventory at 31 December 2018 was as follows:

Item	Net realisable value	Cost
	\$	\$
A	450	400
B	940	1000
C	179	170
D	2300	3000
E	10000	8900

Prepare an inventory valuation statement to show how Chang's inventory at 31 December 2018 is valued.

## Effect of an incorrect valuation of inventory

We will now look at the effect of an incorrect valuation of inventory on gross profit, profit for the year, equity and asset valuation. As mentioned before, inventory is included in the calculation of the cost of sales in the trading account. If closing inventory is overvalued, the cost of sales will be undervalued and therefore the gross profit will be overvalued. The trading account on the left below shows the results of an overvaluation of closing inventory on cost of sales as well as on profit.

### Akio Trading account for the year ended 31 December 2018

	\$	\$
Sales		3300
Less cost of sales:		
Opening inventory	1400	
Purchases	<u>2500</u>	
	3900	
Less closing inventory	<u>1100</u>	<u>2800</u>
Gross profit		<u>500</u>

If closing inventory is overvalued, the gross profit is overstated at \$500

### Akio Trading account for the year ended 31 December 2018

	\$	\$
Sales		3300
Less cost of sales:		
Opening inventory	1400	
Purchases	<u>2500</u>	
	3900	
Less closing inventory	<u>1000</u>	<u>2900</u>
Gross profit		<u>400</u>

This is the right closing inventory. The right gross profit is \$400

### Key info

If inventory is overvalued, the gross profit, and therefore the profit for the year, will also be overvalued.

▲ Effect of overvaluing inventory on gross profit

### Activity 3

- 1 Copy and complete the following sentences:
  - a If closing inventory is overvalued then gross profit is \_\_\_\_\_ and profit for the year is also \_\_\_\_\_.
  - b The formula for calculating net realisable value is:  $NRV = \text{saleable value} - \text{_____}$ .
- 2 Yoko Traders provide the following information about their inventory at the close of their financial year, 31 December 2019.

Item	Amount	Cost price per unit	Selling price per unit
A	290 units	\$2	\$7
B	120 units	\$5	\$6

Yoko traders paid carriage inwards on item B at the rate of \$2 per unit. This was not included in the cost mentioned above.

Prepare an inventory valuation statement to calculate the total value of inventory that will appear in Yoko Traders' statement of financial position as at 31 December 2019.

As profit for the year is added to capital to arrive at closing capital or owner's equity at the end of the financial year, profit for the year that is overvalued will effectively inflate the owner's equity incorrectly.

Inventory is also usually a major current asset. If it is overvalued, then the total assets figure in the statement of financial position will be overstated. If inventory is undervalued at the end of the financial year, then the gross profit, profit for the year, current assets, total assets and owner's equity will all be undervalued.

### → Worked example 3



Della Computers is a computer retailer. The business values its inventory at the end of the financial year. It was found that inventory at 31 December 2019 was overvalued by \$25 000.

#### **Effect on the gross profit for the year ended 31 December 2019:**

Gross profit will be overvalued by \$25 000 (as explained on the previous page)

#### **Effect on profit for the year for the year ended 31 December 2019:**

Profit for the year will be overvalued by \$25 000 as profit for the year is gross profit less expenses.

#### **Effect on current assets as at 31 December 2019:**

Current assets will be overvalued by \$25 000 as inventory is a current asset.

#### **Effect on total assets as at 31 December 2019:**

Total assets will be overvalued by \$25 000 as current assets is a component of total assets in the statement of financial position.

#### **Effect on equity as at 31 December 2019:**

Profit for the year is added to opening capital to get closing capital or owner's equity. Therefore owner's equity will be overvalued by \$25 000.

## Effect of incorrect valuation of closing inventory on the following year's opening inventory

As closing inventory for the current year is the following year's opening inventory (which is also included in the trading account for that year), the gross profit will be affected in the following way:

- » If last year's closing inventory was overvalued, then this year's opening inventory will also be overvalued.
- » If opening inventory is overvalued, then gross profit for this year will be undervalued. Therefore profit for the year for the current year will also be undervalued. However, as last year's profit was overvalued the capital or owner's equity will not be affected by this year's undervalued profit.
- » If last year's closing inventory was undervalued, then this year's opening inventory will also be undervalued.
- » If opening inventory is undervalued, then gross profit for this year will be overvalued. Therefore profit for the year for the current year will also be overvalued. Again, the capital or owner's equity will not be affected.

As opening inventory is not included in the statement of financial position, there will be no effect on the valuation of current assets and total assets.

### Activity 4

Reginald Art Gallery undervalued its closing inventory by \$15 000. State how this will affect the following items in its financial statements:

- a Gross profit
- b Profit for the year
- c Current assets
- d Total assets
- e Owner's equity

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Which of the following will work out to net realisable value?

- A Selling price
- B Selling price less administration costs
- C Selling price less cost of making goods saleable
- D Selling price less estimated profit

[1]

- 2 Gigi Retailers value their inventory of items M and N on 31 December 2019. The following information is provided.

Item	Amount	Cost price per unit	Net realisable value per unit
M	200 units	\$5	\$7
N	700 units	\$10	\$8



What is the total of the inventory?

- A \$6 600
- B \$7 000
- C \$8 000
- D \$8 400

[1]

3 Francis has the following information for the year ended 31 December 2018:

	\$
Cost per unit of inventory purchased during the year	20
Selling price of inventory sold during the year	40

At 31 December 2018, Francis counted his inventory and discovered that he had 2 000 units left. However, 150 units had a net realisable value of only \$10 each.

What was the total value of Francis' inventory at 31 December 2018?

- A \$38 500
- B \$40 000
- C \$80 000
- D \$81 500

[1]

4 How should inventory be valued?

- A At the higher of net realisable value and cost
- B At the higher of net realisable value and selling price
- C At the lower of net realisable value and cost
- D At the lower of net realisable value and selling price

[1]

5 Errol, a sole trader, finds that he has 1 000 units of inventory at 30 November 2018. He had purchased 2 500 units of this product at a price of \$10. During the year he had sold 1 500 units at \$25 each. Out of the remaining, he discovered that 100 units had a net realisable value of only \$15. What was the value of his inventory at 30 November 2018?

- A \$10 000
- B \$10 500
- C \$15 000
- D \$24 000

[1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

6 Dorothy is valuing her inventory.

- a Explain the meaning of the term 'net realisable value'. [2]
- b Explain why inventory should be valued at the lower of cost and net realisable value. [2]
- c Dorothy had overvalued her inventory on 31 December 2018. Copy and complete the table by placing a tick in the correct column to show the effect of this on each of the items shown. [8]

	Overstated	Understated	No effect
Gross profit for the year ended 31 December 2018			
Gross profit for the year ended 31 December 2019			
Cost of sales for the year ended 31 December 2018			

	Overstated	Understated	No effect
Cost of sales for the year ended 31 December 2019			
Profit for the year for the year ended 31 December 2018			
Profit for the year for the year ended 31 December 2019			
Current assets at 31 December 2018			
Current assets at 31 December 2019			

**7** Sahira Ali is a trader.

- a** She values her inventory at the lower of cost and net realisable value. Explain why inventory should be valued on this basis. [2]
- b** Explain the meaning of the term 'net realisable value'. [2]
- c** Sahira Ali overvalued her inventory on 31 October 2013. Complete the table below by placing a tick (✓) in the correct column to show the effect of this on **each** of the following items. [6]

	Overstated	Understated	No effect
Gross profit for the year ended 31 October 2013			
Gross profit for the year ended 31 October 2014			
Profit for the year ended 31 October 2013			
Profit for the year ended 31 October 2014			
Current assets at 31 October 2013			
Current assets at 31 October 2014			

(Adapted from Cambridge IGCSE Accounting 0452/21, October/November 2014, Q1 h, l & j)

**8** Ravi is a retailer of garden furniture. Ravi provided the following information about inventory held at the end of his financial year.

Product	Units held	Cost per unit	Selling and distribution costs per unit	Selling price per unit
		\$	\$	\$
A	600	15	2.00	21
B	100	12	1.50	13
C	50	18	2.00	17

- a** Calculate the total value of each type of product. [6]
- b** Hassan owns a manufacturing business. Name three types of inventory which may appear in Hassan's accounts. [3]
- (Adapted from Cambridge IGCSE Accounting 0452/11, May/June 2013, Q2 a, b & c)

- 9 a** Inventory should not be valued at normal selling price. Name the accounting principle which prohibits this. [1]
- b** State how inventory ought to be valued. [2]
- c** Marek sells table lamps which he buys for \$8 each. On 31 July 2014 he had 10 broken lamps which could only be sold for scrap, at \$2 each. The cost of sending them to the scrap merchant was \$7 in total.

Calculate the value at which these 10 lamps should be included in the inventory on 31 July 2014. [3]

(Adapted from Cambridge IGCSE Accounting 0452/13, October/November 2014, Q3 e & f)

### ? Chapter review questions

1 Complete the following table stating whether each statement is true or false.

Statement	True/False
Closing inventory for the year ended 31 August 2018 will be closing inventory for the year ended 31 August 2019.	
Opening inventory for the year ended 30 June 2019 was the same as the closing inventory for the year ended 30 June 2018.	
A trader's closing inventory will include raw materials.	
It is important to value inventory correctly.	
Inventory should be valued at cost and net realisable value, whichever is higher.	
If closing inventory for the year ended 31 March 2018 is overvalued, then opening inventory for the year ended 31 March 2019 is undervalued.	
If closing inventory is overvalued, then profit for the year is overvalued.	

2 State the names of

- a two methods of inventory valuation
- b the principle to be applied when valuing inventory
- c the difference between selling price and expenses before completion of sale
- d one expense that is included in cost of inventory
- e one expense that is not included in cost of inventory.

### Revision checklist

In this chapter, you have learnt:

- ✓ what is meant by net realisable value
- ✓ how to calculate net realisable value
- ✓ how to calculate total cost of inventory
- ✓ that inventory should be valued at the lower of cost and net realisable value
- ✓ why inventory should be valued at the lower of cost and net realisable value
- ✓ that different classes of inventory should be valued separately
- ✓ the effect of incorrect valuation of inventory on the profit calculation of a business
- ✓ the effect of incorrect valuation of inventory on the total assets of a business
- ✓ the effect of incorrect valuation of inventory on the owner's equity.



# SECTION 5

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## Preparation of financial statements

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### Chapters

- 15 Sole traders
- 16 Partnerships
- 17 Limited companies
- 18 Clubs and societies
- 19 Manufacturing accounts
- 20 Incomplete records

In this section, you will learn how to prepare financial statements for sole traders, service businesses, partnerships, limited companies, non-profit organisations, such as clubs and societies, and manufacturers. Each of these financial statements will include year-end adjustments. You will be taught the characteristics and most important features of each type of business structure. Finally, a chapter on incomplete records will introduce you to those small businesses that do not keep a full set of double-entry records. You will learn to use the limited data provided by these businesses to prepare their financial statements.

## Sole traders



By the end of this chapter you will be able to:

- ★ explain the advantages and disadvantages of operating as a sole trader
- ★ explain the importance of preparing income statements and statements of financial position
- ★ explain the difference between a trading business and a service business
- ★ prepare income statements for trading businesses and for service businesses
- ★ understand that statements of financial position record assets and liabilities on a specified date
- ★ recognise and define the content of a statement of financial position: non-current assets, intangible assets, current assets, current liabilities, non-current liabilities and capital
- ★ understand the inter-relationship of items in a statement of financial position
- ★ prepare statements of financial position for trading businesses and service businesses
- ★ make adjustments for provision for depreciation using the straight-line, reducing balance and revaluation methods
- ★ make adjustments for accrued and prepaid expenses and accrued and prepaid income
- ★ make adjustments for irrecoverable debts and provisions for doubtful debts
- ★ make adjustments for goods taken by the owner for own use.

## Sole traders

A sole trader is an unincorporated business owned and operated by one person who trades (buys and sells goods). However, many service sector and seasonal businesses use this form of business structure, for example, hair dressers and landscapers. Sole traders are usually the smallest business structure in the world of business, although some sole traders are more successful than some larger corporations. One of the reasons why is because a sole trader can offer specialist services, for example, an air conditioning specialist. In addition, because they often deal with customers directly, they are sensitive to their customers' needs.

### Advantages of being a sole trader

- » Sole traders have total control of the business and can therefore make quick decisions.
- » A sole trader business is easy and inexpensive to start up.
- » A sole trader does not have to share profits.
- » Financial statements do not have to be published, so secrecy is easy to maintain.
- » This type of legal structure is easy to change if there is future growth.
- » The sole trader is his or her own boss.

## Disadvantages of being a sole trader

- » A sole trader has unlimited liability, which means their personal assets are at risk if the business should cease trading. When creditors must be paid, no legal distinction is made between private and business assets. Therefore, when business assets run out, the private assets of the owner have to be liquidated to pay off creditors.
- » These businesses find it difficult to raise capital as banks are reluctant to lend to small, unproven and risky businesses.
- » The responsibility of making day-to-day decisions rests with the owner. This is a big responsibility and the owner may not have the skills or knowledge to make the right decisions.
- » It is difficult to recruit and retain high-quality staff as the prospects of salary raises and promotions are limited.

## Financial statements of a sole trader

The most important purpose of a business is to make a profit. A business' accounting records provide information on the income and expenses of a business. These are brought together in the income statement which is used to calculate profit or loss. The income statement shows the financial performance of a business.

Although profits are important, the business also needs information about its financial position: assets, liabilities and capital (owner's equity or net worth) to measure the business' health and the growth (or not) of the owner's investment in the business. The statement of financial position provides this information.

The income statement and the statement of financial position together make up the foundation of the business' financial statements. They are prepared from the trial balance. Every item in the trial balance is mentioned once in the financial statements. Notes or further information is normally found accompanying the trial balance and they are used mainly to make year-end adjustments (see Chapters 11–13 for more on this). Every adjustment in these notes affects two items in the financial statements.

## Income statement

The income statement of a sole trader is comprised of two parts: the trading account, which is used to calculate the gross profit, and the profit and loss account which is used to calculate the profit for the year.

### Trading account section of the income statement

The trading account, as the name suggests, is concerned with those accounts involved in the buying and selling of goods. It contains the sales revenue, the cost of sales and the gross profit. The sales revenue includes cash and credit sales less any sales returns. The gross profit is arrived at by subtracting the cost of sales from the sales revenue.

Hence the trading account formula is:

$$\text{Gross profit} = \text{sales revenue} - \text{cost of sales}$$

### Activity 1

- 1 Define what is meant by a sole trader.
- 2 State three advantages and three disadvantages of a sole trader form of business.
- 3 Complete the table below, using the trading account formula to help you fill in the blanks.

	Sales \$	Cost of sales \$	Gross profit /loss \$
a	4 000	1 340	
b		3 000	1 200 (profit)
c	5 600		700 (profit)
d	7 000	8 500	
e		1 300	1 000 (loss)

- 4 State the names of the financial statements that a sole trader prepares. Explain why he or she prepares these statements. State when these statements are prepared.

#### Key term

**Carriage inwards** is the cost of transporting purchases to the business.

### Cost of sales

To calculate cost of sales, the opening inventory is added to net purchases (purchases *less* purchases returns) and closing inventory is subtracted from it. If there is **carriage inwards**, it will also be added to purchases.

The cost of sales formula is:

**Cost of sales = Opening inventory + net purchases + carriage inwards – closing inventory**

### Activity 2

Complete the table below, using the cost of sales formula to help you fill in the blank.

	Cost of sales \$	Opening inventory \$	Net purchases \$	Carriage inwards \$	Closing inventory \$
a		2 000	1 000	50	500
b	7 000	2 500	6 200	30	
c	6 000	1 700	5 300		1 100
d	8 700	1 300		40	500
e	9 000		9 600	100	1 600

#### Key info

When the owner takes inventory from the business for personal use, the following entry is posted:

- Debit: Drawings
- Credit: Purchases

If the owner takes goods for personal use, the cost of sales formula is:

**Cost of sales = opening inventory + (net purchases – goods taken by owner) + carriage inwards – closing inventory**

#### Think about it!

Discuss in pairs:

- 1 Will the gross profit be overstated or understated if closing inventory is overstated? Why?
- 2 Will gross profit be overstated or understated if opening inventory is overstated? Why?

### Activity 3

- 1 Calculate the cost of sales given the following information.

	\$
Purchases	2 560
Opening inventory	1 400
Carriage inwards	120
Purchases returns	100
Closing inventory	2 100
Inventory taken for own use	200

- 2 Define: carriage inwards.
- 3 Explain why the purchases account is credited when inventory is taken by the owner for personal use. Name the account that is debited.

## → Worked example 1

Selma, a sole trader, extracted the following trial balance from her books of accounts at 31 December 2018:

Selma's trial balance		
	Debit	Credit
	\$	\$
Opening inventory	13 000	
Purchases	40 000	
Sales		100 000
Return inwards	200	
Return outwards		2 000
Carriage inwards	200	
<b>Carriage outwards</b>	500	
Rent	3 000	
Internet charges	1 500	
Property and buildings	500 000	
Machinery	40 000	
Trade receivables	20 000	
Trade payables		30 000
Rent received		3 700
Cash	800	
Bank	14 000	
Drawings	300	
Capital		497 800
	<b><u>633 500</u></b>	<b><u>633 500</u></b>

### Key term

**Carriage outwards** is the cost of transporting goods to the customer.

Additional information:

- Closing inventory: \$6 000.
- Selma took inventory \$300 for her own personal use. No entries were made in the books.

Selma		
Trading account for the year ended 31 December 2018		
	\$	\$
Sales		100 000
Less: return inwards		<u>200</u>
		99 800
Less cost of sales:		
Opening inventory		13 000
Purchases	40 000	
Less: return outwards	<u>2 000</u>	
	38 000	
Less: inventory for own use	<u>300</u>	37 700
Carriage inwards		<u>200</u>
		50 900
Less closing inventory		<u>6 000</u>
		44 900
Gross profit		<b><u>54 900</u></b>

**Key info**

The trading account must have a title that shows the time interval for which it is prepared, for example, 'Trading account for the year ended 31 December 2XXX'.

**Key info**

The information in Activity 4 is not presented in the form of a trial balance, as is usual. However, sufficient information is available to prepare a trading account. Some items, such as returns inwards, are missing. Do not mention them in the trading account. Instead, sales will go directly in the last column.

The trading account prepared in Worked example 1 has items that may not appear in all trading accounts. If an item is missing, simply omit it from the trading account.

**Activity 4**

- 1 Prepare a trading account from the following information provided by Ganesh:

	\$
Closing inventory	100
Opening inventory	600
Purchases	8000
Sales	10000
Carriage inwards	30
Inventory taken for own use	110

- 2 State which item above represents goods unsold at the end of the year.

## Profit and loss account section of the income statement

This section of the income statement starts with the gross profit and ends with the profit for the year. We add the income first and then deduct the expenses. Hence the profit and loss account is used to calculate profit for the year.

The formula used is:

$$\text{Profit for the year} = \text{gross profit} + \text{income} - \text{expenses}$$

**Activity 5**

Complete the table below.

Gross profit	Income	Expenses	Profit for the year/loss
\$	\$	\$	\$
2000	400	1670	_____
_____	200	1500	3000 profit for the year
4500	340	_____	1000 loss for the year
7000	_____	3800	3700 profit for the year

## → Worked example 2

Taking information from Worked example 1, the profit and loss account will be:

<b>Selma</b>			
<b>Profit and loss account for the year ended 31 December 2018</b>			
	<b>\$</b>	<b>\$</b>	<b>\$</b>
Gross profit			54 900
Add rent received			<u>3 700</u>
			58 600
Less expenses:			
Carriage outwards		500	
Rent		3 000	
Internet charges		<u>1 500</u>	<u>5 000</u>
Profit for the year			<u><u>53 600</u></u>

The trading account and profit and loss account are usually combined, with gross profit being mentioned only once. They make up the income statement. We can now combine the trading account from Worked example 1 with the profit and loss account from Worked example 2, to make up the income statement:

<b>Selma</b>			
<b>Income statement for the year ended 31 December 2018</b>			
	<b>\$</b>	<b>\$</b>	<b>\$</b>
Sales		100 000	
Less: return inwards		<u>200</u>	99 800
Less: cost of sales:			
Opening inventory		13 000	
Purchases	40 000		
Less: return outwards	<u>2 000</u>		
	38 000		
Less: inventory for own use	<u>300</u>	37 700	
Carriage inwards		<u>200</u>	
		50 900	
Less closing inventory		<u>6 000</u>	<u>44 900</u>
Gross profit			54 900
Add rent received			<u>3 700</u>
			58 600
Less expenses:			
Carriage outwards		500	
Rent		3 000	
Internet charges		<u>1 500</u>	<u>5 000</u>
Profit for the year			<u><u>53 600</u></u>

### Activity 6

- 1 Prepare an income statement from the following information:  
Business name: Petal's Flowers  
Year ended: 30 June 2018  
Opening inventory \$3 400; Closing inventory \$2 000; Purchases \$2,000; Return inwards \$340; Return outwards \$500; Sales \$4 500; Carriage inwards \$100; Carriage outwards \$120; Rent \$300; Telephone charges \$230; Sundry expenses \$260; Commission received \$450; Salaries \$190.
- 2 Complete the income statement below.

Belissima Cookies			
Income statement for the year ended 31 December 2018			
	\$	\$	\$
Sales			30 000
Less cost of sales:			
a _____ inventory		10 000	
Purchases		<u>3 000</u>	
	b _____		
Less closing inventory:		<u>4 000</u>	c _____
Gross profit			d _____
Add income:			
Rent e _____			300
			21 300
Less expenses:			
Rent		350	
Wages		5 000	
General expenses	f _____		<u>6 500</u>
Profit for the year			g _____

## Transferring balances from ledger accounts to the income statement

As mentioned previously, the trading account and profit and loss account are part of double entry. This means every item that appears in these accounts must have a corresponding account that is either debited or credited to complete double entry.

### → Worked example 3

Using the income statement referred to in Worked example 2, we can now see how the following ledger accounts are closed and transferred to the trading or profit and loss account:

- Sales account
- Return inwards account
- Rent received account
- Internet charges account.



In Selma's books:

#### Nominal (general) ledger

##### Sales account

Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Trading	<u>100 000</u>	Dec 31	Total to date	<u>100 000</u>

##### Return inwards account

Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Total to date	<u>200</u>	Dec 31	Trading	<u>200</u>

##### Rent received account

Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Income statement	<u>3 700</u>	Dec 31	Total to date	<u>3 700</u>

##### Internet charges account

Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Total to date	<u>1 500</u>	Dec 31	Income statement	<u>1 500</u>

All other items from the income statement can be closed and transferred in the same way, except for inventory (closing and opening), gross profit and profit for the year.

## Transfer of inventory

Opening inventory will appear in the inventory account as a debit balance. The entry to transfer it to the trading account will be:

- » Debit: trading account
- » Credit: inventory account.

Closing inventory, which is shown as a credit (a deduction of a debit) in the trading account will now be transferred to the debit of the inventory account. This account will be closed in the *next* financial year when it is transferred to the trading account as opening inventory.

In Selma's books:

Nominal (general) ledger					
Inventory account					
Date	Details	\$	Date	Details	\$
2018			2018		
Jan 1	Balance b/d	<u>13 000</u>	Dec 31	Trading account	<u>13 000</u>
Dec 31	Trading account	6 000			

## Profit for the year transfer

Profit for the year is transferred by debiting the profit and loss account section of the income statement and crediting the capital account. Profit for the year increases the owner's capital.

### Capital account

If the owner has made drawings, then the drawings account will be closed and a transfer made to the debit of the capital account, therefore reducing the capital.

The entry is:

- » Debit: capital account
- » Credit: drawings account

Therefore:

$$\text{Closing capital} = \text{opening capital} + \text{profit} - \text{drawings}$$

If the owner injected fresh capital during the year, the formula would be:

$$\text{Closing capital} = \text{opening capital} + \text{capital introduced} + \text{profit for the year} - \text{drawings}$$

Think about it!

How will loss for the year be transferred to the owner's capital account?

## → Worked example 4

Selma started the year ended 31 December 2018 with \$60 000 in her capital account. During the year, she withdrew \$10 000 cash from the business bank account and took inventory for her personal use \$300 (as mentioned in Worked example 1). Her profit for the year is \$53 600, as calculated in Worked example 2.

Selma's capital account:

Selma					
Nominal (general) ledger					
Capital account					
Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Drawings	10 300	Jan 1	Balance b/d	60 000
	Balance c/d	<u>103 300</u>	Dec 31	Income statement (profit)	<u>53 600</u>
		<u>113 600</u>			<u>113 600</u>
			2019		
			Jan 1	Balance b/d	103 300

## Nominal (general) ledger

## Drawings account

Date	Details	\$	Date	Details	\$
Dec 31	Bank	10 000	Dec 31	Capital account	10 300
	Purchases	300			
		<u>10 300</u>			<u>10 300</u>

## Activity 7

Complete the table below.

Closing capital	Opening capital	Profit for the year/(loss)	New capital brought in by owner	Drawings
\$	\$	\$	\$	\$
_____	100 000	45 000	10 000	12 000
_____	150 000	(30 000)	nil	14 000

## Statement of financial position

The accounts that were not included in the income statement are assets, liabilities and capital. These will be included in the other financial statement prepared at the end of the financial year: the statement of financial position.

In Chapter 2 we learnt the accounting equation. To refresh your memory the accounting equation is:

$$\text{Assets} = \text{Capital} + \text{Liabilities}$$

## Key info

Some businesses possess a third category of assets called intangible assets. These are assets that are not tangible (i.e. not physical objects). Examples of intangible assets are goodwill and patents. These assets are recorded in the statement of financial position.

We also learnt that this equation is presented in the form of a statement of financial position at the end of the financial year. We learnt to prepare a basic statement of financial position using assets, liabilities and capital – the three elements that make up the accounting equation.

Assets, or resources of value that a business owns, can be classified into two types: non-current (for example, machinery) and current (for example, inventory). Similarly, liabilities – debts that a business owes – can be classified as non-current (for example, long-term loan) or current (for example, trade payables).

Non-current assets are listed in the statement of financial position in the order of the length of their economic life. Therefore, premises will be listed before motor vehicle. Current assets are listed in increasing order of liquidity. The least liquid current asset is listed first, followed by all the less liquid assets. The typical order in which current assets are listed is:

- 1 Inventory
- 2 Trade receivables
- 3 Cash at bank
- 4 Cash in hand

A statement of financial position is prepared with a heading. The heading usually indicates that it is the statement of financial position as at the last day of the financial year. This is different from the income statement that says: 'for the year ended'. The reason is, the statement of financial position is prepared *at a point in time*, whereas the income statement is prepared *for a period of time*, usually a year. The name of the business is also shown in the heading of the statement of financial position.

### Activity 8

- 1 State whether each of the following items is a current asset or a non-current asset.
  - a Inventory
  - b Premises
  - c Equipment
  - d Cash at bank
  - e Cash in hand
  - f Trade receivables
  - g Furniture and fixtures.
- 2 State the name of two current liabilities.
- 3 State the order in which the following items are shown in the statement of financial position:
  - a Non-current assets
  - b Current assets.

## Financial statements with year-end adjustments

Year-end adjustments for provisions for depreciation and doubtful debts as well as accruals and prepayments were covered in Chapters 11, 12 and 13. To arrive at the correct profit for the year so that the income statement presents a 'true and fair view' of the financial performance of a business, these year-end adjustments must be made. Both the income statement and the statement of financial position will reflect these year-end adjustments.

### → Worked example 5

The following balances were extracted from the books of account of Rita at close of business on 28 February 2019.

	Dr \$	Cr \$
Sales		19 740
Purchases	11 280	
Capital at 1 March 2018		8 500
Motor vehicle	2 400	
Machinery	1 440	
Provision for depreciation at 1 March 2018: Motor vehicle		1 000
Provision for depreciation at 1 March 2018: Machinery		400
Inventory at 1 March 2018	2 970	
Repairs to motor vehicle	450	
Drawings	2 850	
Rent	2 580	
Salaries	1 020	
Discounts received		360
Provision for doubtful debts at 1 March 2018		270
Discounts allowed	810	
Insurance	690	
Trade receivables and payables	4 920	2 490
Cash in hand	1 140	
Cash at bank	210	

Further information:

- Inventory at 28 February 2019 was \$2380.
- Rent accrued was \$350.
- Salaries prepaid were \$240.
- Decrease the provision for doubtful debts by \$30.
- Provide depreciation as follows: Motor vehicle \$170, Machinery \$350.

Rita's financial statements for the year ended 28 February 2019:

<b>Rita</b>		
<b>Income statement for the year ended 28 February 2019</b>		
	<b>\$</b>	<b>\$</b>
Sales		19 740
Less Cost of sales		
Inventory at 1 March 2018	2 970	
Purchases	<u>11 280</u>	
	14 250	
Less Inventory at 28 February 2019	<u>2 380</u>	<u>11 870</u>
Gross profit		7 870
Add Income		
Discounts received	360	
Decrease in provision for doubtful debts	<u>30</u>	<u>390</u>
Less expenses		8 260
Repairs to motor vehicle	450	
Rent (\$2580 + \$350)	2 930	
Salaries (\$1020 – \$240)	780	
Discounts allowed	810	
Insurance	690	
Depreciation (\$170 + \$350)	<u>520</u>	<u>6 180</u>
Profit for the year		<u><u>2 080</u></u>

### Key info

- Accruals are added to the amount of the expense.
- Prepayments are subtracted from the amount of the expense.
- A decrease in provision for doubtful debts is added to gross profit. An increase would be subtracted from gross profit.
- Cost of sales is \$11 870.
- Total expenses are \$6 180.

### Key info

- Non-current liabilities are recorded before current liabilities. They are added to capital and current liabilities when there are any.
- Every item from the trial balance should be used once and those from 'further information' twice.
- The assets and liabilities should be arranged in the order required.
- If the business has only one current liability, the amount is written in the last column.
- If the business has intangible assets, they will be listed in the non-current assets section before tangible assets.

Rita			
Statement of financial position as at 28 February 2019			
ASSETS	\$	\$	\$
<b>Non-current assets:</b>	Cost	Accumulated depreciation	Net Book Value
Machinery	1 440	750	690
Motor vehicle	<u>2 400</u>	<u>1 170</u>	<u>1 230</u>
	<u>3 840</u>	<u>1 920</u>	1 920
<b>Current assets:</b>			
Inventory at 28 February 2019		2 380	
Trade receivables	4 920		
Less: provision for doubtful debts	<u>240</u>	4 680	
Other receivables (salaries)		240	
Cash at bank		210	
Cash in hand		<u>1 140</u>	<u>8 650</u>
<b>Total assets</b>			<u>10 570</u>
CAPITAL AND LIABILITIES			
<b>Capital:</b>			
Balance at 1 March 2018		8 500	
Add: profit for the year		<u>2 080</u>	10 580
Less: drawings			<u>2 850</u>
			7 730
<b>Current liabilities:</b>			
Trade payables		2 490	
Other payables		<u>350</u>	<u>2 840</u>
<b>Total capital and liabilities</b>			<u>10 570</u>

### Key info

- Adjustment **b** – the rent and rates prepaid will be one third of \$600.
- Adjustment **c** – the amount of depreciation will be calculated at ten per cent of the NBV of the motor vehicle at 1 January 2018 (ten per cent of \$25 400).
- Adjustment **e** – interest on the loan for the year is ten per cent of \$6 000 = \$600. Hence interest accrued is \$600 – \$300 (already paid up to June 30) = \$300.
- Adjustment **f** – deduct \$200 from purchases and increase drawings by \$200.
- Adjustment **g** – the depreciation is the difference between the NBV on 1 January 2018 and that at 31 December 2018 (\$6 800 – \$6 000).

### Key info

When a long-term loan is to be repaid in the financial year for which the financial statements are being prepared, it is treated as a current liability. Therefore, the loan in the example above will be treated as a current liability in the financial statements of the year ended 31 December 2019.

### Activity 9

- 1 Daisy is a trader. Below are the balances taken from her books on 31 December 2018. Prepare a trial balance with the account balances given.

	\$
Sales	141 000
Purchases	74 000
General expenses	770
Return inwards	4 900
Air freight charges	6 240
Motor vehicle repairs	7 250
Rent and rates	5 720
Salaries and wages	19 600
Loan interest payable	300
Loan (repayment 31 December 2020)	6 000
Trade receivables	15 000
Trade payables	6 650
Inventory at 1 January 2018	8 540
Furniture at 1 January 2018	6 800
Motor van at 1 January 2018	25 400
Drawings	12 000
Capital	35 700
Cash at bank	2 830 dr

Using the figures from the trial balance and the information given below, prepare the financial statements for the year ended 31 December 2018.

- a** Inventory at 31 December 2018 was valued at \$10 000.
  - b** The rent and rates amount includes \$600 rent paid for the three months ended 31 January 2019.
  - c** Motor vehicles are to be depreciated by ten per cent, using the reducing balance method.
  - d** A provision for doubtful debts of two per cent of trade receivables is to be made.
  - e** Interest on the loan is payable at ten per cent per annum and has been paid up to 30 June 2018.
  - f** Daisy took goods costing \$200 for her own use during the year ended 31 December 2018. No entries had been made in the accounting records.
  - g** Furniture was valued at \$6 000 on 31 December 2018. No furniture was bought or sold during the year ended 31 December 2018.
- 2 State the name of the depreciation method being applied in g, above.
- 3 State the names of two other methods of calculating depreciation.

**Think about it!**

Who do you think was paid the other half of the salaries and wages included in the trading account?

## Income statement for a service business

As mentioned at the start of this chapter, a service business often uses the legal structure of a sole trader. As it does not trade, a trading account is not required. The takings or fees or other forms of revenue are credited in the income statement, and the expenses the business has incurred are debited. The statement of financial position of a service business is similar to that of a trading business.

### → Worked example 6

Donny is a dentist who provides the following information for the year ended 31 July 2019:



▲ A dentist is an example of a service business

	\$
Fees received	45 000
Rent	10 000
Staff salaries	5 000
Insurance	500
Electricity	1 000
Repair and maintenance of equipment	400
Depreciation of equipment	500

His income statement is shown below:

<b>Donny</b>		
<b>Income statement for the year ended 31 July 2019</b>		
	\$	\$
Income:		
Fees		45 000
Less expenses:		
Rent	10 000	
Staff salaries	5 000	
Insurance	500	
Electricity	1 000	
Repair and maintenance of equipment	400	
Depreciation of equipment	500	<u>17 400</u>
Profit for the year		<u><u>27 600</u></u>



### Activity 10

J. Kingsley, a solicitor, provides you with the following information for the year ended 31 December 2018:

	\$
Fees	234 900
Salaries	35 000
Depreciation	2 000
Motor expenses	11 000
Rent and rates	10 200
Heating and lighting	7 000

Prepare J. Kingsley's income statement for the year ended 31 December 2018.

### Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

1 Wellington Traders have the following assets and liabilities on 1 January 2018:

	\$
Land and buildings	500 000
Cash and cash equivalents	4 000
Trade receivables	7 000
Bank overdraft	3 000
Trade payables	4 900

During the year ended 31 December 2018 the business made a profit of \$12 000 and the owner made drawings of \$10 000. What was the value of capital at 31 December 2018?

- A \$501 100
- B \$505 100
- C \$507 100
- D \$511 100

[1]

2 Which item appears in both the income statement and the statement of financial position?

- A Capital
- B Drawings
- C Gross profit
- D Profit for the year

[1]

3 Which item is calculated in the trading account section of the income statement?

- A Capital
- B Gross profit
- C Profit for the year
- D Sales

[1]



- 4 Which of the following is an intangible asset?  
 A Furniture and fixtures  
 B Office equipment  
 C Patents  
 D Property [1]
- 5 Which of the following records, maintained by a business, provides information for the preparation of an income statement?  
 A Bank statement  
 B Cash book  
 C Nominal (general) ledger  
 D Petty cash book [1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 Thein has a retail business. The following balances were extracted from his books at the end of his financial year on 31 March 2012.

	\$
Leasehold property – 25 years (cost)	50 000
Equipment (cost)	54 000
Provisions for depreciation:	
Leasehold property	10 000
Equipment	17 000
6% bank loan repayable 31 December 2015	25 000
Bank	5 150 (dr)
Trade receivables	6 750
Trade payables	4 010
Provision for doubtful debts	700
Revenue	78 580
Purchases	18 240
Purchases returns	1 600
Inventory at 1 April 2011	4 690
Equipment repairs	850
Equipment running expenses	2 650
General expenses	8 400
Wages	15 300
Insurance	3 640
Power and water	2 300
Advertising	5 100
Discount allowed	1 650
Discount received	330
Capital at 1 April 2011	50 000
Drawings	8 500

Additional information at 31 March 2012:

- Inventory was valued at \$3 870.
- Thein took inventory valued at \$450 for his own use.
- Equipment running expenses, \$750, were accrued, and insurance, \$1 350, was prepaid.
- The 6 per cent bank loan was received on 1 December 2011.
- An appropriate amount is to be written off the lease.
- The purchase of additional equipment, \$10 000, had been omitted from the books.
- Payment was \$5 000 by cheque with the remainder on credit.
- Equipment is to be depreciated at the rate of 20 per cent per annum using the diminishing(reducing) balance method.
- Provision for doubtful debts is to be maintained at 8 per cent of trade receivables.

**A** Prepare the income statement for the year ended 31 March 2012. [20]

**B** Prepare the statement of financial position at 31 March 2012. [20]

*(Adapted from Cambridge O Level Principles of Accounts 7110/21, May/June 2012, Q5)*

**7** Nzita is a sole trader. His statement of financial position at 31 January 2014 included the following balances:

	\$
Trade receivables	700
Trade payables	400
Inventory	1 100
Equipment at cost	15 700
Provision for depreciation of equipment	4 100
Prepaid rent	250
Bank	2 100 debit

**a** Calculate Nzita's capital at 31 January 2014. [6]

**b** A summary of Nzita's bank statements showed the following for the year ended 31 January 2015.

	\$
Receipts from customers	28 900
Payments to suppliers	12 600
Wages	5 200
Rent	3 100
Purchase of new equipment	1 100
Sundry expenses	2 650
Drawings	6 600

Further information is as follows:

- Nzita depreciates his non-current assets at the rate of 10 per cent per annum on the straight-line basis. A full year's depreciation is provided in the year of purchase.
- No non-current assets were disposed of during the year.
- Proper books of account were not kept during the year but Nzita provided the following information at 31 January 2015.
- All sales and purchases were made on credit.



	\$
Trade receivables	900
Trade payables	650
Inventory	1 400
Prepaid rent	150

- b** Prepare the following accounts for the year ended 31 January 2015 to determine the sales and purchases for the year:
- Total trade receivables account
  - Total trade payables account
- c** Prepare Nzita's income statement for the year ended 31 January 2015. [8]
- d** Prepare an extract from Nzita's statement of financial position at 31 January 2015 showing the capital section. [9]
- e** Calculate, to two decimal places, Nzita's gross margin for the year. [4]
- f** Suggest two reasons why Nzita's gross margin was lower than in the previous year. [2]

(Adapted from Cambridge IGCSE Accounting 0452/11, October/November 2015, Q5)

- 8** Maria is in business as a retailer. The following balances were extracted from her books on 30 September 2012.

	\$
Capital at 1 October 2011	180 000
Drawings	21 000
Land and buildings at cost	150 000
Fixtures and fittings at cost	28 000
Computer equipment at cost	40 000
Provisions for depreciation:	
Land and buildings	10 000
Fixtures and fittings	19 000
Computer equipment	12 000
8% bank loan repayable 31 December 2020	50 000
Loan interest paid	2 000
Bank	14 070 Dr
Trade receivables	60 000
Trade payables	31 000
Provision for doubtful debts	6 400
Revenue	365 000
Purchases	135 000
Goods returned by customers	8 900
Purchase returns	4 250
Inventory at 1 October 2011	33 500
Delivery expenses	18 630
Computer repairs expenses	19 150
General running expenses	31 600
Salaries and wages	86 700
Marketing costs	14 000
Discount allowed	22 400
Discount received	7 300

## Additional information:

- Inventory at 30 September 2012 was valued at \$36 450.
- An invoice for a credit purchase of goods, \$7 500, had been misplaced in December and no entries had been recorded in the books.
- The purchases of fixtures and fittings, \$4 000, had been included in the general running expenses.
- At 30 September 2012 computer repair expenses, \$1 700, were accrued and salaries and wages were prepaid, \$5 200.
- The 8 per cent bank loan was received on 1 January 2012.
- Depreciation is to be charged on all non-current assets owned at the end of the year, as follows:
  - Buildings at the rate of 2 per cent per annum using the straight-line method. No depreciation is charged on land. The land was valued at cost, \$50 000.
  - Fixtures and fittings at the rate of 15 per cent per annum using the straight-line method.
  - Computer equipment at the rate of 25 per cent per annum using the reducing balance method.
- A provision for doubtful debts is to be maintained on trade receivables. Debts up to 3 months old at the rate of 4 per cent, debts over 3 months old at the rate of 8 per cent. One-quarter of the trade receivables are over 3 months old.
- a Prepare the income statement for the year ended 30 September 2012. [22]
- b Prepare the statement of financial position at 30 September 2012. [18]

*(Adapted from Cambridge O Level Principles of Accounts, 7110/21, October/November 2012, Q5)*

- 9 The following balances were extracted from the books of Doji, a trader, on 30 September 2010.

	\$
Purchases	70 000
Carriage inwards	3 000
Revenue	155 000
Sales returns	9 500
Non-current assets	
Motor vehicles	42 000
Office equipment	26 000
Provisions for:	
depreciation on motor vehicles	8 000
depreciation on office equipment	4 000
Provision for doubtful debts	1 000
Salaries	23 750
Rent and rates	6 800
Discount received	5 600
Sundry expenses	14 150
Advertising	6 200
Trade payables	18 300
Trade receivables	23 000
Inventory at 1 October 2009	11 500
Bank overdraft	16 000
Capital	40 000
Drawings	12 000



Additional information at 30 September 2010:

- Inventory was valued at \$14 600.
- During the year Doji took goods costing \$1 250 for his own use. No entries have been made in the books.
- Advertising, \$300, was prepaid. Salaries, \$2 600, were accrued.
- Depreciation is to be charged as follows: motor vehicles at the rate of 25 per cent per annum using the reducing balance method; office equipment at the rate of 10 per cent per annum using the straight line method.
- Trade receivables include a debt of \$4 250 which is considered irrecoverable and is to be written off. The provision for doubtful debts is to be maintained at 4 per cent of all remaining debts.
- On 1 April 2010 Doji made a short-term loan, \$10 000, to the business. This was included in error in the capital account. Interest payable at 5 per cent per annum has not been entered in the books.

a Prepare the income statement of Doji for the year ended 30 September 2010. [22]

b Prepare the statement of financial position of Doji at 30 September 2010. [18]

(Adapted from Cambridge O Level Principles of Accounts, 7110/02, October/November 2010, Q5)

## ? Chapter review questions

- 1 State the formulas used to calculate:
  - a gross profit
  - b cost of sales
  - c profit for the year
  - d closing capital
- 2 Explain how the expenses included in the trading account are different from those included in the income statement.
- 3 Complete the following sentences with the words 'overvalued' or 'undervalued':
  - a If the closing inventory is overvalued, then the gross profit will be \_\_\_\_\_.
  - b If the closing inventory is undervalued, then the gross profit will be \_\_\_\_\_.
  - c If the opening inventory is overvalued, then the gross profit will be \_\_\_\_\_.
  - d If the opening inventory is undervalued, then the gross profit will be \_\_\_\_\_.
- 4 A business owner withdraws \$500 cash from the business bank account for personal use. Complete the following phrases with the words 'increases' or 'decreases'.
  - a Drawings \_\_\_\_\_
  - b Cost of sales \_\_\_\_\_
  - c Gross profit \_\_\_\_\_
  - d Profit for the year \_\_\_\_\_
- 5 The following information is provided:

	\$
Purchases	13 000
Sales returns	1 000
Purchases returns	500
Sales	20 000
Opening inventory	3 000
Closing inventory	1 400
Air freight charges	100

- a Calculate the cost of sales.
- b The business also received rent \$4 000. Calculate the gross profit.

## Revision checklist



In this chapter, you have learnt:

- ✓ what a sole trader is
- ✓ the advantages and disadvantages of a sole trader form of business structure
- ✓ how to prepare financial statements for a sole trader
- ✓ the importance of preparing financial statements
- ✓ what financial statements record
- ✓ the difference between the financial statements of a trading business and a service business
- ✓ which accounts are used in the income statement
- ✓ what a trading account is and what it is used for
- ✓ what a profit and loss account is and what it is used for
- ✓ which accounts are used in the statement of financial position
- ✓ how income statements are prepared for a year, whereas statements of financial position record assets, liabilities and capital are prepared *on* a specified date
- ✓ to recognise current, non-current and intangible assets
- ✓ to recognise current and non-current liabilities
- ✓ how items in a statement of financial position are inter-related by use of the accounting equation
- ✓ to make adjustments in the financial statements to provide for depreciation, accrued and prepaid expenses and to provide for doubtful debts
- ✓ to make adjustments for drawings by the owner
- ✓ how to transfer balances from ledger accounts to income statements
- ✓ to make adjustments to the capital of the business owner.



By the end of this chapter you will be able to:

- ★ explain the advantages and disadvantages of forming a partnership
- ★ outline the importance and contents of a partnership agreement
- ★ explain the purpose of an appropriation account
- ★ prepare income statements, appropriation accounts and statements of financial position
- ★ record interest on partners' loans, interest on capital, interest on drawings, partners' salaries and the division of the balance of profit or loss
- ★ make adjustments to financial statements
- ★ explain the uses of and differences between capital and current accounts
- ★ prepare partners' capital and current accounts in ledger account form and as part of a statement of financial position.

## Advantages and disadvantages of forming a partnership

### Key term

A **partnership** is owned by two or more people (up to a maximum of twenty, with some exceptions) who enter into a commitment to do business together with a view to make profits.

In the previous chapter, we learnt about the sole trader form of business structure. In fact, throughout this book we have considered only those businesses owned and controlled by a sole trader. We will now look at what happens when a sole trader wishes to expand. In such a case, the sole trader usually forms a **partnership**, which is a form of business structure owned by two or more people called partners. Partnerships are common among professionals such as lawyers, doctors and accountants. Some family businesses may also run as partnerships. A sole trader may also join with another sole trader in the same line of business to form a partnership. Sole traders normally expand into a partnership because of the following advantages:

- » Partnerships are simple and cheap to set up.
- » It is easier to raise capital for the business as each partner will contribute finance.
- » Partners may have different skills which work well together and which will enable the business to benefit. Partners also contribute to the pool of knowledge and contacts that a business can use.
- » Partners with their own area of expertise will make the business more productive. For example, a firm of lawyers could have a partner who specialises in family law and another in business law. This means that the business can have a wider customer base.
- » Partnerships can provide for more creative ideas that contribute to good decisions.
- » Responsibilities and risks are shared between the partners.
- » Any losses are shared between the partners.



However, partnerships can have the following disadvantages:

- » Profits must now be shared.
- » Disagreements can occur.
- » As decisions are jointly made, they take longer.
- » All partners are liable for errors made by one of the partners on behalf of the partnership.
- » Partners of ordinary partnerships have unlimited liability, like sole traders. This makes partnerships risky.



**Key term**

**Partnership agreement** is a contract drawn up and signed by partners.

## Importance and contents of a partnership agreement

Although a **partnership agreement** is not a legal requirement, it should be considered essential, as disagreements between partners is one of the major reasons why a partnership may fail. It is a contract drawn up and signed by partners and although it contains many clauses, those listed below are important from an accounting perspective.

- » **Percentage of ownership** – how much capital is contributed by each partner. Partners do not have to contribute equal capital.
- » **Distribution of profits and losses** – partners may share profits and losses in proportion to the capital they have contributed, equally, or in any other way they choose. The profit or loss sharing ratio is stated in the agreement.
- » **Partners' drawings limits** – upper limits may be placed on partners' drawings, so that they do not affect the partnership's liquidity or capital base.
- » **Interest on partners' capital** – this is a way of rewarding partners for investing in the partnership. It is important when partners invest different amounts in the business. Partners are therefore motivated to invest in the business rather than elsewhere. The partnership agreement states the rate of interest partners' capital earns.
- » **Interest on partners' loans** – when a partner contributes more than his or her commitment of capital to the partnership, then the surplus is considered to be a loan. This money would have earned interest if invested elsewhere, so to compensate for this loss of interest, the partner is paid interest. The agreement states the rate of interest on the partner's loan. It is often based on the return the money would have earned if it was invested elsewhere.
- » **Interest on drawings** – to discourage partners from making cash drawings, especially early in the accounting period, interest is sometimes charged on drawings. The rate of interest to be charged is stated in the agreement.
- » **Partners' salary** – to reward partners who work longer hours in the business or who take on more responsibilities, a salary is paid. The amount is stated in the agreement.

### Activity 1

- 1 Briefly explain how a partnership is different from a sole trader form of business.
- 2 State the minimum and maximum number of people who can form a partnership.
- 3 State three advantages of a partnership.
- 4 State three disadvantages of a partnership.
- 5 State five clauses that a partnership agreement may contain.
- 6 Explain why a partnership agreement is important.

**Key term**

A **profit and loss appropriation account** shows the distribution of profit among the partners of a partnership.

## Purpose of the profit and loss appropriation account

The set of accounting records maintained by partnerships do not differ from those maintained by sole traders. Financial statements comprising of the income statement and a statement of financial position are prepared, and are similar to those of sole traders with one exception: a partnership will prepare an additional account called the **profit and loss appropriation account**. This shows how the profit for the year, from the income statement, is distributed.

## Preparation of the profit and loss appropriation account

This account starts with profit for the year. Interest on drawings, if any, is added, increasing the amount to be appropriated (shared) by the partners. Salary and interest on capital is then deducted. What remains is called residual profit which is shared between the partners in the profit-sharing ratio agreed upon in the partnership agreement.

### Partners' loans

Partners sometimes contribute more than their share of capital and this surplus is treated as a loan. If the partnership requires money for a fixed period of time, partners can be motivated to loan the business money for a good rate of return. As with any loan, the interest on the loan is a business expense and is a charge to profit for the year.

Entries in connection with partners' loans:

#### When the loan is received

- » Debit: cash or bank
- » Credit: loan from partner account.

The loan account is recorded as a non-current liability in the statement of financial position.

#### When the loan is repaid

- » Debit: loan from partner account
- » Credit: cash or bank account.

#### Interest on loan paid

- » Debit: interest on loan account
- » Credit: cash or bank
- » The interest on loan is an expense charged to profits in the income statement.

## → Worked example 1

Mary and Jane are in partnership and share profits and losses in the ratio of 1:3. Mary has contributed a capital of \$4 000 and Jane, \$3 500, on which they are entitled to an interest of ten per cent per annum. Mary's drawings for the year ended 31 December 2018 are \$2 000 and Jane's are \$3 000. They are to be charged an interest of five per cent on drawings. Jane is to have a salary of \$500 per annum. The profit for the year, before appropriation, is \$7 000 for the year ended 31 December 2018. The balances on their current accounts are: Mary \$40, Jane \$600.

Profit and loss appropriation account for the year ended 31 December 2018				
		\$	\$	\$
Profit for the year				7 000
Add: Interest on drawings	Mary (5% × \$2 000)		100	
	Jane (5% × \$3 000)		<u>150</u>	<u>50</u>
				7 250
Less: Salary (Jane)			500	
Less: Interest on capital:	Mary (10% × \$4 000)	400		
	Jane (10% × \$3 500)	<u>350</u>	<u>750</u>	<u>1 250</u>
Residual profits to be shared				6 000
	Mary (¼ × \$6 000)		1 500	
	Jane (¾ × \$6 000)		<u>4 500</u>	<u>6 000</u>

## Activity 2

- State one reason why:
  - partners earn interest on capital
  - partners are paid a salary
  - partners are charged interest on drawings.
- Name the document which lists the rates of interest on drawings and capital in a partnership.
- Saleem and Sulaiman own a grocery store. The following balances were taken from their books at 31 December 2018:

	Saleem	Sulaiman
	\$	\$
Capital	45 000	30 000
Partnership salaries	4 000	2 000
Drawings	1 200	4 000

Additional information:

- » Interest on capital is to be allowed at ten per cent per annum.
- » The partnership's profit for the year was \$62 000.
- » Profits and losses are to be shared: Saleem – two thirds; Sulaiman – one third.

Prepare a profit and loss appropriation account for the year ended 31 December 2018.

**Key terms**

**Fixed capital account** is when the capital account of each partner remains at the figure of capital contributed by the partner.

**Current accounts** in a partnership are required to be maintained in addition to fixed capital accounts in which profits and losses, drawings, partners' salaries and interest are recorded.

**Fluctuating capital accounts** are capital accounts that record all the earnings, charges and withdrawals made by partners.

## Capital and current accounts

We will now look at the uses of and differences between capital and current accounts.

Capital accounts can be maintained in two ways by a partnership:

- » Fixed capital accounts
- » Fluctuating capital accounts.

### Fixed capital accounts

When the capital account of each partner remains at the figure of capital contributed by the partner year after year and does not change (for example, due to profits or interest earned or drawings made), then such an account is called a **fixed capital account**.

A **current account** must be maintained in *addition* to a fixed capital account in which profits and losses, drawings, partners' salaries and interest are recorded. The earnings (interest on capital, share of salary and profit) of a partner are credited to the current account. The amounts charged to the partner (drawings and interest on drawings and share of loss) are debited to the current account. Therefore, a debit balance on a current account will show that a partner has withdrawn from the business more than he has earned; a credit balance will show that the partner has withdrawn less than he has earned. A debit balance on the current account will also show that a partner owes money to the partnership.

### Fluctuating capital accounts

**Fluctuating capital accounts** record all the earnings, charges and withdrawals made by partners. Drawings and interest on drawings are debited to the capital account, while interest on capital, salary and share of profit are credited to the capital account. No current account is maintained. The opening and closing balance on this account will fluctuate.

**Key info**

Accrued loan interest owing to a partner will be credited in his or her current account. If a fluctuating capital account is maintained, then this loan interest is credited to the capital account of the partner concerned.

**Study tip**

Remember that the interest on partners' loans is to be charged as an expense in the income statement and not in the profit and loss appropriation account.

**Think about it!**

With a partner, think about why a fixed capital account would be preferable to a fluctuating capital account.

**Key info**

A drawings account is maintained for each partner to record their withdrawals. The total of this account is transferred to the debit of the current account at the end of the year.

### Activity 3

- 1 Name the financial statement in which the following are recorded.
  - a Partners' loans to the business
  - b Interest on partners' loans.
- 2 Name the account in which accrued interest on a partner's loan is recorded.
- 3 State one reason why a partner may have a debit balance on her current account.
- 4 State three items recorded in a profit and loss appropriation account.
- 5 State three items recorded in a partner's current account.

## Preparing partners' capital and current accounts

We will now look at how to prepare partners' capital and current accounts in ledger account form and as part of a statement of financial position.

## → Worked example 2

Using the information in Worked example 1, the current accounts of Mary and Jane are shown below:

Current accounts (in columnar form)							
Date	Details	Mary	Jane	Date	Details	Mary	Jane
2018		\$	\$	2018		\$	\$
Dec 31	Drawings	2 000	3 000	Jan 1	Balance b/d	40	600
Dec 31	Int. on drawings	100	150	Dec 31	Int. on capital	400	350
Dec 31	Balance c/d		2 800	Dec 31	Salary		500
				Dec 31	Profit share	1 500	4 500
				Dec 31	Balance c/d	160	
		<u>2 100</u>	<u>5 950</u>			<u>2 100</u>	<u>5 950</u>
2019				2019			
Jan 1	Balance b/d	160		Jan 1	Balance b/d		2 800

The capital accounts are:

Capital accounts (in columnar form)							
Date	Details	Mary	Jane	Date	Details	Mary	Jane
2018		\$	\$	2018		\$	\$
				Jan 1	Balance b/d	4 000	3 500

### Activity 4

- Carefully examine Mary's and Jane's current accounts above and answer the following:
  - State which partner has a closing debit balance. Give one reason for your answer.
  - State which partner has a closing credit balance. Give one reason for your answer.
  - Name the account from which the following entries were transferred.
    - Interest on drawings
    - Interest on capital
    - Salary
    - Share of profits.
- Milo Lyambo and Agatha Moses are partners who share profits and losses in the ratio 1:2. Agatha receives an annual salary of \$12 000. For the year ended 31 August 2018, the partnership's profit for the year was \$45 000.  
Calculate the total amount credited to Agatha's current account on 31 August 2018. Show your workings.
- Vanessa and Marissa decided to form a partnership. They agreed that they would be allowed interest on their capitals at ten per cent per annum and that Vanessa would receive a salary of \$3 000 a year. Profits and losses are shared: Vanessa – one third; Marissa – two thirds.  
In their first year ended 31 March 2018, the business made a profit for the year of \$30 000. Interest on capitals was as follows: Vanessa \$1 500 and Marissa \$900. The partners' drawings were as follows: Vanessa \$7 000 and Marissa \$3 000.
  - Calculate the capital contributions made by Vanessa and Marissa.
  - Prepare the partnership's profit and loss appropriation account for the year ended 31 March 2018.
  - Prepare the partners' current accounts (in columnar form) for the year ended 31 March 2018.
  - Prepare the partners' capital accounts (in columnar form) for the year ended 31 March 2018.

## Preparation of a statement of financial position

### Study tip

Always read an exam question carefully. If the question specifically asks for details, then show the capital and current accounts in full.

The statement of financial position for a partnership is similar to that of a sole trader, apart from the equity section. If fixed capital accounts are being maintained, then both the capital and current accounts should be shown.

The partnership can opt to use either of the following methods:

- » Show only the balances on the capital and current accounts.
- » Show the capital and current accounts in full detail.

### → Worked example 3

Taking information from Worked examples 1 and 2, the statement of financial position extracts are shown below for each method.

#### Method 1: showing only the balances on the capital and current accounts

Mary and Jane			
Statement of financial position as at 31 December 2018 (extract)			
	\$	\$	\$
	Mary	Jane	Total
Capital accounts	4 000	3 500	7 500
Current accounts	(160)	2 800	<u>2 640</u>
			<u>10 140</u>

#### Method 2: showing the current account in detail

Mary and Jane			
Statement of financial position as at 31 December 2018 (extract)			
	\$	\$	\$
	Mary	Jane	Total
Capital accounts	4 000	3 500	7 500
Current accounts			
Opening balance	40	600	
Interest on capital	400	350	
Share of profits	1 500	4 500	
Salary	—	<u>500</u>	
	1 940	5 950	
Less:			
Drawings	2 000	3 000	
Interest on drawings	100	150	
	<u>(160)</u>	<u>2 800</u>	<u>2 640</u>
			<u>10 140</u>

## Financial statements of partnerships with adjustments

### → Worked example 4

Trial balance as at 31 July 2018		
	Dr	Cr
	\$	\$
Capital accounts – Sunaina		20 000
– Fatima		19 000
Current accounts at 1 Aug 2017 – Sunaina		1 374
– Fatima		1 211
Office equipment at cost	6 000	
Motor vehicle at cost	9 700	
Provision for depreciation at 1 Aug 2017 – Motor vehicle		3 950
– Office equipment		1 680
Trade receivables and trade payables	21 000	6 645
Inventory at 1 Aug 2017	2 493	
Cash in hand	155	
Cash at bank	600	
Purchases and sales	71 600	100 000
Salaries	8 415	
Rent	1 400	
Drawings – Sunaina	4 060	
– Fatima	6 000	
	<u>153 860</u>	<u>153 860</u>



The following notes are applicable at 31 July 2018:

- Inventory at 31 July 2018 was \$15 780.
- Rent owing was \$200.
- Provide for depreciation using the straight-line method: motor vehicle 10 per cent per annum; office equipment 15 per cent per annum.
- Interest on capitals is to be allowed at 10 per cent per annum.
- Interest on drawings is to be charged: Sunaina \$200, Fatima \$310.

<b>Sunaina and Fatima</b>		
<b>Income statement for the year ended 31 July 2018</b>		
	\$	\$
Sales		100 000
<i>Less: cost of sales</i>		
Opening inventory	24 930	
Purchases	<u>71 600</u>	
	96 530	
<i>Less: closing inventory</i>	<u>15 780</u>	<u>80 750</u>
Gross profit		19 250
<i>Less: expenses</i>		
Depreciation – Office equipment	900	
– Motor vehicle	970	
Salaries	8 415	
Rent (\$1400 + \$200)	<u>1 600</u>	<u>11 885</u>
Profit for the year		7 365
<i>Add: interest on drawings – Sunaina</i>	200	
– Fatima	310	<u>510</u>
		7 875
<i>Less: interest on capital – Sunaina (10% x \$20 000)</i>	2 000	
– Fatima (10% x \$19 000)	<u>1 900</u>	<u>3 900</u>
		<u>3 975</u>
Residual profits to be shared – Sunaina $\frac{1}{5}$	795	
– Fatima $\frac{4}{5}$	3 180	<u>3 975</u>

### Study tip

When you calculate the share of profit for one of the partners and it is not a whole number, it must be rounded off. It is a good idea to subtract this rounded off amount from the residual profits to be shared to get an accurate figure for share of profit for the other partner(s).



Sunaina and Fatima			
Statement of financial position as at 31 July 2018			
	\$	\$	\$
<b>ASSETS</b>			
<b>Non-current assets:</b>	Cost	Depr.	NBV
Office equipment	6 000	2 580	3 420
Motor vehicle	<u>9 700</u>	<u>4 920</u>	<u>4 780</u>
	15 700	7 500	8 200
<b>Current assets:</b>			
Inventory		15 780	
Trade receivables		21 000	
Cash at bank		600	
Cash in hand		<u>155</u>	<u>37 535</u>
<b>Total assets</b>			<u><u>45 735</u></u>
<b>CAPITAL AND LIABILITIES</b>			
	Sunaina	Fatima	Total
<b>Capital:</b>	<u>20 000</u>	<u>19 000</u>	39 000
Current accounts:			
Balances at 1 August 2017	1 374	1 211	
Add: – Interest on capitals	2 000	1 900	
– Share of profits	<u>795</u>	<u>3 180</u>	
	4 169	6 291	
Less: – Drawings	(4 060)	(6 000)	
– Interest on drawings	<u>(200)</u>	<u>(310)</u>	
	<u>(91)</u>	<u>(19)</u>	(110)
<b>Current liabilities:</b>			
Trade payables		6 645	
Other payables		<u>200</u>	<u>6 845</u>
<b>Total capital and liabilities:</b>			<u><u>45 735</u></u>

### Activity 6

Look again at the Statement of financial position in Worked example 4. Explain why the balances on the current accounts of the partners (\$91 and \$19) are negative.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 In which accounts are salaries to staff and salaries to partners recorded in? [1]

	Staff salaries	Partners' salaries
A	Profit and loss appropriation	Profit and loss appropriation account
B	Profit and loss account	Profit and loss appropriation account
C	Profit and loss appropriation account	Profit and loss account
D	Profit and loss account	Profit and loss account

- 2 The profit for the year before appropriation in a partnership was \$50 000. Shagun, one of the partners, receives a salary of \$4 000 and interest at ten per cent per annum on her capital of \$100 000. Amir, the other partner, receives interest on capital at the same rate as Shagun. Amir's capital was \$89 000. They share profits and losses equally.

What was the total share of profits credited to Amir's current account?

- A \$13 550  
B \$15 350  
C \$22 450  
D \$24 250

[1]

- 3 Aimee and Bella are partners sharing profits and losses equally. They made a loss for the year before appropriation of \$6 000. Aimee is given a salary of \$1 200 for the extra work she puts in. Which value is debited to Aimee's current account as her share of the loss?

- A \$3 000  
B \$3 600  
C \$4 800  
D \$4 000

[1]

- 4 Which items should be entered in the current accounts of the partners in a partnership? [1]

	Staff salaries	Partners' salaries	Interest on bank loan
A		✓	
B	✓	✓	✓
C	✓		✓
D		✓	✓

- 5 In which section of the statement of financial position would a debit balance on a partner's current account be recorded?

- A Capital  
B Current assets  
C Current liabilities  
D Non-current liabilities

[1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

**6** X and Y are partners. The following trial balance was prepared after the preparation of the trading account for the year ended 31 December 2018:

<b>Trial balance as at 31 December 2018</b>		
	<b>Dr</b>	<b>Cr</b>
	<b>\$</b>	<b>\$</b>
Capital accounts: – X		12 700
– Y		11 500
Current accounts at 1 January 2018 – X		500
– Y	300	
Drawings – X	1 200	
– Y	800	
Land and buildings at cost	26 000	
Furniture at cost	8 000	
Motor vehicle at cost	12 000	
Trade receivables and payables	5 000	4 000
Inventory at 31 December 2018	6 400	
Loan given to partnership by X		10 000
Cash in hand	600	
Bank overdraft		600
Provision for depreciation 1 Jan 2018:		
Furniture		2 500
Motor vehicle		5 000
Provision for doubtful debts 1 Jan 2018		360
Administration expenses	2 400	
Selling expenses	2 600	
Gross profit		18 140
	<u>65 300</u>	<u>65 300</u>

Additional information:

- At 31 December 2018, administration expenses owing amounted to \$140 and selling expenses prepaid amounted to \$170.
- The provision for doubtful debts is to be maintained at eight per cent of trade receivables.
- Furniture is to be depreciated at ten per cent per annum using the reducing balance method. Motor vehicle is to be depreciated at ten per cent per annum using the straight-line method.
- The partnership agreement provides for:
  - Interest on partners' loans at five per cent per annum.
  - Interest on capital at two per cent per annum.
  - Profits and losses to be shared equally.

Prepare the profit and loss account and the profit and loss appropriation account for the partnership for the year ended 31 December 2018, and a statement of financial position as at that date.

[20]



- 7 Sally and Mally are in partnership. Their financial year ends on 30 September. On 1 October 2018, the balances on their capital and current accounts were as follows:

Capital accounts:		\$
Sally		50 000
Mally		30 000
Current accounts:		
Sally		1 000 (dr)
Mally		2 000 (cr)

On 1 January 2019, Sally, transferred the \$1000 debit balance on her current account to her capital account. On 1 February 2019, Mally paid an amount of cash into the business so that his capital was equal to Sally's.

Prepare the partners' capital accounts as they would appear in the ledger for the year ended 30 September 2019. [5]

- 8 Omar and Fatima Aziz are in partnership, trading as Aziz Stores. Their financial year ends on 31 March.

On 1 April 2010 the balances on the partners' capital and current accounts were:

	Capital account	Current account
	\$	\$
Omar Aziz	60 000	215 debit
Fatima Aziz	40 000	1 945 credit

Aziz Stores made a profit for each of the years ended 31 March 2009 and 31 March 2010.

- a On 1 April 2009 there was a credit balance on the current account of Omar Aziz. Explain what may have caused this balance to change to a debit balance on 1 April 2010. [2]
- During the year ended 31 March 2011 the partners made the following drawings.

	\$
Omar Aziz	2 900
Fatima Aziz	9 600

Omar and Fatima Aziz prepared the following profit and loss appropriation account for the year ended 31 March 2011.

		\$	\$
Profit for the year			13 575
Interest charged on drawings	Omar Aziz	87	
	Fatima Aziz	<u>288</u>	<u>375</u>
			13 950
Interest allowed on capital	Omar Aziz	2 400	
	Fatima Aziz	<u>1 600</u>	
		4 000	
Partner's salary	Fatima Aziz	<u>12 000</u>	<u>16 000</u>
			(2050)
Share of profit/loss	Omar Aziz	(1 230)	
	Fatima Aziz	<u>(820)</u>	<u>(2 050)</u>

- b** Prepare the partners' current accounts as they would appear in the ledger for the year ended 31 March 2011. Balance the accounts and bring down the balances on 1 April 2011. [11]
- c** Prepare an extract from the statement of financial position of Aziz Stores at 31 March 2011 to show the capital and current account balances of each partner and the total funds provided by the partners. It is not necessary to show full details of the current accounts. [5]
- d** State one advantage of maintaining both a capital account and a current account for each partner. [2]
- e** Instead of operating Aziz Stores as a partnership, Omar Aziz has suggested that they should form a limited company. Explain one reason why this may be of personal benefit to Omar and Fatima Aziz. [2]

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2011, Q3)

- 9** Abid and Faiz are partners. They operate a secretarial agency. Their financial year ends on 31 March. In addition to the capital invested, Abid made a 10-year loan to the business on 31 March 2016.
- a** State one advantage of being a partner rather than a sole trader [1]
- b** State one disadvantage of being a partner rather than a sole trader. [1]
- c** State one reason why a partner may make a loan to the business rather than investing additional capital. [1]
- d** State two reasons why it is important for the partnership to have an adequate amount of working capital. [2]

Abid and Faiz share profits and losses in the ratio of 2:1.

The balances on their accounts at 1 April 2015 were:

	Abid	Faiz
	\$	\$
Capital account	80 000	55 000
Current account	110 dr	800 cr

During the year ended 31 March 2016 the partners made the following drawings:

- Abid: \$6 000
- Faiz: \$7 000

The following is an extract from the profit and loss appropriation account for the year ended 31 March 2016.

		\$	\$
Profit for the year			13 170
Interest on drawings:	Abid	120	
	Faiz	140	<u>260</u>
			13 430
Interest on capital:	Abid	2 400	
	Faiz	1 650	
		4 050	
Salary	Faiz	<u>5 000</u>	<u>9 050</u>
Profit available for distribution			4 380



The following additional information is available on 31 March 2016.

	\$
Fixtures and equipment at book value	104 000
Motor vehicles at book value	28 520
Trade payables	11 900
Other payables	160
Trade receivables	19 320
Bank	16 080 dr
Loan from Abid	20 000

- e Prepare the statement of financial position at 31 March 2016. The details of the partners' current accounts may be shown within the statement or as a separate calculation. [13]
- f Calculate the return on capital employed (ROCE). Use the capital employed from the statement of financial position and the profit for the year of \$13 170. The calculation should be correct to two decimal places. Show your workings. [2]
- g Explain the importance of return on capital employed (ROCE). [2]

*(Adapted from Cambridge IGCSE Accounting 0452/22, May/June 2016, Q3)*

- 10 Raoul and Hassan agreed to form a partnership from 1 April 2011 to sell mobile telephones.
- a State two advantages of trading in partnership. [2]
  - b State two disadvantages of trading in partnership. [2]

On 1 April 2011, Raoul introduced capital of \$6 000 which was paid into the partnership bank account. Hassan introduced inventory valued at \$4 000.

On the same day, the partnership paid rent on a shop of \$600 and bought shop fittings for \$750. Both payments were made by cheque.

- c Prepare journal entries to record the setting up of the partnership. Narratives are not required. [8]

Raoul and Hassan agreed that they would allow interest on capital at 3 per cent per annum and that Raoul would have a partnership salary of \$3 000 per annum. It was agreed that they would share profits and losses in the ratio Raoul 2/5 and Hassan 3/5.

In the year ended 31 March 2012 the partnership made a profit of \$8 800.

- d Prepare the profit and loss appropriation account of the partnership for the year ended 31 March 2012. [8]
- e Prepare Raoul's current account for the year ended 31 March 2012. [4]
- f State one way in which the partnership agreement could be changed to recognise the fact that Raoul makes more sales than Hassan. [2]

*(Adapted from Cambridge IGCSE Accounting 0452/11, May/June 2012, Q5)*

## ? Chapter review questions

- 1 Explain why an appropriation account is necessary in a partnership's financial statements.
- 2 State two reasons why a sole trader might want to change to a partnership.
- 3 Explain why current accounts are maintained in some partnerships.
- 4 Susan and Mattam are in partnership. Susan gave the partnership a loan of \$50 000. State the double entry to record loan interest accrued.
- 5 State three items that appear in both the profit and loss appropriation account and in the partners' current accounts.

## Revision checklist

In this chapter, you have learnt:

- ✓ what a partnership is
- ✓ the advantages and disadvantages of forming a partnership
- ✓ why sole traders may want to form a partnership
- ✓ the importance and contents of a partnership agreement
- ✓ to explain the purpose of an appropriation account
- ✓ to prepare an appropriation account
- ✓ how to treat a partner's loan in the books of a partnership
- ✓ to prepare income statements and statements of financial position for a partnership
- ✓ to record interest on partners' loans, interest on capital, interest on drawings, partners' salaries and the division of the balance of profit or loss
- ✓ to make adjustments to financial statements in the same way as you did for sole traders
- ✓ the difference between fixed and fluctuating capital accounts
- ✓ to explain the uses of and differences between capital and current accounts
- ✓ to prepare partners' capital and current accounts in ledger account form and as part of a statement of financial position.

# Limited companies



By the end of this chapter you will be able to:

- ★ explain the advantages and disadvantages of operating as a limited company
- ★ understand the meaning of the term limited liability
- ★ understand the meaning of the term equity
- ★ understand the capital structure of a limited company comprising preference share capital, ordinary share capital, general reserve and retained earnings
- ★ understand and distinguish between issued, called-up and paid-up share capital
- ★ understand and distinguish between share capital (preference shares and ordinary shares) and loan capital (debentures)
- ★ prepare income statements, statements of changes in equity and statements of financial position
- ★ make adjustments to financial statements.

## Advantages and disadvantages of a limited company structure

In the two previous chapters, we learnt about sole traders and partnerships. We know that sole traders and partners have unlimited liability. This means there is no legal distinction between the owners of these business structures and the businesses they own. Their personal assets can be at risk if the business becomes insolvent.

A **limited company** overcomes this disadvantage as it is a form of business structure that limits the amount of liability placed on its owners, who are also known as **shareholders**. Shareholders are only liable for business debts equal to the value of their investment in the company in the form of shares. Therefore, shareholders enjoy **limited liability**.

Apart from this major advantage, limited companies find it easier to recruit staff or to raise finance, for example a bank loan. Compared to a sole trader or a partnership, a limited company can raise a lot of capital by issuing **shares**. People and institutions are attracted to investing in companies because of the limited liability.

One of the disadvantages of a limited company is that it must comply with many legal requirements and it must be registered at the time of formation. A limited company must publish its financial statements annually, so secrecy cannot be maintained. These are just two of the many legal requirements that apply to companies. Note that the shareholders do not run the company; instead they elect a board of directors who manage the company. Therefore, ownership and management are separated. This could be a limitation if the directors are not good stewards of the company's affairs.

### Key terms

A **limited company** is a form of business structure that is owned by shareholders who have limited liability. A limited company has a legally distinct entity.

**Shareholders** are part owners of a limited company. They are people or institutions who hold one or more shares in a company.

**Limited liability** means that the risk or liability that each shareholder bears is limited to the value of the shares they hold.

A **share** is a unit of investment in a company. These make up the capital of the company. They can have a nominal or face value of \$0.50, \$1, \$10, etc.



## Characteristics of limited companies

Limited companies are incorporated businesses with a legally distinct entity. They can enter into contracts in their own name and are responsible for their finances and actions. The profits of a company may be divided among the shareholders in the form of **dividends**. When a company makes a profit, it can invest some of the profit in the business in the form of retained earnings and distribute some as dividends to its shareholders.

A company must have a minimum of two owners, called shareholders, but there is no maximum. It can have an unlimited number of shareholders who contribute to the share capital, and this means a large amount of capital can be raised. This capital is also called **equity**.

### Key terms

A **dividend** is a portion of a company's earnings distributed to its shareholders.

**Equity** is the total monetary value of a company represented by issued share capital and reserves.

### Think about it!



If a company wanted to raise equity of \$100 000 by selling 10 000 shares, what would be the face value of each share?

## Meaning of 'limited liability'

The risk or liability that each shareholder (owner) bears is limited to the value of the shares they hold. If a shareholder has bought ten shares of \$100 each, she stands to lose only \$1 000 should the company liquidate. This is a major advantage enjoyed by the owners of a limited company. This feature also makes investing in limited companies very attractive.

## Meaning of 'equity'

Equity is the total monetary value of a company represented by the value of shares issued to shareholders, plus reserves.

### → Worked example 1

A company, with a share capital of \$500 000 consisting of shares of \$10 each, made a profit of \$150 000. It was decided to distribute all the profit as dividends.

$$\text{Number of shares in issue} = \frac{\$500\,000}{\$10} = 50\,000 \text{ shares}$$

$$\text{Dividend per share} = \frac{\$150\,000}{50\,000} = \$3$$

$$\text{Rate of dividend} = \frac{\$150\,000 \times 100}{500\,000} = 30\%$$

### Activity 1

- 1 Define:
  - a limited liability
  - b equity
  - c dividends
  - d limited company
  - e shares.
- 2 State two advantages and two disadvantages of a limited company.
- 3 'Companies can raise more finance than sole traders'. Explain what is meant by this statement.
- 4 A company had ordinary capital comprising 100 000 shares of \$0.50 each. Dividend is declared at the rate of ten per cent. Calculate the dividend per share.

## Capital structure of a limited company

We will now look at the capital structure of a limited company, which comprises preference share capital, ordinary share capital, general reserve and retained earnings.

### Types of shares that make up the share capital

There are two types of shares that a company can issue: **ordinary shares** and **preference shares**.

These shares contribute to the equity of a company. Ordinary shareholders are only paid dividends *after* the dividends of the preference shareholders have been paid. When a company is closing down, the assets remaining after all the trade payables, debenture holders and preference shareholders are paid, belong to the ordinary shareholders. Therefore, the ordinary shareholders may receive more, or less, than their original investment in the company.

Preference shares entitle their shareholders to certain rights which ordinary shareholders do not enjoy. Preference shareholders receive a dividend at a fixed rate which is expressed as a percentage of the nominal value of the share. This percentage is mentioned when the share is described, for example, four per cent preference shares. Preference share dividends are paid before the ordinary shareholders are paid their dividend. In the event of a company being **wound up**, preference shareholders are entitled to have their capital repaid before ordinary shareholders receive their capital. However, preference shareholders are not entitled to vote at the annual general meeting.

**Reserves** are profits ploughed back into the business. The two important types of reserves are:

- » retained earnings
- » the general reserve.

**Retained earnings** is profit that has not been appropriated (divided) as dividend or transferred to a general reserve. It is carried forward to the following year(s) to help meet future business needs.

A general reserve is created to meet potential unknown liabilities in the future. It could also be used if the company wants to expand in the future.

All the reserves go to make up the **total equity** and belong to ordinary shareholders.

### Issued, called-up and paid-up share capital

There are different terms used in connection with share capital. A company may decide to sell shares to raise finance. This is called issued share capital. If not all the issued share capital is required, the company may decide to request payment of only part of each share. This means that if the company issues 100 000 shares of \$10 each and decides to request payment of only \$2 a share, the called-up share capital is \$200 000. Sometimes shareholders default on payment. The amount of share capital that has been paid up by shareholders is called paid-up share capital.

#### Key terms

**Ordinary shares** form what is known as the equity of a company.

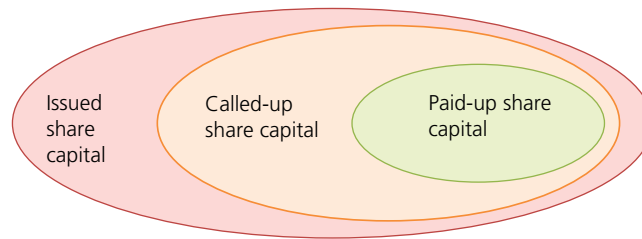
**Preference shares** entitle their shareholders to certain rights which ordinary shareholders do not enjoy.

**Reserves** are profits ploughed back into the business. They are normally used for future expansion of the business, for example, a general reserve.

**Retained earnings** is profit that is kept in the company and not paid out as dividends to shareholders. Retained earnings is a very important source of finance for the business and is normally used for future growth. It is a reserve.

**Total equity** is the sum of the ordinary share capital and ploughed back profits in the form of the general reserve and retained earnings.

**Winding up** is the process of selling all the assets of a business, paying off trade and other payables and any loans, then distributing any remaining funds between the shareholders.



▲ Types of share capital

## → Worked example 2

Akoranga Jandals Ltd was formed on 1 May 2018 with the issue of 250 000 shares of \$1 each. Shareholders were asked to pay \$0.25 for each share. All the calls have been paid except for \$500.

- The issued capital was \$250 000.
- The called-up capital was \$62 500 ( $0.25 \times \$250\,000$ ).
- The paid-up capital was \$62 000.

## Activity 2

Mornington Ltd was formed on 1 March 2018. It issued 350 000 shares of \$1 each. Shareholders were asked to pay 50 per cent for each share. All the calls have been paid except for \$1 000.

Calculate:

- a issued capital
- b called-up capital
- c paid up capital

### Key term

**Debentures** are a source of long-term funds for a limited company. The interest on debentures is charged to the income statement and a company must pay it, regardless of whether it has made a profit or loss.

## Share capital and loan capital

A company may need other long-term funds apart from those received from the issue of ordinary shares. As seen earlier, preference shares are one such source. However, there is another important source of long-term funds known as **debentures**. Debentures are long-term loans that carry a fixed rate of interest, which is charged to the income statement and must be paid whether the company has made a profit or loss. Debenture holders are not owners of the company and cannot vote at annual general meetings. A debenture is listed as a non-current liability in the statement of financial position, not under total equity. If the debenture is due for redemption within one year, then it is shown as a current liability. Debenture holders are repaid before the shareholders of a company in the event of the company being wound up.

### Think about it!

If a company wanted to raise funds, why might it prefer to issue debentures and not shares?



Debentures are different from ordinary shares in the following ways:

- » Ordinary shares are known as equity capital and debentures are known as loan capital.
- » Ordinary shareholders are part owners of the company and have ownership rights such as voting at annual general meetings. Debenture holders are creditors and do not have any ownership rights.
- » The interest on debentures must be paid whether the company has made a profit or a loss. This interest appears as an expense in the income statement. Dividends do not have to be paid if the company has accumulated losses. However, the reserves that make up part of total equity can be used to pay ordinary share dividends in the year the company has made a loss.
- » Ordinary shareholders are the last to be paid in the event of the company winding down. Debenture holders are the first to be paid.

### Key terms

#### Administration expenses

are expenses that a company incurs which are not included in selling and distribution and finance costs. For example, depreciation of equipment, rent.

#### Selling and distribution expenses

are those expenses incurred in the sales and promotion of the company's products. For example, depreciation on motor vehicles used to deliver goods to customers, advertising and irrecoverable debts.

**Finance costs** are those expenses that are incurred when servicing a loan or a debenture, for example debenture interest.

A **statement of changes in equity** records events that were responsible for the increase or decrease of total equity in an accounting period.

**Interim dividends** are paid, either half-yearly or quarterly, before the financial statements are prepared.

### Activity 3

- 1 State two differences between a preference share and an ordinary share.
- 2 State two differences between a debenture and an ordinary share.

## Financial statements of a company

A company's financial statements are very similar to those of a sole trader. The trading account section of the income statement is no different from that of a sole trader. The income statement of a company is similar to that of a sole trader in every respect except for the points of difference described below.

The expenses are grouped and mentioned in this order:

- 1 **Administration expenses**
- 2 **Selling and distribution expenses**
- 3 **Finance costs.**

A statement of changes in equity should be prepared. The statement of financial position must also be prepared and is explained in detail later in this chapter.

## Statements of changes in equity

In the previous chapter, you learnt how to prepare a profit and loss appropriation account for a partnership. Unlike a partnership, companies produce a statement called the statement of changes in equity and this replaces the profit and loss appropriation account. The statement of changes in equity shows the following:

- » **Distributions of equity** – in the form of dividends, for example. Only dividends paid during the year are recorded in the statement of changes in equity. Therefore, dividends declared the previous year but paid in the current year will be included in the **statement of changes in equity**.
- » **Interim dividends** – paid half-yearly or quarterly will also be mentioned. Interim dividends are paid *during* the financial year by the board of directors when they decide to reward the shareholders with a dividend, if the company

is doing very well. Interim dividends do not require the approval of the shareholders.

- » **Proposed dividends** will *not* be included in the statement.
- » **Contributions to equity** – for example, by way of a new issue of shares.
- » **Reconciliation** – between opening and closing carrying amounts of the components of the equity section of the statement of financial position, such as share capital and reserves.
- » **Opening and closing retained earnings.**
- » **Transfers to/from general reserve.**

### Key info

Proposed dividends are only mentioned in a note to financial statements. They will not, therefore, appear as a current liability in the statement of financial position.

### Activity 4

- 1 Explain briefly:
  - a interim dividend
  - b retained earnings
  - c reserves.
- 2 Explain why companies decide to plough back a proportion of their profit.

## Statements of financial position

The assets section of the statement of financial position is like that of a sole trader. The liabilities section of the statement of financial position will also be similar, except for accrued debenture interest. The equity section, however, is very different as it contains details of the different types of shares, such as ordinary and preference shares, and reserves, such as the general reserve and retained earnings. The share capital and reserves are known as total equity.

## Financial statements of a company with adjustments

As already mentioned, the financial statements of companies are similar to those of a sole trader, except for the statement of changes in equity and the total equity section in the statement of financial position. Year-end adjustments are made in the same way they were made for sole trader financial statements: provisions are made for depreciation of non-current assets and doubtful debts. Prepayments and accruals are also considered so that the financial statements show a 'true and fair view' of the financial performance and position of the company.

### → Worked example 3

Aka Ltd's trial balance at 31 December 2018 is given below.

	Dr	Cr
	\$	\$
Sales revenue		450 000
Purchases	157 000	
Carriage outwards	12 000	
Land and buildings	308 750	
Motor vehicles	80 000	
Machinery	76 000	
Provision for depreciation:		
Land and buildings		41 000
Motor vehicles		20 000
Machinery		30 000
Inventory at 1 January 2018	37 000	
Salaries	78 000	
General expenses	34 000	
Interest on debentures	5 000	
Trade receivables	75 000	
Trade payables		40 000
Bank	41 000	
100 000 ordinary shares of \$1 each		100 000
10% debentures (2028)		150 000
General reserve		65 000
Retained earnings b/f		12 000
Interim dividends paid:		
Ordinary	4 250	
	<u>908 000</u>	<u>908 000</u>

Additional information:

Think about it!

Will the final dividend recommended by the directors be included in the statement of financial position?

How much of the debenture interest is owing?

- Inventory at 31 December 2018 was \$46 000.
- Depreciation for the year is to be provided as follows:
  - Land and buildings \$5 000
  - Motor vehicles \$2 000
  - Machinery \$3 000
- A transfer of \$52 000 is to be made to general reserve.
- Debenture interest is accrued.
- The directors have recommended a final dividend of ten per cent for each ordinary share.
- Of the salaries, \$50 000 was paid to sales staff.
- The motor vehicles were used for delivery purposes.

**Think about it!**

Working in pairs, discuss why the depreciation of motor vehicles was included in the selling and distribution expenses.

<b>Aka Limited</b>			
<b>Income statement for the year ended 31 December 2018</b>			
	\$	\$	\$
Sales revenue			450 000
Less: cost of revenue:			
Opening inventory		37 000	
Purchases		<u>157 000</u>	
		194 000	
Less: closing inventory		<u>46 000</u>	<u>148 000</u>
Gross profit			302 000
Less expenses:			
Administration expenses:			
Salaries of administration staff	28 000		
General expenses	34 000		
Depreciation:			
Land and building	5 000		
Machinery	<u>3 000</u>	70 000	
Selling and distribution expenses:			
Sales staff salaries	50 000		
Carriage outwards	12 000		
Depreciation of motor vehicles	<u>2 000</u>	<u>64 000</u>	<u>134 000</u>
Profit before interest			168 000
Finance costs:			
Debenture interest			<u>15 000</u>
Profit for the year			<u>153 000</u>

The statement of changes in equity:

<b>Aka Limited</b>				
<b>Statement of changes in equity for the year ended 31 December 2018</b>				
	Share capital	General reserve	Retained earnings	Total
	\$	\$	\$	\$
Balance at 1 January	100 000	65 000	12 000	177 000
Profit for the year			153 000	153 000
Dividend paid (interim)			(4 250)	(4 250)
Transfer to general reserve		52 000	(52 000)	
Balance at 31 December 2018	100 000	117 000	108 750	325 750



The statement of financial position:

Aka Limited			
Statement of financial position as at 31 December 2018			
ASSETS	Cost	Accumulated depreciation	Net book value
<b>Non-current assets:</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Land and buildings	308 750	46 000	262 750
Machinery	76 000	33 000	43 000
Motor vehicles	<u>80 000</u>	<u>22 000</u>	<u>58 000</u>
	<u>464 750</u>	<u>101 000</u>	363 750
<b>Current assets:</b>			
Inventory		46 000	
Trade receivables		75 000	
Bank		<u>41 000</u>	<u>162 000</u>
<b>Total assets</b>			<u>525 750</u>
EQUITY AND LIABILITIES			
<b>Equity:</b>			
100,000 ordinary shares of \$1 each			100 000
General reserve			117 000
Retained earnings			<u>108 750</u>
Total equity			325 750
<b>Non-current liabilities:</b>			
10% debentures (2028)			150 000
<b>Current liabilities:</b>			
Trade payables		40 000	
Other payables (accrued debenture interest)		<u>10 000</u>	<u>50 000</u>
<b>Total equity and liabilities:</b>			<u>525 750</u>



## Activity 5

The trial balance of Billy Merchants Ltd as at 31 December 2019 is as follows:

	Dr	Cr
	\$	\$
Sales revenue		370 000
Purchases	219 000	
Carriage outwards	5 250	
Inventory at 1 January 2019	47 000	
Land and buildings	158 750	
Furniture and fixtures	79 000	
Motor vehicles	77 000	
Salaries	65 000	
General expenses	47 000	
Provision for depreciation:		
Land and buildings		38 000
Furniture and fixtures		30 000
Motor vehicles		40 000
Interest on debentures	5 000	
Trade receivables and payables	85 000	50 000
Bank	35 000	
100,000 ordinary shares of \$1		100 000
General reserve		16 000
10% debentures (2029)		150 000
Retained earnings		36 000
Interim dividends paid	<u>7 000</u>	
	<u>830 000</u>	<u>830 000</u>

Additional information:

- Inventory at 31 December 2019 was \$44 000.
  - Depreciation for the year is to be provided as follows:
    - Land and buildings \$6 000
    - Motor vehicles \$4 000
    - Furniture and fixtures \$5 000.
  - The directors have recommended a final dividend of five per cent for each ordinary share.
  - Of the salaries, \$50 000 was paid to sales staff.
  - The motor vehicles were used for delivery purposes.
  - Accrued general expenses at 31 December 2019 were \$9 000.
- 1 Prepare Billy Merchant Ltd's income statement for the year ended 31 December 2019, giving as much detail as possible.
  - 2 Prepare a statement of changes in equity for the year ended 31 December 2019.
  - 3 Prepare Billy Merchant Ltd's statement of financial position as at 31 December 2019, giving as much detail as possible.

### Study tip

Calculate debenture interest and include it in the income statement as well as in the statement of financial position as an accrual.

The proposed final dividend will not be mentioned in the financial statements.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Lima Ltd provides the following information:

	\$
Issued and paid up share capital	100 000
12 per cent debentures	30 000
General reserve	20 000
Retained earnings	14 000

What is the total of Lima Ltd's total equity?

- A \$134 000  
 B \$144 000  
 C \$150 000  
 D \$164 000 [1]
- 2 Which item does not appear in the statement of changes in equity of a company?
- A Interim dividend  
 B Proposed dividend  
 C Retained earnings  
 D Transfer to general reserve [1]
- 3 A limited company issued 100 000 shares of \$0.50 each. It called up 50 per cent of the issued shares. All calls except for \$1000 was paid. What is the paid-up capital of the company?
- A \$24 000  
 B \$26 000  
 C \$49 000  
 D \$99 000 [1]
- 4 A limited company issued 200 000 shares of \$1 each. A year later it declared a dividend of \$0.25 for each share. What was the rate of dividend?
- A 0.25 per cent  
 B 2.5 per cent  
 C 25 per cent  
 D 50 per cent [1]
- 5 Which statement is true?
- A Debentures are a form of loan capital.  
 B Debentures are included in total equity.  
 C Debenture holders have voting rights at shareholder meetings.  
 D Debenture interest is paid only if the company has made a profit. [1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 The financial year of Ji Chung Ltd ends on 30 September. The following balances appeared on the books after the income statement for the year ended 30 September 2019 was prepared:

	\$
Non-current assets at cost	400 000
Provision for depreciation of non-current assets	63 350
Five per cent Debentures	30 000
Ordinary share capital 250,000 shares of \$1 each	250 000
Trade receivables	14 400
Trade payables	30 000
Inventory	15 300
Petty cash	150
General reserve 1 October 2018	12 000
Retained earnings 1 October 2018	3 000

Additional information:

- The profit before debenture interest for the year ended 30 September 2019 was \$54 000.
- During the year ended 30 September 2019 an interim ordinary share dividend of \$0.05 for each share was paid.

At 30 September 2019:

- no final ordinary share dividend was proposed
  - a whole year's interest on debentures was accrued
  - \$7 000 was transferred to general reserve.
- Calculate the accrued debenture interest. [2]
  - Calculate the profit after interest. [1]
  - Calculate the interim dividend paid. [2]
  - Prepare the statement of changes in equity for the year ended 30 September 2019. [5]
  - Prepare the statement of financial position as at 30 September 2019. [10]
  - Explain two features of ordinary shares. [2]
  - Explain two features of debentures. [2]

- 7** The financial year of Sildean Ltd ends on 30 April. The following balances appeared on the books after the preparation of the income statement for the year ended 30 April 2013.

	\$
Non-current assets at cost	206 000
Provision for depreciation of non-current assets	12 500
Ordinary share capital 280 000 shares of \$0.50 each	140 000
4% debentures	40 000
Trade payables	14 156
Trade receivables	15 400
Inventory	16 300
Petty cash	200
Bank overdraft	7 982
Provision for doubtful debts	462
General reserve 1 May 2012	10 000
Retained earnings 1 May 2012	2 000

Additional information:

- The profit for the year ended 30 April 2013 before debenture interest was \$24 800
- During the year ended 30 April 2013 an interim ordinary share dividend of \$0.05 per share was paid.
- At 30 April 2013:
  - A whole year's interest on debentures was accrued.
  - No final ordinary share dividend was proposed.
  - It was proposed to transfer \$5 000 to general reserve.
- a** Prepare the statement of financial position of Sildean Ltd at 30 April 2013. [10]
- b i** Calculate the current ratio at 30 April 2013. The calculation should be correct to two decimal places. [2]
- ii** Calculate the liquid (acid test) ratio at 30 April 2013. The calculation should be correct to two decimal places. [2]
- iii** Explain the importance of the liquid (acid test) ratio to Sildean Ltd. [2]
- iv** Suggest two ways in which Sildean Ltd could increase the liquid (acid test) ratio. [2]
- c** Explain two features of ordinary shares. [2]
- d** Explain two features of debentures. [2]

*(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2013, Q4)*

- 8** Lo Shung Limited sells business stationery and their financial year ends on 30 September. After preparing the income statement for the year ended 30 September 2011 the trial balance showed the following items.

	\$
Equipment	18 500
Provision for depreciation	9 800
Inventory (30 September 2011)	4 500
Trade receivables	8 700
Bank and cash	1 000 dr
Trade payables	5 800
Other payables	900
3% debentures repayable 2020	6 000
Share capital	5 000
Retained earnings brought forward	1 200
Profit for the year	4 000

- a** Prepare Lo Shung Limited's statement of financial position at 30 September 2011. [11]
- b** The management of Lo Shung Limited are interested in measuring their company's performance. In the table below, place a tick (✓) under the correct heading to show whether the accounting ratio measures profitability or liquidity. [3]

	Profitability	Liquidity
Profit margin		
Current ratio		
Return on capital employed		

- c** From the information above and your answer to a, calculate the return on opening capital employed for Lo Shung Limited. Show your workings and give your answer to two decimal places. [4]

(Adapted from Cambridge IGCSE Accounting 0452/13, October/November 2011, Q6)

## ? Chapter review questions

- 1 Define the following terms:
  - a debentures
  - b dividend
  - c paid-up capital
  - d retained earnings
  - e total equity
- 2 List one difference between:
  - a ordinary shares and preference shares
  - b proposed dividend and interim dividend
  - c debentures and preference shares
  - d issued share capital and called-up capital
  - e total equity and loan capital.
- 3 State:
  - a two items in the equity section of a company's statement of financial position
  - b two items in a company's statement of changes in equity
  - c two types of expenses in a company's income statement
  - d two items in the current assets section of a company's statement of financial position
  - e one item in the non-current liability section of a company's statement of financial position.
- 4 A company is financed by:
  - 20 000 ordinary shares of \$0.50 each
  - \$4 000 ten per cent loan.

In its first year of trading the company made a profit before interest of \$3000.  
Calculate the maximum dividend payable per ordinary share from this year's profits.
- 5 A company has issued 1.5 million ordinary shares of \$0.25 each. Proposed dividend is \$50 000.  
Calculate the dividend as a percentage.

## Revision checklist

In this chapter, you have learnt:

- ✓ how the structure of a limited company differs to a sole trader and a partnership
- ✓ what is meant by limited liability
- ✓ the advantages and disadvantages of a limited company
- ✓ who are shareholders
- ✓ the characteristics of limited companies – a separate legal identity and ownership separated from management
- ✓ what shares are and the different types of shares available
- ✓ the different types of share capital
- ✓ the difference between equity capital and loan capital
- ✓ what a debenture is
- ✓ how to prepare a company's income statement with year-end adjustments
- ✓ how to prepare a statement of changes in equity
- ✓ how to prepare a company's statement of financial position.

# Clubs and societies

By the end of this chapter you will be able to:

- ★ distinguish between receipts and payments accounts and income and expenditure accounts
- ★ prepare receipts and payments accounts
- ★ prepare accounts for revenue-generating activities, for example, refreshments, subscriptions
- ★ prepare income and expenditure accounts and statements of financial position
- ★ make adjustments to financial statements
- ★ define and calculate the accumulated fund.

## Background to clubs and societies



### Key info

Remember that non-profit organisations such as clubs and societies do not exist to make a profit for distribution to their owners, as there are none, but to provide a service or facility for members. Some non-profit organisations are formed for social and welfare or charitable purposes.

Examples of non-profit organisations are:

- social welfare clubs
- sports societies
- drama clubs.

▲ Fundraising for a non-profit organisation

Clubs and societies are often referred to as non-profit organisations or non-trading organisations. Examples of such organisations are recreation clubs, sports clubs and other activity-centred clubs, often operated largely by volunteers. Charities are also non-profit making in the normal business sense. Organisations such as these aim mainly to provide social and welfare services for their members, and not to make a profit for owners. A business, on the other hand, exists with the main aim to make a profit for its owners.

Non-profit organisations will frequently raise funds in a variety of ways. They may even run profit-making events such as selling refreshments. Any fundraising events are used to make money for the benefit of the organisation and the members, or is given to a charity.

Most non-profit organisations such as these require funds (a supply of money) to operate. Many of these organisations can have relatively large funds at their disposal and so proper accounts must be kept as it is important to ensure that no one in the organisation can be accused of fraud.

The treasurer of a club or society has the responsibility for maintaining proper accounting records and handling the money received and paid.

Source of funds received by a non-profit organisation include **subscriptions**, money made from fundraising activities and donations. Such organisations do not earn profits from the sale of goods in the same way that a sole trader does.

Any 'profit' that a non-trading organisation makes is not passed on to the owners (there are none) but is usually kept within the organisation. 'Profit' in the case of a non-profit organisation is referred to as a surplus and a 'loss' is referred to as a deficit. Some very small organisations may only keep a record of what is received and spent. The treasurer of more prominent organisations may keep proper accounting records based on the double entry system.

The financial statements of a non-profit making organisation usually consist of the receipts and payments account, an income and expenditure account and a statement of financial position. A trading account may possibly be maintained for a profit-making shop or café. The trading account is used to calculate the profit earned from these undertakings.

#### Key term

A **subscription** is a fee paid regularly by the members of a non-profit making organisation in order to belong to the organisation.

## Receipts and payments accounts and income and expenditure accounts

### Receipts and payments account

This is a summarised version of the cash book. Any money received is debited and all money paid is credited. Therefore, non-monetary expenses such as depreciation are not included in this account. If money is received in advance, no adjustments are made for prepayments. Similarly, accruals do not affect the receipts or payments recorded in the account. Expenditure, whether capital or revenue, is credited to the account, and any income, whether capital or revenue, is debited to the account. Opening and closing balances could either represent cash with the treasurer, or cash in the bank, or a combination of both, as no distinction is made between cash and bank transactions.



## → Worked example 1

### Prepare a receipts and payments account

The Champion Sports Club provides facilities to its members to take part in sports activities. The treasurer provides the following information for the year ended 30 April 2019:

	\$
Opening balance of cash	2 500
Subscriptions received	9 000
Receipts from fund-raising event	4 000
Donations	12 000
Entrance fees	16 000
Rent paid for hall hire	4 000
Electricity	1 000
Sports equipment purchased	30 000

#### Champion Sports Club

##### Receipts and payments account for the year ended 30 April 2019

Date	Receipts	\$	Date	Payments	\$
2018			2019		
May 1	Balance b/d	2 500	Apr 30	Rent of hall	4 000
2019				Electricity	1 000
Apr 30	Subscriptions	9 000		Sports equipment	30 000
	Receipts from event	4 000		Balance c/d	8 500
	Donations	12 000			
	Entrance fees	16 000			
		<u>43 500</u>			<u>43 500</u>
May 1	Balance b/d	8 500			

### Activity 1

- 'Profit-making is not the main aim of a non-profit making organisation.' Explain what is meant by this statement.
- Explain the following terms used in a non-profit making organisation:
  - treasurer
  - subscriptions.
- The Honest Golf club had \$4 500 in the bank on 1 July 2018. All receipts are paid into the bank and all payments are made by cheque. The following information is provided for the year ended 30 June 2019:

	\$
Subscription received	3 560
Payment of golf competition fees	60
Ground rent received	400
Travelling expenses	179
General expenses	2 000
Purchase of new equipment	1 000
Receipts from spectators	2 000
Net proceeds from annual fair	450

Prepare a receipts and payments account for the year ended 30 June 2019.

## Income and expenditure account

This account is similar to the income statement of a sole trader in the following ways:

- » The accruals principle is followed, in that accruals are added to expenses whereas prepayments are subtracted from expenses.
- » No capital income or expenditure is included.
- » Non-cash items like depreciation are provided for.
- » Assets and liabilities are not recorded here but in the statement of financial position.

Expenses from a one-off activity should be subtracted from the income earned from that activity and the difference entered as income (if expenses were less than income) or expenditure (if expenses were more than income earned from the activity) in the income and expenditure account.

If the total income exceeds the total expenditure in the income and expenditure account, it is referred to as a surplus of income over expenditure. If, however, income is less than expenditure, then the difference is called a deficit or an excess of expenditure over income.

### → Worked example 2

#### Prepare income and expenditure accounts

The treasurer of Posh Golf Club gives you the following information for the year ended 30 June 2019:

Receipts	\$	Payments	\$
Income from competition	4 000	Rates	400
Rent from hall hired out	2 000	Electricity	1 000
Subscriptions	5 000	Treasurer's salary	500
		Competition expenses	300
		Repairs to premises	140

Posh Golf Club			
Income and expenditure account for the year ended 30 June 2019			
	\$		\$
INCOME			
Subscriptions			5 000
Competition income	4 000		
Less: competition expenses	<u>300</u>		3 700
Rent receivable			<u>2 000</u>
			10 700
Less expenditure:			
Rates	400		
Electricity	1 000		
Treasurer's salary	500		
Repairs to premises	140		<u>2 040</u>
Surplus of income over expenditure			<u>8 660</u>



## Activity 2

- 1 Explain to a new treasurer of a non-profit making organisation the meaning of the following terms:
  - a surplus
  - b deficit.
- 2 The Abu Ansari Book Club gives you the information for the year ended 31 December 2018:

Receipts	\$	Payments	\$
Income from competition	300	Rent of reading rooms	250
Fees received	100	Competition prizes	100
Subscriptions	600	Repairs to books	50

Prepare the income and expenditure account for the year ended 31 December 2018.

## Preparing accounts for revenue-generating activities

Some non-profit making organisations run a profitable venture to fund their activities. These may take the shape of a one-off event such as a competition, or they may be a continuous operation such as a shop or a café. The account in which this profit is calculated is called the trading account. As with a sole trader's trading account, the expenses of running the activity or event are subtracted from the revenue earned, to arrive at a profit or loss that is transferred to the income and expenditure account as income.

### → Worked example 3



Aces Football Club has a café. The following information for the year ended 31 July 2019 is provided by the treasurer of the club:

	\$
Inventory at 1 August 2018	460
Inventory at 31 July 2019	500
Café sales	4 000
Café purchases	1 340
Wages of café staff	2 000

Aces Football Club		
Café trading account for the year ended 31 July 2019		
	\$	\$
Sales		4 000
Less cost of sales:		
Opening inventory	460	
Add purchases	<u>1 340</u>	
	1 800	
Less closing inventory	<u>500</u>	
Cost of sales	1 300	
Wages of café staff	<u>2 000</u>	<u>3 300</u>
Profit for the year from café (transferred to income and expenditure account)		<u>700</u>

**Study tip**

If a one-off profit-making activity is carried out, it is called an ancillary (additional) or subsidiary activity. The expenditure on the activity is subtracted from the income. This must be done before drawing up the income and expenditure account. If there is a profit from the activity, entries should be made in the income section. If there is a loss, it should be shown under expenditure.

**Activity 3**

- 1 When does a non-profit making organisation prepare a trading account?
- 2 Prepare a café trading account for the Roadrunners Club for the year ended 30 June 2019 using the information below:

	\$
Inventory at 1 July 2018	3 000
Inventory at 30 June 2019	3 500
Café sales	5 000
Purchases	1 500
Wages of part-time café staff	600

**Key term**

The **accumulated fund** replaces the capital in the statement of financial position of a non-profit making organisation. It represents the surpluses that have collected over the life of the organisation.

**Statement of financial position**

The statement of financial position for a non-profit making organisation is similar to that of a sole trader. It lists the assets and liabilities of the organisation in the same way as a sole trader's does. However, as there are no owners to invest in the organisation, there is no owners' equity or capital. Instead, the surpluses accumulate over time and this replaces the capital in the statement of financial position. As the members of such an organisation are not owners, they are not entitled to make any drawings. The accumulated surpluses that replace capital is known as the **accumulated fund**. Annual surpluses from the income and expenditure accounts are added to this fund and deficits subtracted.

### → Worked example 4

Lido Exercise Club was formed to provide exercise facilities for its members. The club has a shop attached to it. The club had the following balances in its books on 1 January 2018:

Think about it!

Working in a pair, use your knowledge of the accounting equation to work out a formula for accumulated fund.

	\$
Clubhouse	20 000
Equipment	15 600
Accumulated fund	15 710
Balance at bank	1 460

Additional information:

- Provision for depreciation of equipment of \$600 is to be made for the year ended 31 December 2018.
- Shop inventory at 31 December 2018 was valued at \$1 000.
- Surplus of income over expenditure for the year ended 31 December 2018 was \$21 750.

The statement of financial position is:

Lido Exercise Club			
Statement of financial position as at 31 December 2018			
ASSETS	Cost	Accumulated depreciation	Net book value
Non-current assets	\$	\$	\$
Clubhouse	20 000	—	20 000
Equipment	<u>15 600</u>	<u>600</u>	<u>15 000</u>
	<u>35 600</u>	<u>600</u>	35 000
Current assets			
Inventory		1 000	
Cash at bank		<u>1 460</u>	<u>2 460</u>
Total assets			<u>37 460</u>
ACCUMULATED FUND			
Accumulated fund: Opening balance			15 710
Add: surplus			21 750
Total accumulated fund			<u>37 460</u>

#### Study tip

Remember that surpluses of income over expenditure are added to the accumulated fund, and deficits are withdrawn from it.

### Activity 4

- 1 State what is meant by the term accumulated fund?
- 2 Explain how a deficit will affect the accumulated fund.

## Adjustments to financial statements

Adjustments made to financial statements are very similar to the adjustments made to the financial statements of sole traders. However, there is one important item that requires adjustments in a non-profit making organisation's financial statements that does not appear in a sole trader's financial statements: subscriptions.

The subscriptions received from members during the year are mentioned in the receipts and payments account. However, the matching principle states that the amount to be recorded in the income and expenditure account should be subscriptions relating to that year only. Therefore, accruals and prepayments need to be adjusted for at the start and at the end of the year. A subscriptions account is opened for the purpose.

The diagram shows a T-account for 'A subscriptions account'. The left side (debit) has entries for Jan 1 (Balance b/d (accrued) XX), Dec 31 (Income and expenditure account XXX), and Dec 31 (Balance c/d (prepaid) XX). The right side (credit) has entries for Jan 1 (Balance b/d (prepaid) XX), Cash/bank (XXX), and Dec 31 (Balance c/d (accrual) XX). Arrows point from explanatory boxes to specific entries: a green box points to the Jan 1 debit entry; a blue box points to the Jan 1 credit entry; a blue box points to the Dec 31 debit entry; a blue box points to the Dec 31 credit entry; an orange box points to the Dec 31 debit entry; and an orange box points to the Dec 31 credit entry.

Date	Details	\$	Date	Details	\$
2018			2018		
Jan 1	Balance b/d (accrued)	XX	Jan 1	Balance b/d (prepaid)	XX
Dec 31	Income and expenditure account	XXX		Cash/bank	XXX
Dec 31	Balance c/d (prepaid)	XX	Dec 31	Balance c/d (accrual)	XX

This entry records subscriptions due at the start of the year

This entry records subscriptions received in advance for this year

This entry records subscriptions received in advance for the next year

This is the amount transferred to the income and expenditure account

This entry records subscriptions due at the end of the year

This is the amount received during the year

▲ A subscriptions account

## Subscriptions in advance

Subscriptions in advance at the end of the financial year represent an amount received for the following year's subscriptions and so cannot be treated as income in the present year. In adjusting subscriptions, therefore, this amount will be debited in the subscriptions account. This amount is treated as a current liability in the statement of financial position because for a short time the organisation owes these members for payment received but not due.

## Subscriptions in arrears

This amount represents the subscriptions due for the year but which remain unpaid at the end of the year. They are treated as income in the present year. Therefore, this amount will be credited in the subscriptions account. This amount is listed as a current asset in the statement of financial position as it represents members who owe the organisation money.

### Key info

The income and expenditure account is just like the income statement of a business, containing only revenue income and expenditure for the year. Adjustments are made for prepayments and accruals in exactly the same way as in the income statement.

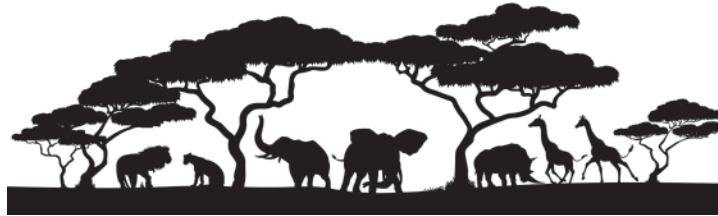
### Key info

The differences in terms used in the accounting records of profit making organisations and non-profit making organisations as shown in Table 18.1.

**Table 18.1** Differences in terms used in accounting records of profit and non-profit making organisations

Profit making organisation	Non-profit making organisation
Income statement	Income and expenditure account
Profit for the year	Surplus of income over expenditure
Loss for the year	Excess of expenditure over income or deficit
Capital	Accumulated fund
Cash book	Receipts and payments account

## → Worked example 5



The Animal Sanctuary Society prepared the following trial balance for the year ended 31 December 2018:

The Animal Sanctuary Society		
Trial balance as at 31 December 2018		
	Dr	Cr
	\$	\$
Sanctuary premises	18 800	
Fixtures and equipment	21 000	
Rates and insurance	2 850	
Staff wages	22 000	
Members' annual subscriptions		15 400
Donations received		3 650
Stationery, phone, postage	350	
Animal food	2 550	
Veterinary bills, etc.	5 000	
Visitors' entrance fees		8 650
Café purchases	6 750	
Trade payables for café supplies		850
Café sales		14 300
Café inventory as at 1 January 2018	2 000	
Bank	2 425	
Accumulated fund		40 875
	<u>83 725</u>	<u>83 725</u>

The following information is also available:

- At 31 December 2018, the inventory was valued at \$2362.
- There is also a need to provide for depreciation of seven per cent for premises and café fixtures and equipment, which amounts to \$1470.
- Subscriptions of \$500 were accrued.

The Animal Sanctuary Society		
Café trading account for the year ended 31 December 2018		
	\$	\$
Sales		14 300
Less: Cost of goods sold		
Opening inventory	2 000	
Purchases	<u>6 750</u>	
	8 750	
Closing inventory	<u>2 362</u>	<u>6 388</u>
Gross profit		<u>7 912</u>

The Animal Sanctuary Society			
Income and expenditure account for the year ended 31 December 2018			
		\$	\$
Income			
Gross profit from café			7 912
Members' annual subscriptions (\$15 400 + \$500) inventory			15 900
Donations			3 650
Visitors' entrance fees			<u>8 650</u>
			36 112
Less: Expenditure			
Rates and insurance	2 850		
Staff wages	22 000		
Stationery, phone, postage	350		
Veterinary bills	5 000		
Animal food	2 550		
Depreciation of site and café fixtures and fittings	<u>1 470</u>		
			<u>34 220</u>
Surplus of income over expenditure			<u>1 892</u>

The Animal Sanctuary Society			
Statement of financial position for the year ended 31 December 2018			
ASSETS	Cost	Accumulated depreciation	Net book value
<b>Non-current assets:</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Sanctuary premises	18 800	-	18 800
Fixtures and equipment	<u>21 000</u>	<u>1 470</u>	<u>19 530</u>
	<u>39 800</u>	<u>1 470</u>	38 330
<b>Current assets:</b>			
Café inventory		2 362	
Subscriptions owing		500	
Cash at bank		<u>2 425</u>	<u>5 287</u>
<b>Total assets:</b>			<u>43 617</u>
<b>Accumulated fund and liabilities:</b>			
Accumulated fund			
Balance at 1 January 2018			40 875
Add: Surplus of income over expenditure			<u>1 892</u>
Balance at 31 December 2018			42 767
<b>Current liabilities:</b>			
Trade payables for café supplies			<u>850</u>
<b>Total accumulated fund and liabilities:</b>			<u>43 617</u>



## Calculating the accumulated fund

As a sole trader's capital is replaced by a non-profit making organisation's accumulated fund, it follows that the formula for accumulated fund will be:

$$\text{Accumulated fund} = \text{Assets} - \text{liabilities}$$

### → Worked example 6

The assets and liabilities of Pupuke Sports Club on 1 January 2019 are as follows:

	\$
Clubhouse	10 000
Equipment	14 700
Provision for depreciation of equipment	3 000
Bank overdraft	560
Restaurant inventory	1 000
Trade payables	400

Calculation of accumulated fund at 1 January 2019		
Assets:	\$	\$
Clubhouse		10 000
Equipment	14 700	
Less: provision for depreciation	<u>3 000</u>	11 700
Restaurant inventory		<u>1 000</u>
		22 700
Liabilities:		
Bank overdraft	560	
Trade payables	<u>400</u>	<u>960</u>
<b>Accumulated fund</b>		<b><u>21 740</u></b>

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Where is the balance on an income and expenditure account transferred?
  - A Accumulated fund
  - B Profit and loss account
  - C Subscriptions account
  - D Surplus account[1]
- 2 Which item would not appear in the accounts of a non-profit organisation?
  - A Café takings
  - B Capital
  - C Rent of premises
  - D Subscriptions received[1]
- 3 A club has the following records: balance at bank at the beginning of year \$3 000; receipts during year \$8 000; payments during the year \$8 000. What is the bank balance at the end of the year?
  - A \$2 000
  - B \$3 000
  - C \$5 000
  - D \$11 000[1]
- 4 Which equation is not correct?
  - A Assets = Liabilities + Accumulated fund
  - B Assets + Liabilities = Accumulated fund
  - C Accumulated fund = Assets – Liabilities
  - D Liabilities = Assets – Accumulated fund[1]
- 5 A small club provides the following information for the year ended 31 July 2018:
  - Insurance \$312
  - Entrance fees \$760
  - Profit from fund-raising event \$340
  - Depreciation of equipment \$615
  - Subscriptions \$1 100
  - General expenses \$820.
 What is the surplus or deficit for the year ended 31 July 2018?
  - A \$453 deficit
  - B \$113 deficit
  - C \$765 surplus
  - D \$453 surplus[1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6** The treasurer of Sands Karate Club did not keep proper accounting records. The following information was available at 30 April 2006:
- At 1 May 2005 subscriptions paid in advance amounted to \$210 and subscriptions in arrears were \$150.
  - Receipts during the year ended 30 April 2006:
    - Subscriptions for the year ended 30 April 2005: \$150 (in arrears)
    - Subscriptions for the year ended 30 April 2006: \$1 400
    - Subscriptions for the year ended 30 April 2007: \$75 (in advance)
    - Sale of refreshments: \$4 620.
  - Payments during the year ended 30 April 2006:
    - Purchase of refreshments: \$3 250
    - Rent: \$1 200
    - Insurance: \$240

Any other expenses to be treated as sundry expenses.

Additional information:

	1 May 2005	30 April 2006
	\$	\$
Inventory of refreshments	270	330
Balance at bank	790	840

All receipts and payments were made through the bank account.

- A** Prepare the subscriptions account for the year ended 30 April 2006. [5]
- B** Calculate the profit made on the sale of refreshments. [2]
- C** Prepare the receipts and payments account for the year ended 30 April 2006. [7]
- D** Explain why the figure for subscriptions in the receipts and payments account might be different from the subscriptions figure in the income and expenditure account. [4]

(Adapted from Cambridge O Level Principles of Accounts 7110/2, May/June 2006, Q2)

- 7 a** State what is meant by the term 'subscription' in a club's accounts. [1]
- b** Speedy Runner Sports Club maintains a subscriptions account. Explain why this account can have two opening balances. [2]
- c** The first column in the table below gives a term used in the financial statements of a sole trader. Complete the table by entering in the second column the equivalent term in the financial statements of a club or society. [3]

Sole trader	Club or society
Capital	
Profit for the year	
Loss for the year	



- d Complete the table below. Put two ticks (✓) in each row to indicate whether the item would appear on the debit side or credit side of the receipts and payments account or the income and expenditure account. The first one has been completed as an example. [10]

	Debit	Credit	Receipts and payments account	Income and expenditure account
Depreciation charge	✓			✓
Proceeds of sale of equipment				
Loss on disposal of equipment				
Unpaid subscriptions written off				
Purchase of new equipment				
Profit on sale of refreshments				

Speedy Runners Sports Club provided the following information.

	\$
Payments made to suppliers of refreshments for the year ended 31 December 2013	2 480
Amounts owing to suppliers for refreshments	
– at 31 December 2012	200
– at 31 December 2013	220

- e Complete the income statement (trading account) below. [5]

Speedy Runners Sports Club	
Income statement (trading account) for the year ended 31 December 2013	
	\$
Revenue	6 150
Inventory – 1 January	380
Purchases	.....
Inventory – 31 December	.....
Cost of sales	.....
Gross profit	3 610

- f Explain why there are no drawings in a club or society. [2]  
 g Explain what is meant by the accounting objective of comparability. [2]  
*(Adapted from Cambridge IGCSE Accounting 0452/13, May/June 2014, Q4)*

## ? Chapter review questions

- 1 Complete the following sentences:
  - a The person responsible for handling the money of a club is called the \_\_\_\_\_.
  - b The \_\_\_\_\_ of a club replaces the capital account of a business.
  - c Profit for the year is referred to as a \_\_\_\_\_ in a non-profit organisation.
  - d A club or society is a \_\_\_\_\_ organisation.
  - e A main source of income for a non-profit organisation is members' \_\_\_\_\_.
  - f Subscriptions in advance are mentioned as a \_\_\_\_\_ in the statement of financial position of club.
- 2 State the name of the following in a non-profit making organisation:
  - a The account that records cash and cheque transactions.
  - b The section of the statement of financial position in which subscriptions prepaid is recorded.
  - c The financial statement in which depreciation appears as a deduction from income.
  - d The fee that members pay to belong to a club.
  - e The term given to the difference between income and expenditure when income is greater than expenditure.
- 3 The membership fee to belong to the Angora Karate Club is \$500 per annum. On 1 January 2018, ten members had paid in advance and five members had not paid their subscription. During the year, the club received \$5 000 as subscriptions. On 31 December 2018, subscriptions were owing from six members and four members had prepaid their subscriptions for the following year ended 31 December 2019.  
 Answer the following questions for the year ended 31 December 2018:
  - a Calculate the value of subscriptions recorded in the income and expenditure account.
  - b Calculate the number of members the club had.
- 4 Information about the Kosi Leisure club for the year ended 31 August 2019 is given below. Prepare a receipts and payments account for the club for the year ended 31 August 2019.

	\$
Balance at bank at 1 September 2018	200
Purchase of equipment	140
Fundraising activities	2 000
Receipts from sale of snacks	400
Rent received	350
Administrative expenses	95
Sundry expenses	100
Wages of part-time staff	300



- 5 Hobson Gardening Club's treasurer maintains a full set of accounting records. The following account appears in the ledger of the club:

Subscriptions account					
Date	Details	\$	Date	Details	\$
2019			2019		
Jan 1	Balance b/d	400	Jan 1	Balance b/d	150
Dec 31	Income and expenditure	3 600	Dec 31	Bank	3 460
	Balance c/d	200		Balance c/d	590
		<u>4 200</u>			<u>4 200</u>

- a Explain each entry in the subscriptions account as it appears in the ledger of the club. State where the double entry for each transaction would be made. The first one has been completed as an example:

	Explanation	Double entry
2019 Jan 1 Balance \$400	This is the total subscriptions paid by members during the financial year ended 31 December 2018 which relate to the following financial year.	Credit subscriptions account for the year ended 31 December 2018

- b Explain the significance of the following shown at the end of the subscriptions account and state where this amount will appear in the club's statement of financial position at 31 December 2019.
- \$200
  - \$590

## Revision checklist

In this chapter, you have learnt:

- ✓ clubs and societies are non-profit making and provide activities and services for their members
- ✓ the person responsible for the accounts is usually called the treasurer and he or she is responsible for maintaining accounting records
- ✓ non-profit making organisations rely on fundraising activities, donations and subscriptions
- ✓ proper accounts must be kept to guard against fraud
- ✓ there is a difference between receipts and payments accounts and income and expenditure accounts
- ✓ to prepare receipts and payments accounts
- ✓ to prepare accounts for revenue-generating activities
- ✓ to prepare income and expenditure accounts and statements of financial position
- ✓ to make adjustments to financial statements
- ✓ to define and calculate the accumulated fund.

# Manufacturing accounts

By the end of this chapter you will be able to:

- ★ distinguish between direct and indirect costs
- ★ understand direct material, direct labour, prime cost and factory overheads
- ★ understand and make adjustments for work in progress
- ★ calculate factory cost of production
- ★ prepare manufacturing accounts, income statements and statements of financial position
- ★ make adjustments to financial statements
- ★ apportion costs between two costs centres.



## Manufacturing accounts

We have been studying the accounts of traders: businesses that buy and sell products. In this chapter, we will deal with business organisations that manufacture goods. They make goods using labour or machinery or both. Manufacturers start with raw materials and, through a manufacturing process, convert them into finished goods. Therefore, in the trading account, the figure for purchases will be replaced by the cost of manufacturing, also known as the cost of goods produced. This cost is calculated in the **manufacturing account**, so the financial statements of a manufacturing business will now include the manufacturing account in addition to the income statement and the statement of financial position. The manufacturing account is prepared for internal use only, for the benefit of managers and, possibly, owners.

### Key terms

A **manufacturing account** is an accounting statement which is part of the financial statements of a manufacturing organisation. It is used to calculate the total cost of manufacturing goods for sale during a period of a financial year.

A **direct cost** is a cost that can be directly attributed to the production of a specific good, for example, direct labour.

**Indirect costs** are those that are not directly linked to the production of a product, for example, rent of premises.

**Table 19.1** Financial statements produced by a manufacturer at the end of the financial year

Types of financial statements	Purpose
Manufacturing account	To calculate the production cost of goods
Income statement	To find out whether the business has made a profit or loss
Statement of financial position	To explain the financial position of the business

## Direct and indirect costs

There are two types of costs that a manufacturing firm can incur: **direct costs** and **indirect costs**. A direct cost is a cost that can be directly linked to the production process of a product. An indirect cost, on the other hand, cannot be directly traced to the production process of a product.

## Direct material, direct labour, prime cost and factory overheads

Direct costs are those costs that are directly linked to the production process: in other words, if production doubles, these costs will also double. If the factory has not started production, there is no direct cost. Direct costs are also called

### Study tip

If you see the word 'direct' in relation to a cost, treat it as a direct cost.

### Key terms

**Direct expenses** are a form of direct costs that can be directly traced to the manufacture of an item. If a product is manufactured using a licensed manufacturing process, then a **royalty** has to be paid for the use of that process. The manufacturer will have to pay the holder of the licence a percentage, for instance, of the gross sale price of the product manufactured.

**Prime cost** includes all the costs that can be directly attributable to the manufacture of a product; usually it is the sum of direct labour, direct materials and direct expenses.

**Overheads** or **fixed costs** are also called indirect costs.

### Think about it!

Do you think that direct costs are the same for every business, regardless of what they are manufacturing? Explain your answer, taking clues from your answers to Activity 1.

### Think about it!

Costs can either be direct or indirect. Do you agree with this statement?

variable costs. The two most important direct costs are: direct labour costs and direct material costs.

## Direct labour cost

Direct labour cost is the cost of labour that can be directly traced to the manufacture of an item. This means that the wages and salaries of people working in the factory are included, but the wages and salaries of the office staff, supervisors, cleaners and crane drivers, for example, are excluded. These labour costs could be incurred on a time rate (workers paid for the number of hours they have worked) or a piece rate (workers paid per product they produce) basis.

## Direct material cost

Direct material cost is the cost of the raw materials being used. It is the cost of purchasing raw materials from a supplier. If carriage inwards is charged, then this is a direct cost as well.

**Direct expenses** are another form of direct costs. These are expenses that can be directly traced to the manufacture of an item, for example, **royalties** or the hire of a special machine for a job.

All the direct costs make up the **prime cost**.

### Activity 1

Suggest one possible direct cost incurred by a:

- a car manufacturer
- b furniture maker
- c soft drink company
- d cosmetic company
- e construction company.

## Factory overhead (indirect) costs

Indirect costs are also called **overheads** or **fixed costs**. These include all those costs incurred in the factory where the production process is carried out, but which cannot be directly identified with each item produced, such as rent of the factory, depreciation of plant machinery and factory lighting.

## Other costs

### Indirect materials and indirect labour

You will sometimes see the terms 'indirect materials' or 'indirect labour'. Indirect materials could include lubricant or loose tools, for example. To calculate the costs of these materials, use the following formula:

$$\text{Cost of lubricant} = \text{Opening inventory (of lubricant)} + \text{Purchases (of lubricant)} - \text{Closing inventory (of lubricant)}$$

Indirect labour could include salary or wages given to staff not directly working on the production line, such as supervisors, production managers and factory cleaners. As these are indirect costs, they will be treated as factory overheads.



## Activity 2

You are given the following information regarding loose tools used by a manufacturing business during the year ended 31 December 2018:

	\$
Loose tools at valuation on 1 January 2018	3 560
Loose tools purchased	1 000
Loose tools at valuation on 31 December 2018	4 000

No loose tools were disposed of during the year.

Calculate the amount that will appear in the manufacturing account for loose tools.

### Key term

**Cost of production of goods** consists of the prime cost and the factory overheads. The manufacturing account is used to calculate this.

### Factory cost of production of goods

The factory **cost of production of goods** consists of the prime cost and the factory overheads. The manufacturing account is used to calculate this.

### Administration costs

Administration costs could include expenses incurred in the process of planning, co-ordinating, controlling or directing the business, for example, office rent, office staff salary, office electricity and depreciation of office equipment.

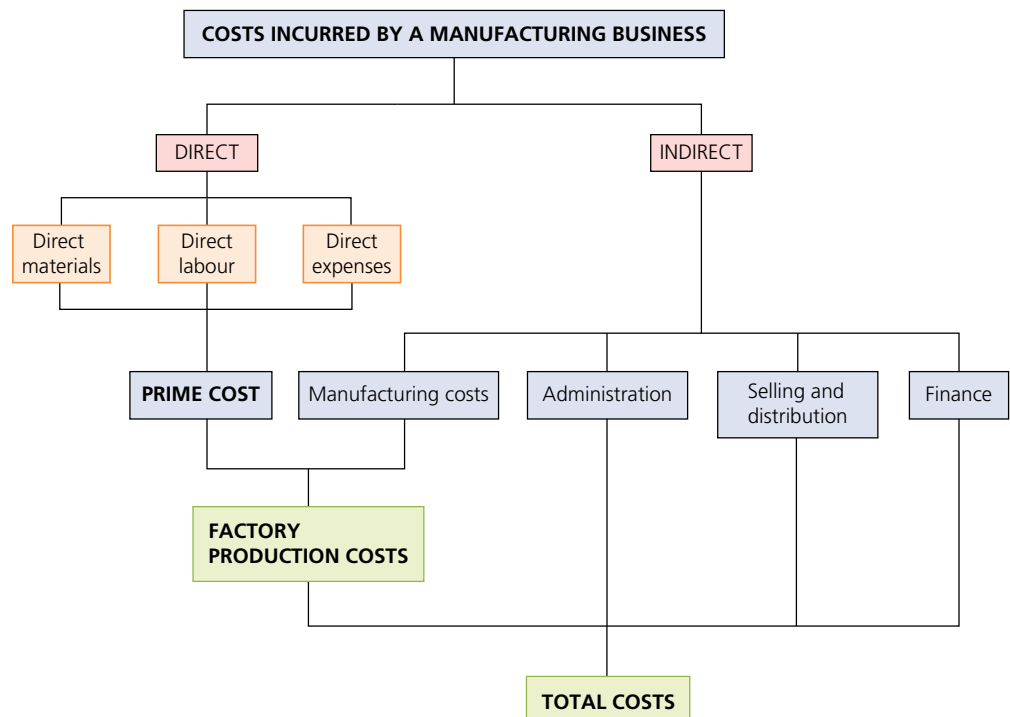
### Selling and distribution expenses

These are incurred in the process of promoting, advertising and distributing finished goods to customers. Selling and distribution expenses include overheads such as sales commission, sales staff salaries, carriage outwards, advertising and depreciation of motor vehicles used for delivery.

### Financial expenses

Financial expenses include bank charges, interest on loan or discounts allowed.

A summary of the various costs incurred by a manufacturing business is shown below.



### Activity 3

Complete the table by placing a tick (✓) in the appropriate column to identify each of the costs shown.

Cost	Direct materials	Direct labour	Direct expenses	Factory overheads
Wages paid as per piece rate				
Factory power				
Royalties				
Carriage inwards				
Wages paid on an hourly basis				
Depreciation of equipment in the office of a manufacturing business				
Cost of raw materials bought in				
Supervisor's salary				
General factory expenses				
Factory manager's salary				

#### Key info

Closing inventory of last year's work in progress would be this year's opening inventory of work in progress.



### Work in progress

Items that are not yet completed and are only partly made are referred to as 'work in progress'. These are unfinished products on the factory floor at the end of the financial year and cannot be sold. The cost of these items would be included in the manufacturing account as the closing inventory of work in progress.

### → Worked example 1

#### Calculation of factory cost of production

The following balances were taken from the books of Abraham, a manufacturer, on 31 December 2018:

		\$
Raw materials	Inventory at 1 January 2018	3 000
	Purchases	10 000
	Inventory at 31 December 2018	4 000
Carriage on raw materials		400
Factory wages:	Direct	1 000
	Indirect	4 000
Factory rent		2 000
Factory machinery repairs		500
Factory lighting		1 200
Depreciation of factory machinery		700

Think about it!

Work with a partner to come up with a formula for:

- a the cost of raw materials consumed
- b prime cost
- c cost of production of goods completed.

Abraham		
Manufacturing account for the year ended 31 December 2018		
	\$	\$
Opening inventory of raw material		3 000
Add: Purchases of raw material		10 000
Add: Carriage Inwards		<u>400</u>
		13 400
Less: Closing inventory of raw material		<u>4 000</u>
Cost of Raw materials consumed		9 400
Add: Direct wages		<u>1 000</u>
<b>Prime cost</b>		<b>10 400</b>
Add: Factory overheads:		
Indirect factory wages	4 000	
Factory rent	2 000	
Factory machinery repairs	500	
Depreciation of factory machinery	700	
Factory lighting	<u>1 200</u>	<u>8 400</u>
<b>Factory cost of production</b>		<b><u>18 800</u></b>

## → Worked example 2

### Manufacturing account with work in progress

Mully's Manufacturing Company provides the following information:

	\$
Inventory at 1 September 2018	
Raw materials	16 500
Work in progress	11 650
Wages and salaries:	
Factory direct	5 000
Factory indirect	12 000
Purchase of raw materials	20 000
Factory power and fuel	4 000
Inventory at 31 August 2019:	
Raw materials	13 700
Work in progress	12 000

Other information:

- Factory power and fuel \$360 in arrears at 31 August 2019.
- Factory machinery is to be depreciated by \$600.



Prepare a manufacturing account for the year ended 31 August 2019 showing clearly:

- a the cost of raw materials consumed
- b prime cost
- c cost of production.

Mully's Manufacturing Company			
Manufacturing account for the year ended 31 August 2019			
		\$	\$
Opening inventory of raw material			16 500
Add: Purchases of raw material			<u>20 000</u>
			36 500
Less: Closing inventory of raw material			<u>13 700</u>
Cost of Raw materials consumed			22 800
Add: Direct wages and salaries			<u>5 000</u>
<b>Prime cost</b>			<b>27 800</b>
Add: Factory Overheads:			
Wages and salaries	12 000		
Factory power and fuel (\$4 000 + \$360)	4 360		
Depreciation	<u>600</u>		<u>16 960</u>
			44 760
Add: Opening inventory of work in progress			<u>11 650</u>
			56 410
Less: Closing inventory or work in progress			<u>12 000</u>
<b>Production cost of goods completed</b>			<b><u>44 410</u></b>

### Study tip

Remember that everything in a manufacturing account is added except for closing inventory.

## Income statement and statements of financial position of manufacturers

The financial statements in relation to manufacturers are described below.

### Trading account section of a manufacturer's income statement

This is very similar to that of any other type of business (see Table 19.2, column 1, which shows a trader's trading account). The only difference is that the production cost of goods completed is added to the opening inventory of finished goods in addition to purchases of finished goods (if any) (see Table 19.2, column 3, which shows the cost of production of goods *and* purchases). If there are no purchases of finished goods, then the production cost of goods completed takes the place of purchases in the trading account section of the income statement (see Table 19.2, column 2, which shows cost of production of goods).

Sometimes manufacturers may have to buy finished goods to meet an urgent order. They may not have the time or the capacity to fulfil the order and do not want to turn customers away. In this case, there will be two items of costs

added to opening inventory of finished goods in the trading account: the cost of production of goods manufactured in the factory as well as the cost of finished goods bought in. Remember, if there is carriage inwards, this will also be added. Table 19.2 describes how purchases and cost of production of goods should be treated.

**Table 19.2** Treatment of purchases and cost of production of goods

Trader's trading account	\$	Manufacturer's trading account	\$	Manufacturer's trading account with purchases	\$
Sales	XXX	Sales	XXX	Sales	XXX
Less cost of sales:		Less cost of sales:		Less cost of sales:	
Opening inventory	XX	Opening inventory	XX	Opening inventory	XX
<b>Purchases</b>	XXX	<b>Cost of production of goods</b>	XXX	<b>Cost of production of goods</b>	XX
Less: closing inventory	<u>XX</u>	Less: closing inventory	<u>XX</u>	<b>Purchases</b>	XX
Gross profit	<u>XX</u>	Gross profit	<u>XX</u>	Less: closing inventory	XX
				Gross profit	<u>XX</u>

## Profit and loss account section of the income statement

This is very similar to any other type of business. It must be remembered that the expenses listed in the profit and loss account will be administration, selling and distribution and financial expenses that cannot be directly traced to the manufacturing process.

## Statement of financial position

Again, this is like that of any other type of business. The only difference is that there may be more than one kind of closing inventory: that of finished goods, raw materials and work in progress.

## Adjustments to financial statements

Year-end adjustments to the financial statements of a manufacturer are like those of a sole trader. Hence, adjustments for provision of depreciation, provision for doubtful debts, accruals and prepayments will require the same treatment as outlined in Chapter 15 Sole traders.

### → Worked example 3

Kotze is a manufacturer. His trial balance at 31 August 2019 is as follows:

	\$	\$
Motor vehicle repairs	3 600	
Electricity:		
Factory	1 980	
Office	1 500	
Manufacturing wages	12 000	
Sundry expenses: Factory	4 580	
Discount allowed	3 470	
Commission of sales team	4 600	
Purchase of raw materials	24 600	
Rent:		
Factory	1 300	
Office	2 500	
Premises	20 000	
Machinery	12 000	
Office equipment	6 000	
Office salaries	3 000	
Trade receivables and payables	2 800	3 500
Bank	400	
Sales		70 000
Provision for depreciation:		
Premises		2 000
Machinery		2 500
Office equipment		1 500
Opening inventory:		
Raw materials	4 000	
Finished goods	16 000	
Work in progress	3 670	
Drawings	2 000	
Capital		50 500
	<u>130 000</u>	<u>130 000</u>

Additional information:

- Inventory at 31 August 2019: raw materials \$3 500; finished goods \$2 300; work in progress \$1 200.
- Depreciate machinery \$2 000, Office equipment \$1 000, Premises \$2 000
- Manufacturing wages due but unpaid at 31 August 2019: \$230.
- Office salaries of \$4 500 are due but unpaid.

Kotze		
Manufacturing account and income statement for the year ended 31 August 2019		
	\$	\$
Opening inventory of raw material		4 000
Add: Purchases of raw material		<u>24 600</u>
		28 600
Less: Closing inventory of raw material		<u>3 500</u>
Cost of Raw materials consumed		25 100
Add: Manufacturing wages (\$12 000 + \$230)		<u>12 230</u>
Prime cost		37 330
Add: Factory overheads:		
Electricity	1 980	
Sundry expenses	4 580	
Rent	1 300	
Depreciation of machinery	<u>2 000</u>	<u>9 860</u>
		47 190
Add: Opening inventory of work in progress		<u>3 670</u>
		50 860
Less: Closing inventory or work in progress		<u>1 200</u>
Production cost of goods completed c/d*		<u><u>49 660</u></u>

Kotze		
Income statement for the year ended 31 August 2019		
	\$	\$
Sales		70 000
Less: Cost of sales:		
Opening inventory of finished goods	16,000	
Add: Production cost of goods b/d*	<u>49 660</u>	
	65 660	
Less: Closing inventory of finished goods	<u>2 300</u>	<u>63 360</u>
Gross profit		6 640
Less: Administrative expenses:		
Electricity	1 500	
Rent	2 500	
Office Salaries (3,000 + 4,500)	7 500	
Depreciation (1,000 + 2,000)	3 000	
Less: Selling and Distribution expenses:		
Motor van repairs	3 600	
Commission	4 600	
Less: Financial charges:		
Discounts allowed	3 470	<u>26 170</u>
Loss for the year		<u><u>19 530</u></u>



Kotze			
Statement of financial position as at 31 August 2019			
ASSETS	\$	\$	\$
<b>Non-current assets:</b>	<b>Cost</b>	<b>Accumulated depreciation</b>	<b>Net book value</b>
Premises	20 000	4 000	16 000
Machinery	12 000	4 500	7 500
Office equipment	<u>6 000</u>	<u>2 500</u>	<u>3 500</u>
	<u>38 000</u>	<u>11 000</u>	27 000
<b>Current assets:</b>			
Inventory: Raw materials	3 500		
Work in progress	1 200		
Finished goods	<u>2 300</u>	7 000	
Trade receivables		2 800	
Bank		<u>400</u>	<u>10 200</u>
<b>Total assets</b>			<u>37 200</u>
CAPITAL AND LIABILITIES			
<b>Capital:</b>		50 500	
Less: Loss for the year		<u>19 530</u>	30 970
Less: Drawings			<u>2 000</u>
			28 970
<b>Current liabilities:</b>			
Trade payables		3 500	
Other payables (\$4 500 + \$230)		<u>4 730</u>	<u>8 230</u>
<b>Total capital and liabilities:</b>			<u>37 200</u>

### Activity 4

Copy and complete the following table by placing a tick (✓) to indicate where each item would appear in a manufacturer's financial statements.

	Prime cost section of the manufacturing account	Overheads section of the manufacturing account	Income statement
Factory lighting			
Direct labour			
Carriage on raw materials			
Purchase of finished goods			
Commission on sales			
Depreciation of factory machinery			



### Study tip

Note that apportionment of costs is part of costing principles and is outside the scope of the syllabus. This information is included to give you an insight into this topic only.

### Key term

**Apportionment of costs** is the division of costs in a given proportion over two or more departments.

## Apportion costs between the factory and the office

Often, costs must be split between manufacturing in the factory and those costs arising from administration expenses, selling and distribution expenses or financial charges – this is referred to as **apportionment of costs**. If the factory and the administration block are in different buildings, then it will be easy to work out the cost for electricity, for instance. This is because each building will have a separate meter and therefore receive separate bills. However, if the factory and administration are housed in one building and the electricity bill covers both, then the cost must be split in the fairest way. Percentages showing apportionment of expenses between factory and office are normally given and should be used accordingly.

### Think about it!

Brainstorm with your partner to come up with the basis on which to apportion the following costs between the factory and the administration block:

- rent
- salaries
- water
- internet
- heating.

Rent, for instance, could be apportioned according to floor area. Can any other basis be used?

### Activity 5

The following costs were incurred by Vasik Manufacturing for the financial year:

	\$
Rent	10 000
Electricity	2 500
Salaries	15 000
Insurance	7 000
Internet	4 600
Heating	3 000

You are given the following information:

	Factory	Administration block
Floor area	2 000 m <sup>2</sup>	500 m <sup>2</sup>
Value of equipment	\$60 000	\$10 000
Number of employees	1 (supervisor)	2

- \$7 000 of the amount shown for salaries was the supervisor's salary and the remainder was paid to the administration staff.
  - It was decided that the internet bill should be split equally between the two cost centres.
  - Only the equipment was insured.
- Using the appropriate basis, apportion the costs to the two cost centres. Calculate the total factory overhead costs.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

1 How is prime cost calculated?

- A Direct materials + Carriage outwards + Other direct costs
- B Direct materials + Carriage inwards + Other direct costs
- C Direct materials + Carriage inwards + Indirect expenses
- D Direct materials + Carriage outwards + Indirect expenses

[1]

2 Neil is a manufacturer. He provides the following information:

	\$
Opening inventory of raw materials	3 500
Closing inventory of raw materials	4 600
Purchases	50 000
Opening inventory of work in progress	3 500
Closing inventory of work in progress	4 290
Carriage outwards	6 000
Carriage inwards	2 300

What is the cost of raw materials consumed?

- A \$50 410
- B \$51 200
- C \$54 900
- D \$60 400

[1]

3 Shaira manufactures gifts for tourists. She provides the following information:

	\$
Purchases of finished goods for the year	60 000
Opening inventory of finished goods	10 000
Closing inventory of finished goods	5 000
Cost of production for the year	80 000

What is the value of her cost of sales for the year?

- A \$85 000
- B \$65 000
- C \$145 000
- D \$155 000

[1]

4 The electricity bill received by a manufacturer was \$60 000 for the financial year. This bill is apportioned on the following basis: 40 per cent factory, 50 per cent office and 10 per cent factory outlet (retail). Commission to sales staff employed in the factory outlet amounted to \$10 000 for the year. What is the amount that appears in the manufacturing account for these costs?

- A \$34 000
- B \$30 000
- C \$40 000
- D \$24 000

[1]

5 Why is a manufacturing account prepared?

- A To calculate the cost of sales
- B To calculate the cost of raw materials consumed
- C To calculate the cost of production
- D To calculate the profit for the year

[1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

6 Ashraf Zayed started a manufacturing business on 1 March 2012. The following information is available after the preparation of the manufacturing account for the year ended 28 February 2013.

	\$
Cost of production	267 100
Revenue from sales of finished goods	323 000
Purchases of finished goods	4 300
Inventory at 28 February 2013:	
Raw materials	11 300
Work in progress	2 100
Finished goods	19 600

a Prepare the trading account section of the income statement to show the gross profit for the year ended 28 February 2013.

[5]

b Suggest two reasons why it was necessary for Ashraf Zayed to purchase finished goods.

[2]

c Prepare journal entries to record the following transfers to the profit and loss section of the income statement on 28 February 2013. Narratives **are** required.

[6]

Carriage outwards on finished goods, \$1 130.

Creation of a provision for doubtful debts of \$600.

On 1 June 2012 Ashraf Zayed purchased a motor vehicle for delivering finished goods to customers. On that date he paid one year's motor insurance, \$720, by cheque. Half of this represented insurance on his private motor car.

d Prepare the motor insurance account as it would appear in Ashraf Zayed's ledger for the year ended 28 February 2013. Balance the account and bring down the balance on 1 March 2013.

[5]

e Explain how the accruals (matching) principle has been applied in the preparation of the motor insurance account.

[2]

f Ashraf Zayed forgot to enter the motor insurance in the profit and loss section of his income statement for the year ended 28 February 2013. Copy and complete the following table to show how this error would affect the profit for the year.

[2]

	Overstated \$	Understated \$
Profit for the year ended 28 February 2013		



- g Explain why it is important for Ashraf Zayed to keep his personal expenses separate to those of the business. [2]

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2013, Q2)

- 7 Harrington provided the following information:

<b>Inventory 1 January 2014:</b>	<b>\$</b>
Raw materials	5 600
Work in progress	1 900
Finished goods	4 600
<b>For the year ended 31 December 2014:</b>	
Purchases of raw material	71 100
Raw materials returned	1 000
Raw materials taken for own use	2 000
Carriage on raw materials	2 100
Carriage outwards	4 050
Direct labour	52 550
Depreciation of machinery	4 400
Depreciation of office equipment	3 200
Discount allowed	3 050
Discount received	1 010
Salesman's salary	19 840
Administration costs	20 070
Factory rent	20 000
Office rent	10 000
<b>At 31 December 2014:</b>	
Inventory of raw materials	4 200
Inventory of work in progress	1 800
Inventory of finished goods	5 500

- a Copy and complete the following table. Indicate with a tick which **costs** from this data appear in the overheads section of the manufacturing account and which appear in the income statement. One cost has been shown as an example. [7]

Cost	Overheads section of the manufacturing account	Income statement
Office rent		✓

- b** Prepare an extract from Harrington's manufacturing account for the year ended 31 December 2014 showing the prime cost. [9]  
**c** Suggest **one** reason why Harrington might want to know his cost of production. [1]  
**d** Calculate the value of inventory in Harrington's statement of financial position at 31 December 2014. [3]

(Adapted from Cambridge IGCSE Accounting 0452/12, March 2015, Q5)

- 8** The financial year of Nasir Manufacturing Limited ends on 31 January. The following information is available.

	\$
At 1 February 2013	
Plant and machinery at cost	94 000
Office fixtures and equipment at cost	34 000
Loose tools at valuation	2 650
Provision for depreciation of plant and machinery	33 840
Provision for depreciation of office fixtures and equipment	12 240
Inventories:	
Raw materials	23 500
Work in progress	11 020
Finished goods	18 100
For the year ended 31 January 2014	
Revenue	539 000
Purchases:	
Raw materials	124 600
Finished goods	16 900
Purchases returns:	
Finished goods	200
Wages and salaries:	
Factory workers	136 000
Factory supervisors	31 400
Administrative and sales staff	61 500
Expenses:	
Direct expenses	16 300
General factory expenses	19 208
General office expenses	8 900
Rates and insurance	6 360

Additional information:

- On 31 January 2014

	\$
On 31 January 2014	
Inventories:	
Raw materials	26 100
Work in progress	12 060
Finished goods	19 300
Direct wages accrued	2 200
Sales staff wages accrued	380
Rates prepaid	120



- The rates and insurance are to be apportioned  $\frac{3}{4}$  to the factory and  $\frac{1}{4}$  to the office.
- The plant and machinery and office fixtures and equipment are being depreciated at 20 per cent per annum using the reducing balance method.
- During the year ended 31 January 2014 loose tools costing \$310 were purchased. On 31 January 2014 loose tools were valued at \$2 740.

Required:

- Prepare the manufacturing account of Nasir Manufacturing Limited for the year ended 31 January 2014. [14]
  - Prepare the trading account section of the income statement of Nasir Manufacturing Limited to show the gross profit for the year ended 31 January 2014. [6]
- (Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2014, Q1)

- 9 Ahmed El Din is a manufacturer of men's suits. He purchases fabric from several suppliers which his workforce makes into suits for sale to wholesalers and large retailers.

Ahmed El Din's financial year ends on 30 September. He provided the following information.

	At 1 October 2010	At 30 September 2010
	\$	\$
Inventory – raw materials	17 300	19 400
– finished goods	29 300	31 200
Work in progress	9 200	10 400
Direct factory wages accrued	2 300	2 750
Factory general expenses prepaid	-	250

For the year ended 30 September 2011:

	\$
Revenue	858 000
Raw materials purchased	203 300
Direct factory wages	199 500
Indirect factory wages	42 600
Factory general expenses	122 400

Additional information on 30 September 2011:

- On 1 October 2010 the factory machinery was valued at \$132 500.
- Additional machinery costing \$5 900 was purchased during the year. There were no sales of machinery during the year.
- On 30 September 2011 the factory machinery was valued at \$124 000.
- Inventories are valued at the lower of cost and net realisable value.
- During the year ended 30 September 2011 Ahmed El Din took finished goods costing \$900 for his own use. No entries have been made in the accounting records.

- Prepare the manufacturing account of Ahmed El Din for the year ended 30 September 2011. [14]
- Prepare the income statement of Ahmed El Din showing the calculation of his gross profit for the year ended 30 September 2011. [6]

(Adapted from Cambridge IGCSE Accounting 0452/23, October/November 2011, Q4 a & b)

## Chapter review questions

- Define:
  - direct costs
  - indirect costs
  - work in progress
  - prime cost
  - finished goods.
- Copy and complete the following sentences, choosing from the words below. administration expenses; cost of production; selling and distribution expenses; direct expenses
  - \_\_\_\_\_ are incurred in the process of promoting, advertising and distributing finished goods to customers.
  - \_\_\_\_\_ could include expenses incurred in the process of planning, co-ordinating, controlling or directing the business.
  - \_\_\_\_\_ are those expenses that can be directly traced to the production process.
  - Ishan is a manufacturer who produces all the goods he sells. In the trading account section of his income statement, \_\_\_\_\_ is the term which replaces 'ordinary goods purchases'.
- Explain the difference between a manufacturing account and a trading account.
- Copy and complete the following table by entering 'true' or 'false' for each statement.

	True/False?
A manufacturer can also be a trader.	
The direct costs for every manufacturer cannot differ.	
The factory and office of a manufacturer must be housed in separate buildings.	
There can be more than one type of closing inventory for a manufacturing business.	
Carriage inwards should be added to arrive at prime cost.	

- Limba Toba owns a business making children's clothes. Her accounts are prepared annually to 31 March. The balances in Limba's books at 31 March 2019 include the following:

		\$
Raw materials:	Purchases	3 500
	Inventory at 1 April 2018	1 600
Factory overheads:	Wages	1 500
	Electricity	800
	Fuel and power	900
Non-current assets:	Office premises	15 000
	Plant machinery	6 000

- At 31 March 2019, the inventory of raw materials was valued at \$1 200.
- There was no work in progress at the beginning or at the end of the year.
- Limba has a policy of charging depreciation at 15 per cent of non-current assets held at the end of the year.

Prepare Limba's manufacturing account for the year ended 31 March 2019.



6 Molly Manufacturing company provides the following information:

		\$
Inventory at 1 September 2018:	Raw materials	10 500
	Work in progress	12 000
Wages and salaries	Factory direct	3 000
	Factory indirect	15 000
Purchase of raw materials		10 000
Power and fuel (indirect)		5 000
Inventory at 31 August 2019:	Raw materials	10 000
	Work in progress	13 000

Notes:

- Fuel and power \$200 in arrears at 31 August 2019.
  - Factory machinery is to be depreciated by \$1 000.
- Prepare a manufacturing account for the year ended 31 August 2019 showing clearly:
- a** Cost of raw materials consumed
  - b** Prime cost
  - c** Cost of production.

### Revision checklist

In this chapter, you have learnt:

- ✓ what manufacturing accounts are
- ✓ how to calculate cost of raw material consumed, prime costs and factory overheads
- ✓ which financial statements a manufacturer prepares
- ✓ how cost of goods produced are calculated in the manufacturing account
- ✓ to distinguish between direct and indirect costs
- ✓ how to treat other costs such as administrative costs
- ✓ to prepare manufacturing accounts
- ✓ to make adjustments for work in progress
- ✓ to calculate the factory cost of production
- ✓ to make adjustments to financial statements of manufacturers
- ✓ how to apportion costs between the factory and the office of a manufacturer.



# Incomplete records



By the end of this chapter you will be able to:

- ★ explain the disadvantages of not maintaining a full set of accounting records
- ★ prepare opening and closing statements of affairs
- ★ calculate profit for the year from changes in capital over time
- ★ calculate financial statements from incomplete information: sales, purchases, gross profit, trade receivables and trade payables and other figures
- ★ prepare income statements and statements of financial position from incomplete records
- ★ make adjustments to financial statements
- ★ apply the techniques of mark-up, margin and inventory turnover to arrive at missing figures.

## Disadvantages of not maintaining a full set of accounting records

A full set of accounting records is invaluable to a business, as every business transaction is recorded. Information about each of these transactions will always be available for the business to use and trial balances and financial statements can be easily and quickly prepared. By maintaining accounting records, businesses can determine their annual profit or loss and their net worth. Checks can be easily put in place to prevent fraud and monitor expenses, trade payables and trade receivables.

Comparisons between similar businesses, or between two different years in the same business, help to detect reasons for possible change and assist managers with decision making (see also Chapter 22). Managers can use recorded data to identify the strengths and weaknesses of the business. Accounting records can also help managers to plan ahead to meet financial commitments such as paying trade payables on time. A good set of accounting records strengthens a business' negotiating power with banks and investors when trying to raise additional finance. Finally, a full set of records enables important information and documents to be quickly traced in the case of a dispute, for instance.

Businesses that do not maintain accounting records do not enjoy the numerous advantages described above. Small businesses often keep very basic records, making one entry per transaction. This is sometimes known as single entry book-keeping. In some cases, transactions do not get recorded at all. However, like any other business, small businesses will wish to calculate their profits and net worth annually to know if they are profitable enough to carry on and to measure whether the business has experienced any growth.

**Key term**

A **statement of affairs** lists the assets, liabilities and capital of a business that does not maintain a full set of records.

## Statements of affairs

Like a statement of financial position, a **statement of affairs** lists the assets and liabilities of a business on a given day, with the difference between assets and liabilities listed as capital. However, a statement of affairs is prepared from a set of incomplete records as opposed to a statement of financial position that is prepared from a set of double entry records.

## Calculation of profit for the year from changes in capital over time

*Think about it!*

In the modified equation above, why is drawings added, and fresh capital introduced by the owner subtracted, to arrive at the estimated profit?

When no further information is available, the business uses the opening and closing statement of affairs to calculate profit. Details such as sales revenue, purchases, gross profit, expenses and so on are not available and so cannot be used.

The opening and closing statement of affairs is prepared to determine the opening capital and closing capitals, respectively. The difference between the two capitals will be profit, if the closing capital is more than the opening capital, or loss, if the opening capital is more than the closing.

The following equation is used to calculate profit from information provided by the statement of affairs:

$$\text{Profit} = \text{Closing capital} - \text{Opening capital}$$

or

$$\text{Loss} = \text{Opening capital} - \text{Closing capital}$$

If the business owner has made drawings or introduced new capital during the financial year, the equation is modified as follows:

$$\text{Profit} = \text{Closing capital} - \text{Opening capital} + \text{Drawings} - \text{Capital introduced}$$

A capital account can also be used to calculate profit. The balancing (missing) figure will be the estimated profit.

*Think about it!*

Work with a partner to come up with a formula for calculating profit using opening and closing capitals.

### → Worked example 1



Donny, a sole trader, does not maintain a full set of accounting records. On 1 January 2018, he introduced \$40 000 cash, deposited into the business bank account, and a motor vehicle valued at \$5 000. He bought the motor vehicle on credit from Kunal Motors.

Donny's (opening) capital at 1 January 2018 is:

$$\begin{aligned} \text{Capital} &= \text{Assets} - \text{liabilities} \\ &= (\$40\,000 + \$5\,000) - \$5\,000 \\ &= \$40\,000 \end{aligned}$$

At 31 December 2018, Donny's capital was \$56 000. During the year, he introduced fresh capital of \$3 000 and his drawings were \$5 000. Donny's capital account is given below, with estimated profit calculated as the balancing figure.

Capital account					
Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Drawings	5 000	Jan 1	Balance b/d	40 000
	Balance c/d	56 000	Dec 31	Bank	3 000
				Profit for the year (balancing figure)	18 000
		<u>61 000</u>			<u>61 000</u>
2019			2019		
			Jan 1	Balance b/d	56 000

### Activity 1

- 1 Prepare a capital account to calculate the profit made by Denison Sole Traders for the year ended 31 December 2018 using the following information:

	\$
Capital at 1 Jan 2018	500 000
Drawings	12 350
Capital introduced	14 000
Capital at 31 Dec 2018	670 000

- 2 Explain what is meant by an opening statement of affairs.
- 3 If the opening capital is less than the closing capital and there have been no drawings or fresh introduction of capital, state whether the business made a profit or a loss.
- 4 State the formula for calculating the following:
  - a capital, given assets and liabilities
  - b profit, given opening and closing capitals and drawings.

## Calculation of profit using statement of affairs

Statements of affairs can also be used to calculate opening and closing capitals. They are used particularly when there are a number of opening and closing assets and liabilities.

### → Worked example 2

Gauri does not keep a full set of accounting records, but the following information is available.



▲ A corner shop is a type of small business that may not keep a full set of accounting records

	At 31 December 2018	At 31 December 2019
	\$	\$
Inventory	4 200	4 600
Trade receivables	3 480	2 590
Trade payables	1 340	100
Shop fittings at cost	7 400	7 400
Motor vehicles at valuation	3 500	8 000
Cash at bank	4 790	5 340



## 20 INCOMPLETE RECORDS

Additional information:

- Drawings for the year ended 31 December 2019 were \$1 680.
- Gauri bought a new motor vehicle for \$5 000 during the year, using her personal funds. No vehicles were sold during the year.
- Shop fittings are to be depreciated by 20 per cent of cost.

Gauri			
Statement of affairs at 1 January 2019			
ASSETS		\$	\$
<b>Non-current assets:</b>			Cost
Shop fittings			7 400
Motor vehicle			<u>3 500</u>
			10 900
<b>Current assets:</b>			
Inventory	4 200		
Trade receivables	3 480		
Cash at bank	<u>4 790</u>		<u>12 470</u>
			<u>23 370</u>
<b>CAPITAL AND LIABILITIES</b>			
Capital (balancing figure)*			22 030
<b>Current liabilities:</b>			
Trade payables			<u>1 340</u>
			<u>23 370</u>

\*Capital = \$23 370 – \$1 340 = \$22 030

Gauri			
Statement of affairs at 31 December 2019			
ASSETS	\$	\$	\$
<b>Non-current assets:</b>	Cost	Depr	N.B.V.
Shop fittings	7 400	1 480	5 920
Motor vehicles	<u>8 500</u>	<u>500</u>	<u>8 000</u>
	<u>15 900</u>	<u>1 980</u>	13 920
<b>Current assets:</b>			
Inventory		4 600	
Trade receivables		2 590	
Cash at bank		<u>5 340</u>	<u>12 530</u>
			<u>26 450</u>
<b>CAPITAL AND LIABILITIES</b>			
Capital (balancing figure)			26 350
<b>Current liabilities:</b>			
Trade payables			<u>100</u>
			<u>26 450</u>

To calculate profit:

	\$
Capital at 31 December 2019	26 350
Less capital at 1 January 2019	<u>22 030</u>
	4 320
Add: Drawings	<u>1 680</u>
	6 000
Less: Capital introduced	<u>5 000*</u>
Profit for the year	<u><u>1 000</u></u>

\*This is the value of motor vehicle paid for from Gauri's own funds.

## Activity 2

Kelly is a sole trader who does not keep full accounting records. She is able to provide the following information:

	At 31 August 2018	At 31 August 2019
	\$	\$
Non-current assets	30 000	26 000
Current assets	10 000	21 000
Current liabilities	5 000	1 000

Kelly's drawings for the year ended 31 August 2019 were \$3 000.

Prepare the following:

- Kelly's statement of affairs at 1 September 2018.
- Kelly's statement of affairs as at 31 August 2019.
- A statement showing Kelly's profit or loss for the year ended 31 August 2019.

## Calculating financial statements from incomplete information

Although the small businesses mentioned in the examples above do not keep double entry accounting records, they do maintain cash books that are verifiable by bank statements, as well as other source documents such as invoices and cheques. This makes it possible to calculate sales, purchases, gross profit, trade receivables and trade payables and other figures from incomplete information. Therefore, although a trial balance cannot be prepared, a set of financial statements can be prepared using other methods.

We have already learnt how to calculate opening and closing capitals using the statement of affairs. The next step is to calculate sales.

## Calculating total sales for the year

All receipts from trade receivables do not equal the year's sales. This is because some of them may be from opening trade receivables, who owed the business money for last year's sales. There may also be closing trade receivables whose debts affect the value of sales. Therefore, receipts (cash or cheques) should be adjusted to find (credit) sales. This can be achieved with the help of a total trade receivables account (see Chapter 9). The balancing figure of the account will be credit sales.

### → Worked example 3

#### Calculate sales from incomplete records

Ace Traders provide the following figures:

Trade receivables	
	\$
1 January 2018	1 500
31 December 2018	4 600

Additional information:

- Cash sales: \$2 500
- Cash receipts from trade receivables: \$8 560
- Receipts by cheque from trade receivables: \$3 360
- Discounts allowed: \$750

Total trade receivables account					
Date	Details	\$	Date	Details	\$
2018			2018		
Jan 1	Balance b/d	1 500	Dec 31	Cash	8 560
Dec 31	Credit sales (balancing figure)	15 770		Bank	3 360
				Discounts allowed	750
				Balance c/d	4 600
		<u>17 270</u>			<u>17 270</u>

Total sales = credit sales + cash sales = \$15 770 + \$2 500 = \$18 270

An alternate method to calculate credit sales for the year:

	\$
Receipts from trade receivables (\$8 560 + \$3 360)	11 920
Add: closing trade receivables	<u>4 600</u>
	16 520
Less: opening trade receivables	<u>1 500</u>
	15 020
Add discounts allowed	<u>750</u>
Total credit sales	<u>15 770</u>

#### Key info

Remember to add cash sales and credit sales to arrive at total sales.

#### Think about it!

Why are discounts allowed added in the alternative method to arrive at total sales?

### Activity 3

Amy and daughters are traders who do not keep a complete set of accounting records. They provide the following information for the year ended 31 December 2019.

#### Study tip

It is important to know the difference between cash received from trade receivables and cash sales. The former will be used in the total trade receivables account, whereas cash sales are added to credit sales later to find total sales. Read the question carefully to distinguish between the two.

#### Trade receivables

	\$
1 January 2019	10 500
31 December 2019	8 600

For the year ended 31 December 2019:

- Cash sales: \$1 500.
- Cash receipts from trade receivables: \$16 800.
- Discounts allowed: \$150.
- Receipts by cheque from trade receivables: \$9 400.

Calculate the total sales for the year ended 31 December 2019.

## Calculating total purchases for the year

All payments (cash or cheque) to suppliers do not equal the year's purchases. This is because some payments could have been made to the previous year's trade payables to whom money was owing at the beginning of the present financial year. These are represented by opening trade payables for the year. Closing trade payables will also affect the value of purchases. Therefore, payments to suppliers should be adjusted to find (credit) purchases. This can be achieved with the help of the total trade payables account. The balancing figure in the account will be credit purchases.

### → Worked example 4

#### Calculate purchases from incomplete records

Ace Traders, from Worked example 3, provide the following additional information for the year ended 31 December 2018:

#### Trade payables

	\$
1 January 2018	4 500
31 December 2018	3 600

Additional information:

- Payments to trade payables during the year was: cash \$3 500; cheque \$3 800.
- Discounts received: \$30

#### Total trade payables account

Date	Details	\$	Date	Details	\$
2018			2018		
Dec 31	Cash	3 500	Jan 1	Balance b/d	4 500
	Bank	3 800	Dec 31	Credit purchases*	6 430
	Discounts received	30			
	Balance c/d	3 600			
		<u>10 930</u>			<u>10 930</u>

\*Credit purchases = \$10 930 - \$4 500



As there are no cash purchases, the total purchases for the year are \$6 430.  
An alternate method to calculate credit sales for the year:

	\$
Payments to trade payables (\$3 500 + \$3 800)	7 300
Add: closing trade payables	<u>3 600</u>
	10 900
Less: opening trade payables	<u>4 500</u>
	6 400
Add: discounts received	<u>30</u>
Total credit purchases	<u><u>6 430</u></u>

Think about it!

Why are discounts received added to arrive at total purchases in the alternative method?

### Calculate gross profit from a set of incomplete records

With the methods outlined above, it is possible to compute purchases and sales for the financial year. If opening and closing inventory are given, it is also possible to calculate gross profit by preparing the trading account.

#### → Worked example 5

Jason is a trader, buying and selling entirely on credit terms. He does not keep complete accounting records but is able to provide the following information for the year ended 31 December 2018:

	At 1 January 2018	At 31 December 2018
	\$	\$
Inventory of goods	4 000	3 450
Trade payables	1 500	2 000
Trade receivables	5 400	5 600

During the year cheques received from trade receivables amounted to \$3 700 and cheques paid to trade payables amounted to \$2 500.

To prepare the trading account, it is necessary to calculate the sales and purchases for the year.  
To calculate sales:

	\$
Cheques received from trade receivables	3 700
Add: closing trade receivables	<u>5 600</u>
	9 300
Less: opening trade receivables	<u>5 400</u>
Total credit sales for the year	<u><u>3 900</u></u>

To calculate purchases:

	\$
Cheques paid to trade payables	2 500
Add: closing trade payables	<u>2 000</u>
	4 500
Less: opening trade payables	<u>1 500</u>
Total credit purchases for the year	<u><u>3 000</u></u>



Jason		
Trading account for the year ended 31 December 2018		
	\$	\$
Sales		3900
Less: Cost of sales:		
Opening inventory	4000	
Add: purchases	<u>3000</u>	
	7000	
Less: closing inventory	<u>3450</u>	<u>3550</u>
Gross profit		<u>350</u>

### Activity 4

- 1 Sales and purchases have been calculated using the method in Worked example 5. Prepare a total trade receivables account and a total trade payables account to calculate Jason's sales and purchases using the information given.
- 2 Vanita owns a trading business and does not keep full accounting records. However, she supplies the following information for the year ended 31 March 2019:

	At 1 April 2018	At 31 March 2019
	\$	\$
Inventory	4670	3680
Trade payables	2000	1500
Trade receivables	1200	4500

Additional information:

	\$
Receipts from trade receivables:	
Cash	5000
Cheque	2000
Payments to trade payables:	
Cash	2000
Cheque	1400

- a Calculate the sales and purchases for the year ended 31 March 2019.
- b Calculate Vanita's gross profit for the year ended 31 March 2019.

From the information described above, it can be seen that the trading account of businesses with incomplete records is the same as those of a sole trader. The rest of the income statement can also be prepared after expenses and income for the year are calculated.

## Calculate closing trade payables or trade receivables given incomplete records

The total trade receivables account and the total trade payables account have been used to calculate credit sales and purchases given all the other figures in the accounts. As we saw in Chapter 9 on control accounts, these accounts could also be

**Key info**

The balancing figure technique should be used only when *all* the other figures are correct. If an expense or income has been omitted, by mistake, then the missing figure is due to this error and cannot be assumed to be drawings or a receipt from trade receivables, respectively. Read the question carefully, before deciding what the missing figure represents.

used to calculate closing trade receivables and payables. It is assumed, in this case, that the records, incomplete though they are, have provided all the other figures.

## Calculate drawings and cash sales from incomplete records

The cash account maintained by a small business can sometimes be incomplete with transactions missing. When balanced, if the missing (balancing) figure is on the credit side, then it is often assumed to be drawings. If the missing figure is on the debit side, it is often assumed to be a receipt from a debtor. However, the question will contain more information about the missing figure and should be read carefully.

## Calculate expenses and income from incomplete records

It is important to calculate expenses and income for the *current* year so that the financial statements provide a 'true and fair' view of the performance and position of the business. Therefore, payments made for expenses during the year should be adjusted for accruals and prepayments to arrive at the right figure to use in the income statement. Similarly, income received during the year should also be adjusted. This is in keeping with the matching principle.

## Calculate the closing bank and cash balances from incomplete records

If the opening balances of cash and bank accounts are known and a summary of all the receipts and payments given, the closing balances of these accounts can be calculated. They will be the balancing figures of their respective accounts. It is not necessary to give details of every transaction, unless the question requires this, as shown in the example below.

Cash account					
Date	Details	\$	Date	Details	\$
2018			2018		
Jan 1	Balance b/d	3 500	Dec 31	Total cash payments	5 780
Dec 31	Total cash receipts	3 800	Dec 31	Balance c/d (balancing figure)	1 520
		<u>7 300</u>			<u>7 300</u>

▲ Closing bank and cash balances from incomplete records

## Preparation of income statements and statements of financial position from incomplete records

Once all the preparatory work has been completed, it is possible to prepare the financial statements of a business that has incomplete records. Table 20.1 on the next page summarises the information above.

**Table 20.1** Steps to take to prepare statements of financial position from incomplete records

Steps	Information for financial statements
1 Prepare an opening statement of affairs.	To calculate the value of opening capital for use in the statement of financial position.
2 Prepare a summarised bank account.	To calculate the closing bank balance for use in the statement of financial position.
3 Prepare a summarised cash account.	To calculate the closing cash balance for use in the statement of financial position.
4 Prepare total trade payables and trade receivables accounts.	To calculate either total credit sales and purchases for use in the trading account, or closing trade receivables and payables for use in the statement of financial position.
5 Prepare the financial statements using information provided in the previous four steps.	

### → Worked example 6

The following is a summary of Manoj's bank account for the year ended 31st December 2019:

Bank account			
	\$		\$
Balance at 1 Jan 2019	4 000	Payments to suppliers	36 000
Receipts from customers	45 000	Rent	1 000
		Insurance	500
		Office expenses	275
		Drawings	18 450

All the business takings have been paid into the bank except for \$8 700. Out of this, Manoj paid wages of \$5 200, withdrew \$1 100 for personal use and purchased goods \$2 400.

Additional information available:

	At 1 January 2019	At 31 December 2019
	\$	\$
Inventory of goods	12 000	14 000
Trade payables	5 400	6 500
Trade receivables	10 000	9 650
Rent prepaid	150	200
Insurance owing	50	100
Machinery at valuation	3 500	3 250



Manoj		
Income statement for the year ended 31 December 2019		
	\$	\$
**Sales		53 350
Less cost of sales:		
Opening inventory	12 000	
***Purchases	<u>39 500</u>	
	51 500	
Less: Closing inventory	<u>14 000</u>	<u>37 500</u>
Gross profit		15 850
Less expenses:		
Rent (\$1 000 + \$150 – \$200)	950	
Insurance (\$500 – \$50 + \$100)	550	
Office expenses	275	
Wages	5 200	
Depreciation (\$3 500 – \$3 250)	<u>250</u>	<u>7 225</u>
Profit for the year		<u>8 625</u>

Manoj			
Statement of financial position for the year ended 31 December 2019			
	\$	\$	\$
ASSETS			
<b>Non-current assets:</b>	<b>Cost</b>	<b>Accumulated depreciation</b>	<b>Net book value</b>
Machinery	<u>3 500</u>	<u>250</u>	3 250
<b>Current assets:</b>			
Inventory		14 000	
Trade receivables		9 650	
Other receivables (rent)		<u>200</u>	<u>23 850</u>
Total assets			<u>27 100</u>
CAPITAL AND LIABILITIES			
Capital:			
*Balance at 1 January 2019		24 200	
Add: Profit for the year		<u>8 625</u>	32 825
Less: drawings (\$18 450 + \$1 100)			<u>19 550</u>
			13 275
<b>Current liabilities:</b>			
Trade payables		6 500	
Other payables (insurance)		100	
****Bank overdraft		<u>7 225</u>	<u>13 825</u>
TOTAL CAPITAL AND LIABILITIES			<u>27 100</u>

### Working

\*Calculation of capital at 1 January 2019 = Assets – Liabilities  
 = (\$4 000 + \$12 000 + \$10 000 + \$150 + \$3 500) – (\$5 400 + \$50)  
 = \$24 200

#### Study tip

If a question requires you to prepare an opening statement of affairs, then opening capital will be calculated using a statement of affairs. If opening capital is a part of a larger solution to a question, then the accounting equation can be used.

\*\* Calculation of sales for the year

#### Total trade receivables account

Date	Details	\$	Date	Details	\$
2019			2019		
Jan 1	Balance b/d	10 000	Dec 31	Cash	8 700
Dec 31	**Credit sales	53 350		Bank	45 000
				Balance c/d	9 650
		<u>63 350</u>			<u>63 350</u>

\*\*\* Calculation of purchases for the year

#### Total trade payables account

Date	Details	\$	Date	Details	\$
2019			2019		
Dec 31	Bank	36 000	Jan 1	Balance b/d	5 400
	Balance c/d	<u>6 500</u>	Dec 31	Credit purchases***	<u>37 100</u>
		<u>42 500</u>			<u>42 500</u>

Total purchases = cash purchases + credit purchases = \$37 100 + \$2 400 = \$39 500

\*\*\*\* Calculation of closing bank balance

#### Bank account

Date	Details	\$	Date	Details	\$
2019			2019		
Jan 1	Balance b/d	4 000	Dec 31	Total payments	56 225
Dec 31	Total receipts	45 000			
	Balance c/d****	<u>7 225</u>			
		<u>56 225</u>			<u>56 225</u>

#### Study tip

If all the cash takings (money received from sales) were not used up, then there would be some cash left with the business and this would be mentioned in the statement of financial position as 'cash in hand' under current assets. Read the question carefully.

## Adjustments to financial statements

Worked example 6 shows that the financial statements of businesses with incomplete records are presented in the same way as those prepared for businesses with a complete set of records. Hence, year-end adjustments for accruals, prepayments and provisions for depreciation and doubtful debts will be calculated and treated in the same way as they are for sole traders and partnerships.

### Activity 5

- 1 Answer the following questions after a careful inspection of Worked example 6, above.
  - a Explain what is meant by the term 'takings'. Calculate Manoj's takings for the year.
  - b Explain how Manoj has used those takings he did not pay into the bank.
  - c Calculate the amount which would be left if the takings were \$10 000 instead of \$8 700. Where would this be mentioned in the financial statements.
  - d Explain how you know that Manoj had a bank overdraft.
  - e Explain how you know that depreciation of machinery was \$250.
  - f State where in the financial statements a provision for doubtful debts would be recorded, if such a provision was made.
  - g Explain how the cash purchases were paid for.
  - h Explain how the wages were paid for.
- 2 Mobin does not maintain a full set of accounting records but he provides the following information for the year ended 31 December 2019:

	At 1 January 2019	At 31 December 2019
	\$	\$
Inventory of goods	3 000	5 000
Trade payables	2 500	3 000
Trade receivables	3 500	4 000
Balance at bank	2 100	2 000
Shop fittings at valuation	6 000	5 500

Additional information:

- Cheques received from trade receivables \$30 000.
- Cash sales banked \$3 500.
- Cheques paid to trade payables \$16 700.
- Mobin's drawings were \$550 a month.

From the above information, calculate Mobin's:

- a purchases and sales
- b capital at 1 January 2019 and 31 December 2019
- c profit for the year for the year ended 31 December 2019.

### Key info

As the question requires you to calculate purchases and sales first, you should do that first. It is part of the answer to the question posed, hence it is not part of 'working' in this example.

### Key terms

**Gross margin** is the gross profit as a percentage of sales revenue. It uses data from the trading account of the income statement to analyse the profitability of sales made by a business during a financial year.

**Mark-up** is the gross profit as a percentage of cost of sales.

## Use of mark-up, gross margin and inventory turnover to arrive at missing figures

### Mark-up and margin

**Mark-up** and **gross margin** are both connected with the trading account where gross profit is calculated using sales revenue and cost of sales.

$$\text{Mark-up} = \frac{\text{Gross profit} \times 100}{\text{Cost of sales}}$$

$$\text{Gross margin} = \frac{\text{Gross profit} \times 100}{\text{Sales}}$$

### → Worked example 7

Hanji's sales for the year ended 31 December 2019 were \$40 000 while his cost of sales was \$25 000.

$$\text{Mark-up} = \frac{\text{Gross profit} \times 100}{\text{Cost of sales}} = \frac{\$15\,000 \times 100}{\$25\,000} = 60\%$$

$$\text{Gross margin} = \frac{\text{Gross profit} \times 100}{\text{Sales}} = \frac{\$15\,000 \times 100}{\$40\,000} = 37.5\%$$

$$\text{Gross profit} = \text{sales} - \text{cost of sales} = \$40\,000 - \$25\,000 = \$15\,000.$$

The mark-up and the gross margin enables us to calculate missing data in the trading account. For instance, these ratios can be used to find purchases. This is a strategy that businesses find very useful if they want to know how much to purchase to achieve a certain sales target.

### → Worked example 8

The following are the figures for the year ended 31 December 2018:

	\$
Inventory at 1 January	500
Inventory at 31 December	700
Purchases for the year	5 000

A uniform rate of mark-up of 25 per cent is applied.

$$\begin{aligned} \text{The gross profit} &= 25 \text{ per cent} \times \text{cost of sales} = 25 \text{ per cent} \times (\$500 + \$5\,000 - \$700) \\ &= 25 \text{ per cent} \times \$4\,800 = \$1\,200 \end{aligned}$$

$$\text{Sales} = \text{Cost of sales} + \text{Mark-up} = \$4\,800 + \$1\,200 = \$6\,000$$

Mark-up can be converted to gross margin and vice versa using the following methods:

If the mark-up is given as a percentage, convert it to a fraction, for example, 25 per cent =  $\frac{1}{4}$ .

$$\text{Gross margin} = \frac{1}{1 + 4} = \frac{1}{5} = 20\%$$

[The numerator stays the same but the denominator is the sum of the numerator and the denominator.]

If the margin is given as a percentage, convert it to a fraction, for example, 20 per cent =  $\frac{1}{5}$ .

$$\text{Mark-up} = \frac{1}{5 - 1} = \frac{1}{4} = 25\%$$

[The numerator stays the same but the denominator is the difference between the denominator and the numerator.]

Calculating the missing figure for purchases using the mark-up.  
The following are figures for the year ended 30 June 2019:

	\$
Inventory at 1 July 2018	4 000
Inventory at 30 June 2019	3 500
Sales	22 000

The mark-up is applied at a uniform rate of ten per cent.



Trading account for the year ended 30 June 2019		
	\$	\$
Sales		22 000
Less cost of sales:		
Opening inventory	4 000	
Purchases	<u>19 500</u>	
	23 500	
	<u>3 500</u>	<u>20 000</u>
Gross profit		<u>2 000</u>

Instructions for completion of the trading account shown above:

- a Prepare the trading account leaving spaces for purchases, cost of sales and gross profit.
- b You have to work backwards, starting from gross profit.

To calculate gross profit:

As mark-up is given  $\frac{1}{10}$  and cost of sales is not, the mark-up should therefore be converted to a gross margin.

$$\text{Gross margin} = \frac{1}{10 + 1} = \frac{1}{11}$$

Therefore:

$$\text{Gross profit} = \frac{1}{11} \times \$22\,000 = \$2\,000$$

- c Subtract gross profit from sales to get cost of sales:  $\$22\,000 - \$2\,000 = \$20\,000$
- d Purchases = Cost of sales + Closing inventory – Opening inventory =  $\$20\,000 + \$3\,500 - \$4\,000 = \$19\,500$

### Activity 6

- 1 Calculate purchases given the following information for the year ended 31 December 2019.

	\$
Inventory at 1 January	1 000
Inventory at 31 December	3 000
Cost of sales	8 000

- 2 State the formula to calculate:
  - a mark-up
  - b gross margin.

## Inventory turnover

A business is more profitable if it sells its inventory quickly and replaces it with new inventory. The more times it does this, the more gross profit it will make. It is therefore important to know what a business' turnover of inventory is.

A business will use a formula called the **rate of inventory turnover** to calculate how many times it sells its inventory in a year and replaces it with new inventory (see also Chapter 21). The formula to calculate rate of inventory turnover is shown below.

$$\text{Rate of inventory turnover} = \frac{\text{Cost of sales}}{\text{Average inventory}} = \frac{\text{Cost of sales}}{(\text{Opening} + \text{Closing inventory}) \div 2}$$

### Key term

The **rate of inventory turnover** is the number of times inventory is sold and replaced by a business in a given period.



In this chapter, we will be using inventory turnover to calculate missing information.

### → Worked example 9

Oslo Hardware, a trader, provides the following information for the year ended 2018:

	\$
Inventory at 1 January	2 400
Inventory at 31 December	2 800
Rate of inventory turnover	10 times a year

The gross margin is at a uniform rate of 20 per cent.

To find purchases for the year, prepare a trading account (see instructions below).

Oslo Hardware		
Trading account for the year ended 31 December 2018		
	\$	\$
Sales		32 500
Less cost of sales:		
Opening inventory	2 400	
Purchases	<u>26 400</u>	
	28 800	
Less closing inventory	<u>2 800</u>	<u>26 000</u>
Gross profit		<u>6 500</u>

Instructions to prepare the trading account for Oslo Hardware:

- a Prepare the trading account leaving spaces for purchases, cost of sales, gross profit and sales.
- b Use the rate of inventory turnover formula:

$$\frac{\text{Cost of sales}}{\text{Average inventory}} = 10$$

Therefore:

$$\text{Cost of sales} = 10 \times (\text{Opening} + \text{Closing inventory}) \div 2 = 10 \times \$2\,600 = \$26\,000$$

- c To calculate gross profit:

$$\text{As gross margin is given } \frac{1}{5} \text{ and sales is not, the mark-up} = \frac{1}{4} = 25 \text{ per cent.}$$

$$\text{Therefore, gross profit} = 25 \text{ per cent} \times \$26\,000 = \$6\,500.$$

- d Purchases = Cost of sales + Closing inventory – Opening inventory = \$26 000 + \$2 800 – \$2 400 = \$26 400

- e Sales = Gross profit + Cost of sales = \$6 500 + \$26 000 = \$32 500

You now have all the figures necessary to fill in the missing figures in the trading account.

**Activity 7**

Barrington Computers provides the following information for the year ended 2019:

	\$
Inventory at 1 January	3 000
Inventory at 31 December	2 000
Rate of inventory turnover	8 times a year

The mark-up is applied at a uniform rate of 25 per cent.  
Calculate the following:

- a Cost of sales
- b Gross profit
- c Sales
- d Purchases.

## Calculation of closing inventory, given the gross margin or mark-up

As we have seen, incomplete records may be the result of small traders not maintaining a full set of double entry records. However, some large businesses may be faced with a situation of having incomplete information due to a fire, theft or an act of nature. In such a case, closing inventory should be calculated to establish how much inventory was lost.

### → Worked example 10

Mala's Craft Store caught fire on 12 June 2018. All the inventory was destroyed. She provides the following information:

On 1 January 2018, her inventory was valued at \$500. From 1 January to 12 June 2018, her sales were \$5 000 and her purchases were \$3 000. Her profit margin was 50 per cent. Calculate the cost of the inventory destroyed. Show your answer in the form of a trading account.

<b>Mala</b>		
<b>Trading account for the period 1 January to 12 June 2018</b>		
	\$	\$
Sales		5 000
Less cost of sales:		
Opening inventory	500	
Purchases	<u>3 000</u>	
	3 500	
Less closing inventory:	<u>1 000</u>	<u>2 500</u>
Gross profit		<u>2 500</u>

#### Working

$$\text{Gross profit} = 50 \text{ per cent} \times \$5\,000 = \$2\,500$$

$$\text{Cost of sales} = \text{Sales} - \text{Gross profit} = \$2\,500$$

$$\begin{aligned} \text{Closing inventory} &= \text{Opening inventory} + \text{Purchases} - \text{Cost of sales} = (\$500 + \$3\,000) - \$2\,500 \\ &= \$1\,000 \end{aligned}$$

Therefore the cost of inventory destroyed was \$1 000.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Jenny, a trader, provides the following information:

	\$
Trade receivables at 1 January 2019	3 500
Trade receivables at 31 December 2019	2 500

Receipts from trade receivables in the year ended 31 December 2019 were \$23 000

What were the credit sales for the year ended 31 December 2019?

- A \$22 000  
B \$23 000  
C \$24 000  
D \$29 000

[1]

- 2 A sole trader's financial year ends on 30 June. His accounts showed the following details at 30 June 2018:

	\$
Drawings for the year	4 500
Capital at 30 June 2018	10 500
Profit for the year	5 000
Capital introduced during the year	1 900

What was the trader's opening capital?

- A \$2 900  
B \$8 100  
C \$12 400  
D \$12 900

[1]

- 3 Manuka, a sole trader, does not keep full accounting records. Which formula will be used to calculate credit purchases?

- A Amount paid – Discount received – Closing trade payables + Opening trade payables  
B Amount paid – Discount received + Closing trade payables – Opening trade payables  
C Amount paid + Discount received – Closing trade payables + Opening trade payables  
D Amount paid + Discount received + Closing trade payables – Opening trade payables

- 4 The following figures appear in the statement of financial position of Min Jun, a sole trader who does not keep full financial records.

At 31 December 2018:	\$
Non-current assets	23 000
Current assets	9 500
Current liabilities	13 000
Loss for the year ended 31 December 2018	1 000

What was Min Jun's capital at 1 January 2018?

- A \$18 500  
B \$19 500  
C \$20 500  
D \$21 500



- 5 Juanita, a trader who does not keep full financial records, provides the following information:

	1 January 2019	31 December 2019
	\$	\$
Total assets	46 000	57 000
Total liabilities	12 700	10 400

If Juanita's drawings for the year were \$3 900, what was the profit/loss for the year?

- A \$17 200 loss  
 B \$12 700 loss  
 C \$12 700 profit  
 D \$17 200 profit

[1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 Sam is a sole trader who does not keep full accounting records. All purchases and most of his sales are on credit.

Balances on 1 April 2003 included:

	\$
Trade receivables	8 000
Trade payables	6 000

During the year ended 31 March 2004, Sam recorded the following information:

	\$
Receipts from trade receivables	83 000
Payments to trade payables	74 000
Discounts allowed	5 000
Discounts received	3 000
Credit sales	90 000
Credit purchases	77 000

- a Calculate Sam's trade receivables and trade payables as at 31 March 2004. Show your workings.

[10]

Sam supplies the following further information:

	\$
Cash sales for the year	10 000
Inventory of goods for resale:	
At 1 April 2003	14 000
At 31 March 2004	16 000

- b Using the relevant information given in 6 a and above, prepare Sam's Trading Account.

[7]

- c i Calculate Sam's rate of inventory turnover for the year ended 31 March 2004. Show your workings.

[4]

- ii Suggest one way in which knowing the rate of inventory turnover will be useful to Sam.

[2]

(Adapted from Cambridge IGCSE Accounting 0452/2, May/June 2004, Q4)

- 7 Malala Khan is a trader. Her financial year ends on 31 May. She does not maintain many accounting records, but was able to provide the following information at 31 May 2015.

	\$
Bank overdraft	4 080
Trade payables	8 100
Trade receivables	7 800
Other receivables	101
Inventory	6 750
Machinery at book value on 1 June 2014 (cost \$28 600)	22 880
Motor vehicles at book value on 1 June 2014 (cost \$24 000)	13 500
Loan (repayable 31 July 2016)	10 000

The following adjustments are required on 31 May 2015.

- A provision for doubtful debts of 2 per cent of the trade receivables should be created.
- The machinery should be depreciated by 20 per cent per annum using the straight line method.
- The motor vehicles should be depreciated by 25 per cent per annum using the reducing balance method.

**a** Prepare a statement of affairs on 31 May 2015. The statement of affairs should show the total capital at that date. [12]

On 1 June 2014 Malala Khan's capital was \$20 000. On 1 January 2015 she transferred \$5 000 from her private bank account into the business bank account. During the year ended 31 May 2015 Malala Khan made the following drawings:

	\$
Cash	1 990
Goods	420

**b** Prepare Malala Khan's capital account for the year ended 31 May 2015, showing the profit or loss for the year. [6]

**c** Complete the following table by placing a tick (✓) in the correct column to show how each course of action would affect Malala Khan's working capital. [4]

	Increase	Decrease	No effect
Reduce the credit period allowed to credit customers			
Sell a motor vehicle which is no longer used			
Arrange with the bank to have a loan for six months			
Allow cash discount to credit customers who pay promptly			

**d** State three reasons why it is important for Malala Khan to have an adequate amount of working capital. [3]

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2015, Q3)

**8** Paul Muyambo is a trader. His financial year ends on 31 January.

Paul Muyambo does not maintain a full set of accounting records, but was able to provide the following information at 31 January 2011.

Assets and liabilities at 31 January 2011:

	\$
Machinery at book value	32 500
Inventory	12 648
Trade payables	9 485
Other payables	315
Trade receivables	11 320
Other receivables	261
Motor vehicle at valuation	10 300
Bank overdraft	11 146



The following adjustments are required on 31 January 2011:

- The machinery should be depreciated by 25 per cent on book value.
- The motor vehicle should be revalued at \$9 100.
- A provision for doubtful debts of 2½ per cent of the trade receivables should be created.

a Prepare a statement of affairs for Paul Muyambo at 31 January 2011 showing the total capital at that date. [13]

On 1 February 2010 Paul Muyambo's capital was \$42 500.

During the year ended 31 January 2011 Paul Muyambo made the following transactions:

- Introduced an additional \$3 000 as capital.
- Withdrew cash from bank, \$5 575, for personal use.
- Took goods costing \$1 700 for personal use.

b Using the capital you calculated in (a) and the information above, calculate Paul Muyambo's profit or loss for the year ended 31 January 2011. Your answer may be in the form of a calculation or a ledger account. [7]

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2011, Q2)

9 Aneela started a business on 1 March 2015. She did not maintain a full set of accounting records.

All purchases and sales were made on credit terms. All payments were made by cheque and all money received was banked.

Aneela was able to provide the following information.

	\$
<b>On 1 March 2015:</b>	
Capital introduced	45 000
Business start-up loan received	10 000
<b>During the year ended 29 February 2016:</b>	
Non-current assets purchased	20 500
Credit purchases	70 150
Cheques received from credit customers	61 230
Cash discount allowed	1 570
Cash discount received	1 860
Returns to credit suppliers	1 110
Returns by credit customers	2 070
Irrecoverable debts written off	260
<b>On 29 February 2016:</b>	
Amount owing by credit customers	16 190
Amount owing to credit suppliers	7 040
Cash at bank	16 970

a Calculate the credit sales for the year ended 29 February 2016. [6]

b Calculate the amount paid to credit suppliers during the year ended 29 February 2016. [5]

c Prepare the bank account for the year ended 29 February 2016. Insert the missing figure which represents expenses for the year. [7]

(Adapted from Cambridge IGCSE Accounting 0452/22, May/June 2016, Q2)

## ? Chapter review questions

- 1 Define the following terms:
  - a Incomplete records
  - b A statement of affairs
- 2 Explain the difference between:
  - a a statement of account and a statement of affairs.
  - b mark-up and gross margin.
- 3 A business provides the information below. Calculate the profit/loss for the year.

	\$
Drawings for the year	5 000
Capital at 30 June 2019	14 700
Capital at 1 July 2018	15 000
Capital introduced during the year	2 000

- 4 Larry is a sole trader who does not keep full accounting records. His capital at the end of the year is less than at the start. He had not introduced any new capital during the year. Suggest two reasons for the difference.
- 5 Amber is a sole trader who does not keep full financial records. She provides the following information on 31 March 2019:

	\$
Non-current assets	25 000
Current assets	10 700
Current liabilities	9 000

Her capital on 1 April 2018 was \$16 900. She did not make any drawings during the year. Calculate Amber's profit or loss for the year ended 31 March 2019.

- 6 A trader bought goods for \$1 000 and sold them for \$1 500. Calculate:
  - a the mark-up
  - b the gross margin.
- 7 Tom provides the following information for the year ended 31 December 2018:

	\$
Sales	20 000
Opening inventory	4 500
Closing inventory	4 800

A uniform gross margin of 25 per cent was achieved.

Prepare a trading account to calculate the purchases.

- 8 The sales of a business were \$40 000. The cost of sales was \$25 000. Calculate:
  - a the mark-up
  - b the gross margin.

### Revision checklist



In this chapter, you have learnt:

- ✓ the disadvantages of not maintaining a full set of accounting records
- ✓ what a statement of affairs is
- ✓ how to prepare an opening and closing statement of affairs
- ✓ how to calculate profit for the year from an opening and closing statement of affairs
- ✓ how to calculate profit for the year from preparing a capital account
- ✓ how to calculate total sales for the year
- ✓ how to calculate total purchases for the year
- ✓ to calculate gross profit given a set of incomplete records
- ✓ to calculate closing trade payables or trade receivables given incomplete records
- ✓ to calculate drawings and cash sales from incomplete records
- ✓ to calculate expenses and income from incomplete records
- ✓ to calculate the closing bank and cash balances from a set of incomplete records
- ✓ to prepare income statements and statements of financial position from incomplete records
- ✓ to make adjustments to financial statements prepared from incomplete records
- ✓ what a mark-up is
- ✓ what a gross margin is
- ✓ how to use the mark-up, gross margin and rate of inventory turnover to arrive at missing figures
- ✓ how to calculate the rate of inventory turnover and use it to calculate missing information
- ✓ how to calculate closing inventory from incomplete records.



# SECTION 6



## Analysis and interpretation

### Chapters

- 21 Calculation and understanding of accounting ratios
- 22 Interpretation of accounting ratios
- 23 Inter-firm comparison
- 24 Interested parties
- 25 Limitations of accounting statements

In this section, you will learn how interested parties analyse financial statements and interpret them to make important decisions about the business. Intra- and inter-firm comparisons using profitability and liquidity ratios can reveal the health of a business. Using ratios, analysts can measure the efficiency with which the business is run, and its future growth prospects. This section also covers the limitations of accounting statements, in terms of their inability to reveal to interested parties every aspect of a business' performance and worth.

# Calculation and understanding of accounting ratios

By the end of this chapter you will be able to understand, calculate and explain the importance of the most commonly used ratios:

- ★ gross margin
- ★ profit margin
- ★ return on capital employed (ROCE)
- ★ current ratio
- ★ liquid (acid test) ratio
- ★ rate of inventory turnover (times)
- ★ trade receivables turnover (days)
- ★ trade payables turnover (days).

## Accounting ratios

Financial statements on their own are useful only to those who are very skilled at interpreting them. This is because they must be properly analysed and interpreted to be valuable. Analysing the financial data contained in financial statements involves a careful examination of the figures. The results of such an examination should then be compared to find out if progress has been made by the business or not. To make comparisons easier, the accounting data are usually expressed as **accounting ratios**. The various parties interested in a business use ratio analysis to evaluate the business' profitability, liquidity and efficiency. They then make decisions based on their observations. 'Accounting ratios' is a term used loosely, and it includes not only ratios, but also percentages and time periods. This chapter will cover those most commonly used ratios, described in the list above.

### Key term

**Accounting ratios** are used to reveal the interrelationships that exist between the different items in financial statements.

## Gross margin

The gross margin ratio uses data from the trading account section of the income statement to analyse the profitability of sales made by a business during a financial year.

The formula is:

$$\text{Gross margin} = \frac{\text{Gross profit} \times 100}{\text{Sales}}$$

This ratio is also known as the percentage of gross profit to revenue (where revenue is net sales less return inwards) or gross profit margin. The ratio represents the gross profit for every \$100 of sales revenue. If the gross margin is 20 per cent, the business has made \$20 gross profit for every \$100 of sales. Therefore, the higher the margin, the more profitable the sales have been.

A fall in the gross margin may have been caused by:

- » a decrease in the selling price to increase quantities of goods sold and thereby increase sales revenue
- » an increase in the trade discount to attract more customers
- » an increase in costs not passed to customers to keep selling prices competitive.

Here are some of the measures the business can take to improve gross margins:

- » increase selling price but keep the cost of sales constant
- » reduce cost of sales by seeking out cheaper suppliers, for example, but keep the selling price constant
- » increase product range to include newer and more profitable products.

However, some of these measures could have adverse effects. For example, increasing the selling price may drive customers away, while reducing the cost may affect the quality of the product.

Think about it!

What are the adverse effects of increasing:

- sales promotions and advertising
- product range?



### → Worked example 1

Sally, a sole trader who deals in antique jewellery, provides the following information for the year ended 31 December 2018:

Sally		
Income statement for the year ended 31 December 2018		
	\$	\$
Sales		3 000
Less cost of sales:		
Opening inventory	900	
Purchases	<u>3 000</u>	
	3 900	
Less closing inventory	<u>2 500</u>	<u>1 400</u>
Gross profit		1 600
Less expenses:		
Salaries	400	
Electricity	230	
Rent	<u>300</u>	930
Profit before interest		670
Interest		20
Profit for the year		<u><u>650</u></u>

$$\begin{aligned}
 \text{Gross margin} &= \frac{\text{Gross profit} \times 100}{\text{Sales}} \\
 &= \frac{\$1\,600}{\$3\,000} \times 100 = 53.33\%
 \end{aligned}$$

### Activity 1

- 1 State which of the financial statements of a sole trader provides information to calculate the gross margin.
- 2 'If gross profit rises, gross margin will also rise.' State whether this statement is true or false.
- 3 State what is measured by gross margin.
- 4 A business provides the information below. Calculate the gross margin.

	\$
Gross profit for the year	25 000
Sales for the year	65 000
Sales returns for the year	5 000

## Profit margin

This ratio uses data from the income statement and is also meant to analyse the profitability of sales made by a business during a financial year. However, the profit used in this ratio is the profit for the year, not the gross profit.

The formula is:

$$\text{Profit margin} = \frac{\text{Profit for the year} \times 100}{\text{Revenue}}$$

#### Key term

**Profit margin** is also known as percentage of profit to revenue. The ratio shows the profit for the year for every \$100 of sales revenue.

#### Key info

A change in the gross margin will affect the profit margin.

#### Think about it!

If profit rises, and sales stay the same, will the profit margin also rise?

This ratio is also known as percentage of profit to revenue. The ratio shows the profit for every \$100 of sales revenue. If the **profit margin** is ten per cent, the business has made \$10 profit for every \$100 of sales. Therefore, the higher the margin, the more profitable the business.

Profit for the year is affected by how well expenses have been controlled. Some of the expenses are linked to sales, for instance, sales commission or distribution expenses. These expenses will increase with an increase in sales. However, other expenses such as rent or electricity, are not dependent on sales and can be controlled.

Subtracting the two ratios above, the gross margin and the profit margin, one can calculate the expenses to sales ratio: if the gross margin was 20 per cent and the profit margin 8 per cent, the expenses for every \$100 of sales would be \$12. Therefore, the expenses to sales ratio would be 12 per cent.

### → Worked example 2

Using Sally's income statement from Worked example 1, the profit margin can be calculated:

$$\begin{aligned} \text{Profit margin} &= \frac{\text{Profit for the year} \times 100}{\text{Revenue}} \\ &= \frac{650 \times 100}{3000} = 21.67\% \end{aligned}$$

For every \$100 of sales, Sally makes a profit of \$21.67.

Therefore Sally's expenses for every \$100 of sales = \$53.33 - \$21.67 = \$31.66

Sally's expenses to sales ratio is 31.66 per cent.

## Activity 2

- 1 A business provides the following information:

	\$
Gross profit	20 000
Profit for the year	15 000
Sales for the year	60 000

Calculate:

- a the gross margin
  - b the profit margin
  - c the expenses as a percentage of sales.
- 2 Calculate the increase in profit which would arise if the business increased its sales to \$100 000 and maintained the same profit margin.

### Key terms

#### Return on capital employed (ROCE)

measures a business' efficiency with which money invested in it is used.

**Working capital** is the difference between current assets and current liabilities, and is used in the day-to-day running of the business.

**Capital owned** is the amount owed to a business owner by the business on a given day.

**Capital employed** is the amount being used by the business on a given day.

## Return on capital employed (ROCE)

The **return on capital employed (ROCE)** ratio measures how efficiently a business uses the money invested in it. It is used to gauge the value gained by the business from the use of its assets and liabilities.

The formula is:

$$\text{Return on capital employed} = \frac{\text{Profit before interest}}{\text{Capital employed}} \times 100$$

Before we proceed, it is necessary to distinguish between the different types of capital.

- » **Working capital** – the difference between current assets and current liabilities. It is the capital used in the day-to-day running of the business.
- » **Capital owned** – the amount owed to the owner of a business by the business on a given day.
- » **Capital employed** – the total money being used (employed) by the business on a given day. Therefore it is the sum of the capital invested in the business *and* the long-term loans taken. It could also be calculated by adding non-current assets to working capital.

The two formulae for calculating capital employed are:

$$\text{Capital employed} = \text{Owner's equity} + \text{Non-current liabilities}$$

$$\text{Capital employed} = \text{Non-current assets} + \text{Current assets} - \text{Current liabilities}$$

Instead of using capital employed at an arbitrary point in time, either at the start of the year or at the end of the year, the average capital employed is used by some analysts for the accounting period. This is the average of opening and closing capital employed.

The formula will therefore be modified:

*Return on capital employed =*

$$\frac{\text{Profit before interest}}{\text{Owner's equity} + \text{Non current liabilities}} \times 100$$

or

*Return on capital employed =*

$$\frac{\text{Profit before interest}}{\text{Non current assets} + \text{Current assets} - \text{Current liabilities}} \times 100$$

or

*Return on capital employed =*

$$\frac{\text{Profit before interest}}{(\text{Opening capital employed} + \text{Closing capital employed}) \div 2} \times 100$$

### Study tip

As there are three possible ways to calculate capital employed, it is important that you read the question carefully to ensure you use the correct method. If there is no information given, then use the first method with capital employed equal to the sum of the owner's equity and non-current liabilities.

A higher return on capital employed will show a more efficient use of capital. This is an important ratio for owners and investors to gauge how well their investment is working.

### → Worked example 3

Returning to the example in Worked examples 1 and 2, Sally has the following statement of financial position:

Sally		
Statement of financial position as at 31 December 2018		
	\$	\$
<b>Non-current assets</b> (at net book value)		8 000
Current assets:		
Inventory	2 500	
Trade receivables	3 500	
Bank	<u>6 800</u>	<u>12 800</u>
Total assets		<u>20 800</u>
<b>Capital:</b>		
Opening	11 000	
Add: Profit for the year	<u>650</u>	
	11 650	
Less: Drawings	<u>1 650</u>	10 000
<b>Non-current liabilities:</b>		
Loan from bank		5 000
<b>Current liabilities:</b>		
Trade payables		<u>5 800</u>
Total capital and liabilities		<u>20 800</u>

### Think about it!

A business that owns less land will have a larger ROCE than a business that owns more land, if it makes the same profit. Do you agree?



### Activity 3

- 1 Comment on the ROCE earned by Sally.
- 2 Calculate the ROCE using the other two formulae given.

$$\begin{aligned}\text{Sally's return on capital employed} &= \frac{\text{Profit before interest}}{\text{Owner's equity} + \text{Non current liabilities}} \times 100 \\ &= \frac{670}{\$10\,000 + \$5\,000} \times 100 = 4.47\%\end{aligned}$$

## Current ratio

The **current ratio** compares the current assets – assets that will remain ‘current’ or liquid for one year – and current liabilities, or liabilities that will be due for payment within one year. Current ratio shows whether there are sufficient liquid funds to meet the business’ short-term liabilities when they become due. This ratio is also called the working capital ratio. The current ratio is:

$$\text{Current ratio} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

When the ratio is calculated, it is expressed as a ratio to 1, with current liabilities being set to 1.

After the ratio is calculated, it is important to comment on it. Normally a current ratio between 1.5:1 and 2:1 is considered desirable. However, other factors should be taken into consideration, such as:

- » What is the industry current ratio? Similar sized businesses in the same industry should normally have the same current ratio.
- » What are the assets and liabilities of the business? Why do they differ from similar businesses?

If the business is far above or below the industry average, there is cause for concern. If the reason for this is poor management of current assets, then this should be addressed immediately.

It is possible to increase the current ratio by improving the business’ cash-flow position in the following ways:

- » owners should reduce their drawings
- » owners can introduce more capital
- » obtain more loans
- » sell surplus non-current assets.

### Key term

**Current ratio** compares the current assets, assets that will remain ‘current’ or liquid for one year, and current liabilities, or liabilities that will be due for payment in one year.

### Think about it!

What are the adverse effects of the five other strategies shown above, if any?

## → Worked example 4

Using the figures from Sally’s financial statements, her current ratio is:

$$\frac{\text{Current assets}}{\text{Current liabilities}} = \frac{\$12\,800}{\$5\,800} = 2.2:1$$

The current ratio for the antique jewellery industry is 2.3: 1. This is because traders hold expensive inventory which increases the value of their current assets. Hence, Sally’s current ratio is close to the industry average and she should have no cause for concern.

### Activity 4

- 1 Define:
  - a current assets
  - b current liabilities
  - c liquid assets.
- 2 Calculate the current ratio given the following information:

	\$
Bank overdraft	2 100
Machinery	3 450
Inventory	6 800
Trade receivables	3 500
Cash	2 500
Trade payables	1 500

#### Key term

**Liquid ratio**, also called the acid test ratio or the acid test, measures the business' ability to meet its current liabilities with its most liquid assets.

### Liquid (acid test) ratio

The **liquid ratio**, also called the acid test ratio, measures the business' ability to meet its current liabilities with its most liquid assets. Therefore, the ratio excludes inventory from its current assets. This is because inventory is two stages away from being converted into cash: it has to be sold first and then money has to be collected from trade receivables. This means that inventory is the least liquid current asset.

The formula is:

$$\text{Liquid ratio} = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$$

The ratio shows the ability of the business to meet its current liabilities if trade receivables pay at the same time as the business pays off its trade payables. A liquid ratio of 1:1 is considered desirable. However, as with the current ratio, other factors such as the industry average, the size and type of business should also be considered.

If the ratio is higher than 1:1, this would show that the current assets such as trade receivables and cash are not being managed efficiently. The money tied up in these assets could have been used more productively elsewhere. For example, a large bank balance in a current account means the money is not being put to good use.

A ratio lower than 1:1 means that the business could be in trouble if all its trade payables asked to be paid immediately. Many businesses fail because, though profitable, they are not liquid enough to pay off their trade payables on time.

### → Worked example 5

Using information from Sally's financial statements, her liquid ratio is:

$$\frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}} = \frac{\$10\,300}{\$5\,800} = 1.78 : 1$$

Sally's liquid ratio is significantly higher than the ideal ratio.  
Why is it important for a business to know what its liquid ratio is?



### Activity 5

Calculate the liquid ratio given the following information:

	\$
Bank overdraft	2 100
Machinery	3 450
Inventory	6 800
Trade receivables	3 500
Cash	2 500
Trade payables	1 500

### Rate of inventory turnover

This ratio measures the number of times a business sells its inventory and replaces it in a year. **The ratio is measured in times.** If a business has a high rate of inventory turnover, it follows that it is selling a lot of products and therefore should be making a good profit. As inventory is being replaced regularly with new goods, the products for sale will always be new and current, making it attractive to customers.

If the rate is low, however, it would show that the business is not being efficient at managing its inventory. The business may have over purchased inventory, which is not being sold fast enough. As a result, the inventory will pile up in the warehouse, become increasingly old and unattractive.

Money is tied up in inventory that could have been used more productively elsewhere. A slowing down in the rate could also mean that sales are slowing down, perhaps due to falling demand, uncompetitive prices or insufficient sales promotions. The business could be facing an undesirable situation called a **liquidity crisis**.

There is no ideal rate of inventory turnover as it will differ from business to business. Some businesses need a lot of inventory and sell almost all of it every day, for example, bakeries and restaurants. These businesses will have a high of inventory turnover. Some businesses will have a low rate of inventory turnover as they have slow-moving inventory, such as machinery or luxury cars. Overall, if the rate has improved year on year, it is a good sign that inventory is being managed well.

The formula is:

$$\text{Rate of inventory turnover} = \frac{\text{Cost of sales}}{\text{Average inventory}}$$

or

$$\text{Rate of inventory turnover} = \frac{\text{Cost of sales}}{(\text{Opening inventory} + \text{Closing inventory} \div 2)}$$

#### Key term

A **liquidity crisis** is a business' lack of liquidity to meet its immediate need for cash.

### → Worked example 6

Information given:

Cost of sales = \$45 000

Opening inventory = \$6 000

Closing inventory = \$4 000

$$\begin{aligned}\text{Rate of inventory turnover} &= \frac{\text{Cost of sales}}{(\text{Opening inventory} + \text{Closing inventory}) \div 2} \\ &= \frac{\$45\,000}{(\$6\,000 + \$4\,000) \div 2} = 9 \text{ times}\end{aligned}$$

This means that the business sold all its inventory and replaced it nine times during the year.  
In days:

$$\text{Inventory turnover} = \frac{365}{9} = 40.5 \text{ or } 41 \text{ days (approx.)}$$

The business held its inventory on an average of 41 days before selling it.  
The above calculation can also be done using the following formula:

$$\text{Inventory turnover (days)} = \frac{\text{Average inventory}}{\text{Cost of sales}} \times 365$$

### Activity 6

- 1 State two reasons why a high rate of inventory turnover is good for a business.
- 2 State two reasons why a low rate of inventory turnover is not good for a business.
- 3 Calculate the rate inventory turnover (in times) from the following information:

	\$
Cost of sales	20 000
Opening inventory	2 700
Closing inventory	2 200

### Trade receivables turnover ratio

This ratio is calculated using the following formula:

$$\text{Trade receivables turnover} = \frac{\text{Trade receivables}}{\text{Credit sales}} \times 365 \text{ (in days)}$$

or

$$\text{Trade receivables turnover} = \frac{\text{Trade receivables}}{\text{Credit sales}} \times 52 \text{ (in weeks)}$$

or

$$\text{Trade receivables turnover} = \frac{\text{Trade receivables}}{\text{Credit sales}} \times 12 \text{ (in months)}$$

This ratio measures the average time the business' trade receivables take to pay their debts (or the debt collection period). It is always better if trade receivables pay off their accounts quickly because this helps the business meet its cash needs. In addition, old debts are liable to become irrecoverable debts which are a business expense. Therefore, businesses offer trade receivables incentives in the form of cash discounts to encourage them to pay their debts within a certain time.

This ratio could show that the business has a credit control policy in place. The period allowed for payment should be compared with the trade receivables turnover period to gauge whether a business is efficient in controlling its trade receivables. If the debt collection period is low or decreases, it is a good sign, as it means that trade receivables are taking fewer days to pay off their accounts. A

**Key term**

The **trade receivables turnover ratio** measures the average time the business' trade receivables take to pay their debts.

high collection period would mean that the credit control policy is not working or there is no credit control policy in place, both of which show inefficiency. However, a high trade receivables turnover ratio may also be intentional to attract more customers by offering longer credit terms.

The **trade receivables turnover ratio** can be improved by using measures such as:

- » charging interest on amounts owing
- » offering cash discounts for early payment
- » putting in place a good credit control policy
- » refusing to sell more goods to customers who have outstanding debts.

**Study tip**

Always round up your answer to the next whole day.

**Think about it!**

Discuss with your partner the methods Yolanda in Worked example 7 can use to ensure that her trade receivables pay her on time. (Hint: you learnt this in Chapter 13 Irrecoverable debts and provision for doubtful debts.)

**→ Worked example 7**

Yolanda, a sole trader, provides the following information:

	\$
Sales	120 000
Trade receivables	30 000

Out of the total sales, \$20 000 were cash sales and the remaining were credit sales.

$$\begin{aligned} \text{Trade receivables turnover} &= \frac{\text{Trade receivables}}{\text{Credit sales}} \times 365 \text{ (in days)} \\ &= \frac{\$30\,000}{\$120\,000 - \$20\,000} \times 365 = 109.5 = 110 \text{ days (approx.)} \end{aligned}$$

Yolanda's trade receivables take almost four months to pay her, which is not ideal. The situation should be immediately investigated and steps taken to improve it.

**Activity 7**

- 1 Suggest why trade receivables turnover ratio is important to a business.
- 2 Suggest one way that a business can reduce its trade receivables turnover ratio.
- 3 A business allows its trade receivables 40 days credit. The trade receivables turnover period is 30 days. Explain whether or not the business would be satisfied with this.

**Trade payables turnover ratio**

The **trade payables turnover ratio** is calculated using the following formula:

$$\text{Trade payables turnover} = \frac{\text{Trade payables}}{\text{Credit purchases}} \times 365 \text{ (in days)}$$

or

$$\text{Trade payables turnover} = \frac{\text{Trade payables}}{\text{Credit purchases}} \times 52 \text{ (in weeks)}$$

or

$$\text{Trade payables turnover} = \frac{\text{Trade payables}}{\text{Credit purchases}} \times 12 \text{ (in months)}$$

This ratio measures the average time the business takes to pay its trade payables. It can also be referred to as the trade payables payment period. It indicates whether the business takes full advantage of the trade credit extended to it by its suppliers. The business should pay off its trade payables within the credit

**Key term**

The **trade payables turnover ratio** measures the average time the business takes to pay its trade payables.

limit period as it can then take advantage of cash discounts for early payment. Therefore, its trade payables turnover period should be less or nearly equal to the credit limit period offered by its suppliers.

A business may use the same payment period year after year. If this period decreases, it could indicate that the business is paying its trade payables more quickly. If the period increases, it indicates that the business is taking longer to pay off its trade payables, perhaps due to liquidity problems or inefficiency.

A business' liquidity is dependent to a large extent on how long its credit customers take to pay. Therefore, it is important to constantly chase up trade receivables, to make sure that there is enough cash to pay trade payables. Sometimes businesses may delay paying their trade payables and use the money for other purposes. If their suppliers do not charge interest for late payment, this can be a source of interest-free finance. However, there may be adverse effects such as:

- » the business loses any cash discount for early payment
- » the supplier could refuse to sell any more goods to the business
- » the supplier could refuse to sell goods to the business on credit in the future
- » the relationship with the supplier is damaged.

### Study tip

Always round up your answer to the next whole day.

### → Worked example 8

Olga, a sole trader, provides the following information:

	\$
Credit purchases	50 000
Trade payables	5 000

$$\begin{aligned}
 \text{Trade payables turnover (days)} &= \frac{\text{Trade payables}}{\text{Credit purchases}} \times 365 \\
 &= \frac{\$5\,000}{\$50\,000} \times 365 = 36.5 = 37 \text{ days (approx.)}
 \end{aligned}$$

Olga pays her trade payables on average within 37 days. This is a good strategy, especially if her suppliers offer her cash discounts for early payment of, say, within 40 days. She has made good use of the credit period offered to her *and* taken advantage of the cash discount offered.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Kingsley had a profit for the year of \$50 000. His expenses were \$15 000 and his sales were \$100 000.  
What was his gross margin?  
 A 15 per cent  
 B 35 per cent  
 C 50 per cent  
 D 65 per cent [1]
- 2 Which ratio shows how well a business controls its trade receivables and trade payables?  
 A Current ratio  
 B Gross margin  
 C Profit margin  
 D Rate of inventory turnover
- 3 Tara provides the following information at the end of her financial year:

	\$
Non-current assets	40 000
Current assets	10 000
Current liabilities	5 000
Return on capital employed	10%

- What was Tara's profit for the year?
- A \$450  
 B \$500  
 C \$4 500  
 D \$5 000 [1]
  - 4 Sander's current ratio is 2.5:1 and Kerry's current ratio is 1.5:1. When compared, what do these ratios indicate?  
 A Kerry has fewer current assets than Sanders  
 B Kerry has more inventory than Sanders  
 C Sanders has fewer liabilities than Kerry  
 D Sanders has more liquidity than Kerry [1]
  - 5 Jess' gross profit ended 31 March 2019 is \$20 000 which is 20 per cent of sales. Her expenses for the year are \$6 000. What is her profit margin?  
 A 6 per cent  
 B 14 per cent  
 C 20 per cent  
 D 26 per cent [1]



The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6** A trader provides the information below. Profit for the year is 20 per cent of sales.

Calculate the cost of sales.

[4]

	\$
Gross profit	45 000
Expenses	20 000

- 7** Below is an extract from a business' statement of financial position. Calculate the current ratio.

[4]

	\$
Current assets:	
Inventory	25 000
Trade receivables	15 000
Cash at bank	10 000
Cash in hand	5 000
Current liabilities:	
Trade payables	30 000

- 8** The following balances were extracted from the books of Alex Penn on 31 March 2013.

	\$
Equipment (net book value)	40 000
Delivery vans (net book value)	22 000
Inventory	10 670
Trade receivables	11 200
Other receivables	4 130
Bank overdraft	4 200
Trade payables	8 800
6% bank loan (repayable 23 May 2016)	15 000
Capital 31 March 2013	70 000
Drawing	10 000

During the year Penn had purchased non-current assets to the value of \$20 000.

- a** Calculate the working capital. [2]  
**b** Calculate the following to two decimal places:  
**i** Current ratio [2]  
**ii** Liquid ratio (acid test ratio) [2]

For the year ended 31 March 2012 Penn's current ratio was 3:1 and his liquid ratio (acid test ratio) was 1:1.

- c** Suggest three reasons why Penn's liquidity position may have changed. [6]  
**d** Suggest two courses of action Penn could take to improve his liquidity. [6]  
*(Adapted from Cambridge O Level Principles of Accounts 7110/21, May/June 2013, Q3)*

- 9 George is a trader who buys and sells goods on credit. He provided the following information:

	2010	2011
	\$	\$
For the year ended 30 April		
Sales	220 000	180 000
Gross profit	110 000	72 000
Expenses	66 000	63 000
At 30 April	2010	2011
	\$	\$
Inventory	46 000	35 000
Capital	160 000	180 000
Bank	20 000 (overdraft)	15 000
Trade receivables	50 000	40 000
Trade payables	60 000	60 000
Ratios/percentages	2010	2011
Profit margin	?	5%
Current ratio	1.2:1	?
Liquid ratio (acid test)	0.6:1	?

- a Calculate the following to one decimal place:
- Profit margin for the year ended 30 April 2010. [3]
  - Current ratio on 30 April 2011. [3]
  - Liquid ratio (acid test) on 30 April 2011. [3]
- b Suggest two possible reasons for the change in the profit between the two years. [4]
- c Suggest two possible reasons for the change in the bank balance in the year ended 30 April 2011. [4]

(Adapted from Cambridge O Level Principles of Accounts 7110/21, May/June 2011, Q4)

## ? Chapter review questions

- 1 Copy the table below. Match each cause of a high current ratio in column one with the correct effect shown in column two.

	Cause of a high current ratio		Effect
a	Too much inventory	1	Danger of irrecoverable debts
b	Too many trade receivables	2	Money not being put to good use
c	Too much money in bank	3	Money not earning any income
d	Too much cash in hand	4	Goods getting outdated

- 2 State the formula for each of the following:

- a current ratio
- b liquid ratio
- c gross margin
- d profit margin
- e trade receivables turnover (days)
- f rate of inventory turnover
- g trade payables turnover (days).

- 3 Samson, a sole trader, provides the following information:

	2018	2019
Sales	\$40 000	\$50 000
Gross margin as a percentage of sales	35%	28%
Profit margin as a percentage of sales	15%	14%

Comment on Samson's ability to control his expenses by comparing the ratios above.

## Revision checklist

In this chapter, you have learnt:

- ✓ how to calculate the gross margin and its importance to a business
- ✓ how to calculate the profit margin and its importance to a business
- ✓ how to calculate the capital employed by a business
- ✓ how to calculate the return on capital employed and why it is an important ratio for a business
- ✓ how to calculate the current ratio and its importance to a business
- ✓ how to calculate the liquid ratio and why it is important to a business
- ✓ how to calculate the rate of inventory turnover
- ✓ why it is important for a business to know rate of inventory turnover
- ✓ how to calculate the trade receivables turnover ratio in days, months and weeks and why it is important to a business
- ✓ how to calculate the trade payables turnover ratio in days, months and weeks and why it is important to a business.



# Interpretation of accounting ratios

By the end of this chapter you will be able to:

- ★ prepare and comment on simple statements showing comparison of results for different years
- ★ make recommendations and suggestions for improving profitability and working capital
- ★ understand the significance of the difference between the gross margin and the profit margin as an indicator of a business' efficiency
- ★ explain the relationship of gross profit and profit for the year to the valuation of inventory, rate of inventory turnover, revenue, expenses and equity.

## Comparison of results for different years

As mentioned in Chapter 21, financial statements on their own do not contain useful data. This is because the data exists in absolute figures. To make sense of the data, the business' interested parties must analyse and then interpret the results of their analysis to assist them in decision making. Analysis involves examining the interrelationships that exist between various items in financial statements. Accounting ratios are used to do this.

## Absolute figures versus the use of ratio analysis for comparison between two financial years

The following example will illustrate the usefulness of ratio analysis for comparison between two years:

▼ **Table 22.1** Ratio analysis used for comparison between two years

	2018	2019
Current assets	\$10 000	\$20 000
Current liabilities	\$5 000	\$15 000
Working capital	\$5 000	\$5 000
Current ratio	2:1	1.33:1

Though the working capital (the amount of money available for the day-to-day running of the business) is the same in both years, the current ratio has decreased in 2019. Therefore, in 2019, for every \$1 of current liabilities, there is now just \$1.33 available to pay it off as compared to \$2 in 2018. This demonstrates the ability of ratios to better communicate the liquidity position of a business as compared to absolute figures.

As you have already seen in Chapter 21, ratios such as the gross margin and the profit margin analyse the ability of a business to earn profits, whereas the current ratio and the liquid ratio help analyse how liquid the assets of a business are.

The results of these analysis then can be interpreted to determine whether the business has improved or not, compared to the previous years or compared to other similar businesses in the same industry.

### Uses of ratios

- » Ratios of a business for the current year can be compared with those of a previous year.
- » Ratios of a business can be compared with those of another similar business in the same industry.
- » Ratios of a business for the current year can be compared with ratios derived from budgets and forecasts, to decide whether the targets contained in them were achieved.

### → Worked example 1

Tailspin Industries provide the following information for the years ended 31 December 2018 and 2019.

	2018	2019
	\$	\$
Sales	70 000	80 000
Gross profit	35 000	48 000
Profit for the year	21 000	26 667
Capital employed	84 000	133 335
Closing inventory	5 000	11 000
Opening inventory	4 500	5 000
Trade receivables	4 000	5 000
Balance at bank	3 000	
Bank overdraft		2 000
Trade payables	5 000	6 000
Out of total sales credit sales were	50 000	55 000
Out of total purchases, credit purchases were	30 000	32 000
Interest payable for the year	200	300

The ratio analysis for Tailspin Industries is shown in Table 22.2.

▼ **Table 22.2** Ratio analysis for Tailspin Industries

Tailspin industries			
Ratio analysis for the years ended 31 December 2018 and 2019			
		2018	2019
Gross margin	$\frac{\text{Gross profit}}{\text{sales}} \times 100$	$\frac{\$35\,000}{\$70\,000} \times 100 = 50\%$	$\frac{\$48\,000}{\$80\,000} \times 100 = 60\%$
Profit margin	$\frac{\text{Net profit}}{\text{sales}} \times 100$	$\frac{\$21\,000}{\$70\,000} \times 100 = 30\%$	$\frac{\$26\,667}{\$80\,000} \times 100 = 33.33\%$
Total expenses	Gross profit – net profit	$\$35\,000 - \$21\,000 = \$14\,000$	$\$48\,000 - \$26\,667 = \$21\,333$
ROCE	$\frac{\text{Profit before interest}}{\text{Capital employed}} \times 100$	$\frac{\$21\,200}{\$84\,000} \times 100 = 25.24\%$	$\frac{\$26\,967}{\$133\,335} \times 100 = 20.22\%$

Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	$\frac{\$12\,000^*}{\$5\,000} = 2.4:1$	$\frac{\$16\,000}{(\$2\,000 + \$6\,000)} = 2.1:1$
Liquid ratio	$\frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$	$\frac{\$12\,000 - \$5\,000}{\$5\,000} = 1.4:1$	$\frac{\$16\,000 - \$11\,000}{\$8\,000} = 0.63:1$
Trade receivable turnover ratio	$\frac{\text{Trade receivables}}{\text{Credit sales}} \times 365$	$\frac{\$4\,000}{\$50\,000} \times 365 = 30 \text{ days}$	$\frac{\$5\,000}{\$55\,000} \times 365 = 34 \text{ days}$
Trade payables turnover ratio	$\frac{\text{Trade payables}}{\text{Credit purchases}} \times 365$	$\frac{\$5\,000}{\$30\,000} \times 365 = 61 \text{ days}$	$\frac{\$6\,000}{\$32\,000} \times 365 = 69 \text{ days}$
Inventory turnover	$\frac{\text{Cost of sales}}{\text{Average inventory}}$	$\frac{\$35\,000}{\$4\,750} = 7.4 \text{ times}$	$\frac{\$32\,000}{\$8\,000} = 4 \text{ times}$

**Study tip**

The figures for days should be rounded up. Hence 60.8 days = 61 days

▼ **Table 22.3** Comparison of current assets and cost of sales for 2018 and 2019

	2018	2019
*Current assets	$\$5\,000 + \$4\,000 + \$3\,000 = \$12\,000$	$\$11\,000 + \$5\,000 = \$16\,000$
**Cost of sales	$\$4\,500 + \$50\,000 - \$5\,000 = \$49\,500$	$\$9\,000 + \$16\,000 - \$11\,000 = \$14\,000$

▼ **Table 22.4** Comments on the ratios shown in Table 22.2

	2018	2019	Comment
Gross margin	50%	60%	The gross margin has improved from 50 per cent to 60 per cent indicating an increase of \$10 gross profit for every \$100 of sales.
Profit margin	30%	33.33%	The profit margin has also improved. For every \$100 of sales, the net profit has increased by \$3.33.
Total expenses	\$14 000	\$21 333	The total expenses have increased by \$7 333. This is because, although the profit margin increased, it did not increase in proportion to the increase in sales for 2019. This indicates inefficiency in managing expenses for 2019.
ROCE	25.24%	20.28%	The return on capital employed has decreased. Owners are now (in 2019) getting a return of \$5 less for every \$100 they invested in the business.
Current ratio	2.4:1	2:1	The current ratio has remained almost the same with a small decrease. However, as the ideal current ratio is between 1.5:1 and 2:1, the current ratio has improved.
Liquid ratio	1.4:1	0.63:1	The liquid ratio has decreased to 0.63:1, which is an indication of a liquidity crisis. The ideal liquid ratio is 1:1.
Trade receivables turnover ratio	30 days	34 days	The trade receivable ratio is quite pleasing overall, though it has worsened a little from 30 days to 34 days. Debtors are now paying their debts on an average of four days later.
Trade payables turnover ratio	61 days	69 days	This ratio has changed for the worse. The business is now taking more than a week longer to pay its trade payables than it was in 2018.
Inventory turnover	7.4 times	4 times	This ratio has also changed for the worse drastically. The business is not selling and replacing its inventory as regularly as it did in 2018.

**Study tip**

It is important to mention the times/percentage/days etc. after the figures in the answers after calculating them using the formulae given.

### Activity 1

Lopes, a sole trader, provides the following information for the years ended 31 December 2018 and 2019:

	2018	2019
	\$	\$
Sales	100 000	90 000
Gross profit	45 000	45 000
profit for the year	33 000	36 000
Capital employed	80 000	100 000
Closing inventory	4 000	8 000
Opening inventory	3 000	4 000
Trade receivables	5 000	5 000
Balance at bank	2 000	5 000
Trade payables	5 000	10 000
Out of total sales, credit sales were	80 000	60 000
Credit purchases	20 000	15 000

- 1 Calculate for 2018 and 2019:
  - a gross margin
  - b profit margin
  - c ROCE
  - d current ratio
  - e liquid ratio
- 2 State whether the ratios in 2019 are better or worse than those in 2018.
- 3 Explain why ratios are more useful than the figures in the financial statement alone.

## Recommendations and suggestions for improving profitability

### Key term

**Profitability ratios** are used to show the relationships between profit and other figures in the financial statements prepared by a business for the accounting period.

Profitability is not the same as profit. Profit is an absolute figure, mentioned in the income statement. It does not tell us very much on its own, unless it is converted to a **profitability ratio**.

The following ratios are classified as profitability ratios:

- » Gross margin
- » Profit margin
- » Return on capital employed (ROCE).

In general, the higher the profitability ratios, the better. However, as with all ratios, it is important not to look at these ratios in isolation. To be useful, ratios should be compared with ratios from financial statements of previous years to see if there has been an improvement in profitability.

When a company is experiencing decreasing profitability, it could be due to external factors such as changing market conditions, increasing competition or rising costs. There are also internal factors to consider, such as inefficiency and low productivity.

## Gross margin

When the gross margin has decreased, it could be for a number of reasons, including:

- » higher supplier costs
- » lower selling prices due to trade discounts and promotions offered to customers
- » increasing additional costs such as packaging or carriage can increase cost of sales
- » not passing on increasing costs to customers
- » increased competition that can force the business to compete by reducing the selling price to make it more competitive.

The business can take the following measures to improve its gross margin:

- » **Reduce costs** – the business can reduce costs by either switching to a cheaper supplier or buying cheaper goods. It will have to do some research to find a supplier who is willing to supply cheaper goods. However, it is not a good idea to switch suppliers with whom the business has had a long relationship, as good suppliers who supply consistently high-quality goods on time are hard to come by. Buying cheaper goods is also not a good idea as the quality will be lower and this could result in a permanent loss of customers. Other cost-cutting measures include requesting suppliers to give discounts for buying in bulk.
- » **Increase the selling price** – by increasing the selling price, the business will earn a higher gross margin, only if it can keep costs constant. However, increasing selling prices can cause customers to move to a competitor who is selling the same product at a lower price.
- » **Keep track of inventory** – holding too much inventory could result in products deteriorating, going out of fashion and also getting stolen or damaged. Products that are brand new have a better chance of selling than products that have been in a warehouse for an extended period of time.
- » **Reduce other costs** – carriage inwards adds to the cost of sales and every attempt should be made to reduce it. If the packaging being used is expensive but adds to the appeal of the product (for example, it is environmentally friendly), then these costs could perhaps be passed on to the customer.



## Profit margin

A low cost of sales, as seen above, raises gross profit, which can let the business absorb its expenses and thereby increase profit for the year. However, the business should try to keep its expenses as low as possible to improve profit for the year, as profit margins are dependent on expenses and income, in addition to gross profit. Any additional income will improve profit for the year and therefore the profit margin, while any additional expense will reduce profit for the year and therefore the profit margin. If the business is experiencing falling profit margins, it should manage its expenses. Some of the measures it can take to improve its profit margins are as follows:

- » **Minimise waste** – electricity and power bills can be reduced if the business takes measures to decrease their consumption by ensuring lights and heaters are switched off when not in use. Staff training will help staff be more efficient and productive, thereby minimising wastage of materials, time and effort.
- » **Decrease overheads** – rent can be reduced by relocation to cheaper or smaller premises. Employing fewer staff could also help minimise the wage and salary

bill. Perhaps work can be outsourced. Low-cost marketing techniques can be adopted to reduce marketing costs.

### Return on capital employed

As profit plays an important part in this ratio, all the measures recommended to increase gross profit and profit for the year are applicable here.

#### Activity 2

State:

- a two reasons why gross margins can decrease
- b two measures a business can take to improve gross margin
- c two measures a business can take to improve profit margin.

### Significance of the difference between gross margin and profit margin as an indicator of efficiency

The difference between the gross margin and the profit margin can be used as an indicator of a business' efficiency.

Gross margin is a ratio used by a business to measure its return on sales. It compares the gross profit to sales and expresses it as a percentage. The profit margin, on the other hand, uses profit for the year and expresses it as a percentage of sales.

For example, in Worked example 1, Tailspin Industry's gross margin was 50 per cent and its profit margin was 30 per cent in 2018. This means it made a gross profit of \$50 and a profit for the year of \$30 for every \$100 worth of sales. As the difference between gross profit and profit for the year is expenses (provided there is no income), the expenses as a percentage of sales for Tailspin Industries is 20 per cent. This is an important ratio as it is an indication of a business' ability to manage its expenses and this in turn is a measure of its efficiency.

### Ways to improve working capital and the cash position of the business

Think about it!

In pairs, think about the adverse effects of other cash injection methods.



» **Working capital** – this is a measure of a business' short-term financial health. It is the difference between current assets and liabilities. If working capital is insufficient, it will be revealed by the current ratio. For most businesses, if the current ratio is not ideally between 1.5:1 and 2:1, then measures will need to be taken to improve it. A ratio below 1.5:1 will indicate that there are not enough current assets to cover current liabilities. A ratio above 2:1 will indicate that the business is not investing its excess assets.

Think about it!

Is it advisable for a business to take on a short-term loan like a bank overdraft to improve its liquidity position?



» **Working capital can be improved by injecting cash into the business** – the owner could contribute more capital to the business or reduce drawings. The business could also take on more long-term loans. It could sell off non-current assets that are surplus to the needs of the business. All these measures should be used after a great deal of thought as there are some adverse effects in using



them. For instance, taking a long-term loan may take care of a business' immediate liquidity problem, but could affect future liquidity when it has to be paid back.

- » **Other measures to improve the cash position of the business** – these measures could include reducing credit sales and increasing cash sales, delaying the payment of trade payables, and reducing the credit period allowed to customers. Again, these measures could have adverse effects, for example, delaying payment to trade payables may cause them to stop extending credit to the business or to charge a fee for late payment.

### Activity 3

- 1 State what is meant by working capital.
- 2 Recommend four ways a business can improve its working capital.
- 3 State how the liquid ratio is calculated.
- 4 Explain what is meant by a liquidity crisis.

## Other measures of a business' liquidity

Ratios, other than the current ratio and the liquid ratio, that are commonly used to measure a business' liquidity are:

- » The trade receivables turnover which measures the efficiency of the business' credit control. If the turnover period is high, it is an indication that trade

receivables are taking a long time to settle their accounts. Money tied up in trade receivables is unproductive and should be chased up regularly.

- » The trade payables turnover which measures how quickly a business pays its trade payables. If a business does not pay its trade payables on time, it could be forgoing cash discounts for prompt payment or be charged interest, both of which are signs of inefficiency as they cost the business money.

- » Rate of inventory turnover which measures how quickly a business sells its inventory and replaces it with new inventory. The higher the turnover, the more profitable the business will be.



## Relationship of profit to inventory, revenue, expenses and equity

Inventory affects the gross profit and consequently, profit for the year, of a business. It is therefore important to use the right valuation of inventory.

### Relationship to the valuation of inventory and rate of inventory turnover

As you saw in Chapter 14, inventory is valued at the lower of cost and net realisable value. This is in accordance with the prudence principle (see Chapter 26). If closing inventory is undervalued, gross profit and profit for the year will also be undervalued and therefore the gross margin and profit margin will be

undervalued, as shown below. The reverse is also true: if closing inventory is overvalued, so are the gross profit, gross margin, profit for the year and profit margin. Table 22.5 shows a comparison of gross profit, gross margins, profit for the year and profit margins in relation to valuation of closing inventory.

**Table 22.5** The relationship of gross profit and profit for the year to valuation of closing inventory and inventory turnover

	\$		\$		\$
Inventory undervalued	4 000	Inventory at right value	4 500	Inventory overvalued	5 000
Gross profit	3 500	Gross profit	4 000	Gross profit	4 500
Sales	10 000	Sales	10 000	Sales	10 000
Opening inventory	3 000	Opening inventory	3 000	Opening inventory	3 000
Purchases	7 500	Purchases	7 500	Purchases	7 500
Gross margin	35%	Gross margin	40%	Gross margin	45%
Profit for the year	1 000	Profit for the year	1 500	Profit for the year	2 000
Profit margin	10%	Profit margin	15%	Profit margin	20%
Rate of inventory turnover	1.9 times	Rate of inventory turnover	1.6 times	Rate of inventory turnover	1.4 times

The rate of inventory turnover will also be affected by an incorrect valuation of (closing) inventory.

$$\text{Rate of inventory turnover} = \frac{\text{Cost of sales}}{\text{Average inventory}}$$

When inventory is undervalued at \$4 000:

$$\text{Rate of inventory turnover} = \frac{(\$3\,000 + \$7\,500 - \$4\,000)}{(\$3\,000 + \$4\,000) \div 2} = 1.9 \text{ times}$$

When inventory is at the right value at \$4 500:

$$\text{Rate of inventory turnover} = \frac{(\$3\,000 + \$7\,500 - \$4\,500)}{(\$3\,000 + \$4\,500) \div 2} = 1.6 \text{ times}$$

When inventory is overvalued at \$5 000:

$$\text{Rate of inventory turnover} = \frac{(\$3\,000 + \$7\,500 - \$5\,000)}{(\$3\,000 + \$5\,000) \div 2} = 1.38 \text{ times}$$

### Relationship to revenue

A business' main source of income is sales revenue, which is found in the income statement along with gross profit and profit for the year. Sales revenue, minus cost of sales, is equal to gross profit and gross profit minus expenses is equal to profit for the year. If sales revenue is incorrect, the gross profit and profit for the year will also be incorrect. Therefore, the gross margin as well as the profit margin will be incorrect as well, as seen in Table 22.6, which gives a comparison of gross profit, gross margins, profit for the year and profit margin to valuation of sales revenue.



**Table 22.6** Relationship of gross profit and profit for the year to revenue

	\$		\$		\$
Sales undervalued	9 500	Sales at correct value	10 000	Sales overvalued	10 500
Cost of sales	4 500	Cost of sales	4 500	Cost of sales	4 500
Gross profit	5 000	Gross profit	5 500	Gross profit	6 000
Gross margin	47.3%	Gross margin	55%	Gross margin	57.1%
Profit for the year	1 000	Profit for the year	1 500	Profit for the year	2 000
Profit margin	10.5%	Profit margin	15%	Profit margin	19%

## Relationship to equity

As we have seen, gross profit has a direct influence on profit for the year.

$$\text{Profit for the year} = \text{Gross profit} - \text{Expenses}$$

Owner's equity (capital) is the difference between the business' assets and liabilities. It is the sum of the contributions made by the owner to the business minus any drawings. The relationship between profit for the year and owner's equity is through profits ploughed back into the business, as profits are added to owner's equity (and losses are subtracted from owner's equity).

Return on capital employed (ROCE) measures the profit before interest as a percentage of capital employed. Owner's equity is the capital employed if there are no non-current liabilities.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Which ratio indicates whether or not a business has good control of its expenses?

- A Gross margin
- B Liquid ratio
- C Profit margin
- D Rate of inventory turnover

[1]

- 2 What does a comparison of these liquid ratios indicate?

	Liquid ratio
2018	1.3:1
2019	0.4:1

- A The business' cost of sales was lower in 2018
- B The business had better control of its expenses in 2018
- C The business had lower liquidity in 2019
- D The return on capital employed was lower in 2019

[1]

- 3 Graham has calculated the following ratios for the years 2018 and 2019, during which time sales have remained constant:

	Gross margin	Profit margin
2018	50%	16%
2019	50%	20%



What was the reason for the increase in profit margin in 2019?

- A Cost of sales decreased
- B Cost of sales increased
- C Expenses decreased
- D Expenses increased

[1]

4 Shirley decides to improve her gross margin. What should she do?

- A Reduce marketing expenses
- B Reduce rate of cash discount allowed
- C Reduce rate of trade discount allowed
- D Reduce salaries

[1]

5 Which of the following is *not* a profitability ratio?

- A Gross margin
- B Liquid ratio
- C Profit margin
- D ROCE

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

6 Maniben is a trader. She provides the following information for the year ended 31 January 2019.

		\$	\$	\$
Sales:	Cash			34 000
	Credit			66 000
Cost of sales:				
Opening inventory			70 000	
Purchases	Cash	10 000		
	Credit	<u>15 000</u>	<u>25 000</u>	
			95 000	
Closing inventory			<u>35 000</u>	60 000
Expenses				15 000
Trade receivables				6 300
Trade payables				5 700

Maniben decides to compare her results with those for the previous financial year.

a Copy the table to indicate the ratios for Maniben's business for the year ended 31 January 2019. Complete the table by inserting the required ratios to be calculated using the information provided. [8]

Ratio	Year ended 31 Jan 2018	Year ended 31 January 2019
Gross margin	34%	.....
Profit margin	30%	.....
Trade receivables turnover	28 days	.....
Trade payables turnover	35 days	.....

b For each ratio below, suggest two possible reasons which could account for the change in the ratio between 31 January 2018 and 31 January 2019.

- i Gross margin
- ii Profit margin
- iii Trade receivables turnover ratio
- iv Trade payables turnover ratio

[2]

[2]

[2]

[2]

7 Hesham provides the following information:

Ratio	2018	2019
Gross margin	56%	53%
Profit margin	25%	19%
Current ratio	2.3:1	3.3:1
Liquid ratio	1:1	0.9:1
Trade receivables turnover	56 days	69 days
Trade payables turnover	35 days	25 days
Rate of inventory turnover	9.1 times	5.5 times

A Suggest two ways that Hesham can improve:

- i profitability [4]
- ii liquidity [4]
- iii trade receivables turnover [4]

B Explain how the decrease in the gross margin can affect Hesham's capital? [3]

C Explain how sales revenue can affect the gross margin? [3]

D Suggest one measure Hesham should take to improve sales revenue. [2]

E Explain the relationship between inventory turnover and gross margin [4]

8 Anna D'Souza is a trader. She buys and sells on both cash and credit terms.

Anna D'Souza allows her credit customers 21 days credit and her credit suppliers allow her 30 days credit.

The following information is available.

	Purchases	Sales
	\$	\$
For the year ended 31 March 2011		
Cash	8 700	11 400
Credit	42 500	52 800

	\$
At 31 March 2011	
Trade receivables	4 100
Trade payables	5 300
Inventory	3 800
Bank overdraft	2 900

a Calculate the trade payables turnover. Your answer should be rounded up to the next whole day. Show your workings. [2]

b State and explain whether Anna D'Souza's credit suppliers will regard the turnover period as satisfactory. [3]

c Calculate the trade receivables turnover. Your answer should be round up to the next whole day. Show your workings. [2]



- d The trade receivables turnover for the year ended 31 March 2010 was 24 days. State and explain whether the change in the turnover period is an advantage or a disadvantage to Anna D'Souza. [3]
- e Explain two ways in which Anna D'Souza could improve the turnover period for trade receivables. [2]
- f Calculate the current ratio. The calculation should be correct to two decimal places. Show your workings. [2]
- g State and explain whether Anna D'Souza will be satisfied with the ratio calculated in f) [2]
- h Explain two ways in which Anna D'Souza could increase her current ratio. [2]

(Adapted from Cambridge IGCSE Accounting 0452/21, May/June 2011, Q6)

### ? Chapter review questions

- 1 You are given the following information for the years 2018 and 2019:

	Sales	Expenses
	\$	\$
2018	50 000	10 000
2019	60 000	20 000

Profit margin is 10 per cent.

- a Calculate the gross profit for both years.
  - b State the year in which the business made a higher gross profit.
- 2 Akimbo Traders provides the information below for two years. State the year in which the business was more profitable.

	Profit for the year	Sales
	\$	\$
2018	50 000	100 000
2019	6 000	220 000

- 3 State three ratios that measure a business' efficiency.
- 4 Explain the relationship between:
  - a gross profit and owner's equity
  - b gross profit and expenses
  - c gross profit and revenue
  - d gross profit and inventory valuation

## Revision checklist



In this chapter, you have learnt:

- ✓ why financial statements should be compared
- ✓ why absolute figures are not enough for comparisons between the financial statements of two different years
- ✓ how to use ratio analysis to compare the performance of a business over two years
- ✓ how to comment on the comparison
- ✓ how to make recommendations based on the results of the comparison
- ✓ how to make suggestions for improvement and remedial action based on the comparison
- ✓ what the profitability ratios are
- ✓ what the liquidity ratios are
- ✓ why gross margin can decrease and the measures a business can take to increase its gross margin
- ✓ how to increase profit margins and why profit margins are important
- ✓ how to calculate the ROCE and why it is important
- ✓ what working capital is and how a business can increase its working capital
- ✓ how to improve the cash position of a business
- ✓ how significant the gross margin and profit margin is to a business' efficiency
- ✓ the relationship between the gross margin and profit margin to the valuation of inventory and inventory turnover
- ✓ the relationship between gross margin and profit margin to revenue, expenses and equity.

# Inter-firm comparison

By the end of this chapter you will be able to:

- ★ understand the problems of inter-firm comparison
- ★ apply accounting ratios to inter-firm comparison.

## Introduction

In Chapter 22 you learnt how to compare the financial statements of a business from one year to the next using ratio analysis. However, businesses exist side by side with other businesses and some of them are competitors in the same industry. To know how well the business is doing, it is also important to compare it to other similar businesses. Only then can a business know whether it is performing at its best.

Think about it!

Why will a supermarket have a higher inventory turnover ratio compared to an electronics store?

## Problems of inter-firm comparison

Comparisons should be made between two businesses in the same industry. The ratios of a supermarket that sells large volumes of household necessities cannot be sensibly compared with that of an electronic store that sells more expensive products, for example. The inventory turnover ratio of the electronics store will be much lower (around five times) compared to the supermarket's which will be higher at around 20 times.



For inter-firm comparisons to be useful, the firms being compared must also be the same size. A large supermarket cannot be compared with a small convenience store even if they are in the same industry. Both firms may sell similar products, but do so in different volumes.

The businesses being compared should ideally use the same methods of valuing such items as inventory and of providing for depreciation.

It is also not logical to compare firms that do not have the same financial year ends. For instance, a stationery firm that closes its books at the end of summer may have larger inventory levels in preparation for back to school sales, than a similar firm that closes its books just after the back to school rush, when its inventory has been sold off.

Retailers in the same industry may have different profitability ratios due to the different pricing strategies they use. Some firms may charge a higher price and be content with smaller sales volumes. These firms will have higher profit margins. Other firms may charge lower prices so that they can have larger sales volumes. They will have lower profit margins.

Some firms who have used loans to finance their business will have a different structure to their capital employed. Therefore, their ROCE ratio will be different to those firms who have not taken any loans.

### Activity 1

Explain four reasons why inter-firm comparisons can be difficult.

For an accurate comparison, firms must also be at the same stage of their life cycle. A new firm will not yet have built up a loyal customer base that contributes to good sales.

Firms may be in the same industry but use different methods of production. Some may use machines, while others may have more people working for them than machines. This will make a difference to overheads which in turn will affect ratios.

Some firms may buy land and buildings while others may choose to rent. This will affect ratios like profit margins.

In conclusion, ratio analysis should be carried out with caution. However, it can provide a lot of important information that interested parties can use to make good decisions.

## Applying accounting ratios to inter-firm comparison

Inter-firm comparisons using financial ratios will help a business evaluate its financial position and benchmark (compare against a standard, such as the industry average) its financial performance. Ratios can help to reveal a business' strengths and weakness, enabling decision makers to make intelligent plans.

### → Worked example 1

Kelsey, a sole trader provides the following information:

Ratio	Average for the trade	Kelsey's ratios
Gross margin	53%	56%
Profit margin	25%	19%
Current ratio	2.3:1	3.3:1
Liquid ratio	1:1	0.9:1
Trade receivables turnover	56 days	69 days
Trade payables turnover	35 days	25 days

### Comparisons

- » Kelsey's gross margin at 56 per cent indicates that she earns \$56 gross profit for every \$100 of sales as compared to the trade average of only \$53. Therefore, her gross margin is better than the trade average.
- » Kelsey's profit margin at 19 per cent means that she earns a profit for the year of \$19 for every \$100 of sales, while the average for the trade is \$25. Therefore, her profit margin is worse than that of the trade average.
- » Kelsey's current ratio at 3.3:1 is worse than that of the trade average of 2.3:1, as the ideal is 2:1.
- » Kelsey's liquid ratio of 0.9:1 is worse than that of the trade average of 1:1. The ideal ratio is 1:1.
- » Kelsey's trade receivables turnover of 69 days is worse than that of the trade average of 56 days. It means that her trade receivables take 13 days longer to pay her.
- » Kelsey's trade payables turnover ratio of 25 days is not as good as the trade average, as she pays her trade payables very quickly compared to the rest of the trade who, on average, take 35 days to pay their trade payables.

#### Study tip

Always remember to use in your answers on comparison of industry ratios.



### Comments and recommendations

#### Profitability

Though Kelsey has a gross margin that is higher than the trade average, she has a lower profit margin, indicating that her expenses are higher than her competitors. She seems to be holding down her cost of sales while maintaining a good selling price, which indicates that she has good suppliers who supply her with quality goods at a reasonable price.

However, Kelsey has not done a good job of controlling her expenses and therefore her profit margin is quite low.

#### Suggestions

Kelsey should continue to do what she is doing concerning selling price and managing her cost of sales. However, she should take control of her expenses as soon as possible. She could minimise waste by reducing her usage of utilities (electricity, water; see also Chapter 22) or train staff to be more proactive in cutting down on wastage. Kelsey can also decrease her overheads such as rent by shifting to cheaper or smaller premises. Cutting her salary bill, by reducing the number of staff she employs and perhaps outsourcing the work they do, is another means she could adopt to reduce expenses. Adopting low-cost marketing and distribution techniques to cut down on selling and distribution costs will also help to reduce expenses.

#### Efficiency

Kelsey's expenses to sales ratio is 37 per cent (56 per cent – 19 per cent), far more than that of the trade average at 28 per cent. For every \$100 of sales, she spends \$37 as opposed to the trade average of \$28.

#### Suggestions

As mentioned above, Kelsey should curb her expenses using the ways suggested. She could also chase up her trade receivables using methods like a cash discount incentive or a good credit control policy.

#### Liquidity

Kelsey's current ratio of 3.3:1 is much higher than the trade average, which indicates that she is holding onto current assets that are not generating much income and which are tying up working capital. Her liquid ratio is very low and indicates that she could have a liquidity crisis if all her trade payables ask for payment at once. The difference between the two ratios indicates that a very high level of inventory is being held. Her trade receivables turnover is also not satisfactory. Her trade receivables take on average 13 days longer to pay her as compared to the other traders in her industry. She does not have the liquidity to meet all her debts and could be sued for non-payment of debts or worse, face bankruptcy.

#### Suggestions

Kelsey should immediately take control of her current assets and liabilities to improve her liquidity. She should put in place a good credit control policy and start chasing up her trade receivables so that her cash position improves. She could also increase cash sales and decrease credit sales. Delaying payments to trade payables will help her liquidity position considerably. Kelsey is paying her trade payables earlier than her competitors, anyway. However, she should ensure that she continues to pay them in time to take advantage of the cash discounts they are offering.

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## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Jojo and Kojo own similar businesses. It provides the following information:

	Jojo	Kojo
Trade receivables turnover	30 days	46 days

Which statement is true?

- A Jojo pays his suppliers sooner than Kojo.
  - B Jojo receives money from customers sooner than Kojo.
  - C Kojo pays her suppliers sooner than Jojo.
  - D Kojo receives money from customers sooner than Jojo. [1]
- 2 How is the trade payables turnover calculated?

- A Credit purchases ÷ Trade payables × 100
- B Credit purchases ÷ Trade payables × 365
- C Trade payables ÷ Credit purchases × 100
- D Trade payables ÷ Credit purchases × 365 [1]

- 3 Aimee, a sole trader, compared her results with those of another business. This business had a liquid ratio which was exactly the same as that of Aimee's business.

Which additional ratio might help Aimee to see if she was holding too much inventory?

- A Current ratio
  - B Gross margin
  - C Profit margin
  - D Return on capital employed [1]
- 4 The table shows the performance of two businesses, Simi and Mimi, in a financial year.

	Simi	Mimi
Gross margin	45%	55%
Profit margin	32%	16%

What is revealed by comparing the ratios for Simi and Mimi?

- A Mimi controls her overhead expenses better than Simi. [1]
  - B Mimi's cost of sales is higher than Simi's.
  - C Simi controls her overhead expenses better than Mimi.
  - D Simi's cost of sales is higher than Mimi's.
- 5 Which of the following is *not* a factor to be considered when comparing two businesses in the same industry?
- A They should be the same size
  - B They should have similar financial year ends
  - C They should have the same managers [1]
  - D They should use the same methods of providing for depreciation

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.



## 6 Hudson provided the following information:

Inventory 1 January 2018	\$100
Inventory 31 December 2018	\$250
Revenue for the year ended 31 December 2018	\$2000
Gross margin	30%
Profit margin	10%

## A Calculate for the year ended 31 December 2018:

- i Gross profit
- ii Cost of sales
- iii Purchases
- iv Profit for the year
- v Expenses [10]

Hudson's nephew, Haddon, has a similar business. His gross margin is 50 per cent and profit margin is 35 per cent.

## B State one reason why the two ratios are different. [1]

## C Calculate Hudson's inventory turnover. [4]

## D Suggest two reasons why Haddon's inventory turnover is faster than Hudson's. [2]

## 7 Conrad has a supermarket and sells food and other groceries. Congo has a smaller shop and only sells fresh fruit and vegetables. The following information is available for the year ended 30 September 2012.

	Conrad	Congo
	\$	\$
Revenue	120 000	48 000
Gross profit	42 000	26 400
Profit for the year	14 400	17 600
Capital at 1 October 2011	96 000	50 000

## a i For each business, calculate the gross margin. Show your workings and give your answers to one decimal place. [4]

## ii Give one reason for the difference in the gross margin between the two businesses. [2]

## b i For each business calculate the profit margin. Show your workings and give your answers to one decimal place. [4]

## ii State one reason for the difference in the profit margin between the two businesses. [2]

## c i For each business calculate the return on the opening capital employed. Show your workings and give your answers to one decimal place. [4]

## ii Give one reason for the difference in the return on opening capital employed between the two businesses. [2]

## d Conrad believes that he will increase his profit by increasing his sales. Explain why this may not be the case. [2]

(Adapted from Cambridge IGCSE Accounting 0452/11, October/November 2012, Q6)

- 8** Cole Limited and Fanza Limited are both electrical wholesalers. They provided the following information at 31 March 2012.

	Cole Limited	Fanza Limited
	\$	\$
Inventory	18 000	36 000
Trade receivables	36 000	60 000
Trade payables	21 000	63 000
Cash at bank	4 800	
Bank overdraft		17 000

- a** Copy and complete the table below to show the figures for Fanza Limited. In each case, state the formula and show your workings. [9]

		Cole Limited	Fanza Limited
i	Working capital	\$37 800	Formula: Calculation:
ii	Current ratio	2.8:1	Formula: Calculation:
iii	Liquid (acid test) ratio	1.9:1	Formula: Calculation:

- b i** State which company has the better current ratio. Give a reason for your answer. [3]
- ii** State which company has the better liquid (acid test) ratio. Give a reason for your answer. [3]

(Adapted from Cambridge IGCSE Accounting 0452/11, May/June 2012, Q6 a & b)

## ? Chapter review questions

- 1** The following information is provided by two businesses: Kenny Retail and Benny Retail. All sales are credit sales.

	Kenny Retail	Benny Retail
	\$	\$
Sales	50 000	100 000
Gross profit	30 000	60 000
Profit for the year	20 000	40 000
Capital employed	100 000	200 000
Inventory	3 000	8 000
Trade receivables	2 000	6 000
Balance at bank	4 000	
Bank overdraft		1 500
Trade payables	4 000	9 000

- a** For each of the businesses calculate:
- i** gross margin
  - ii** profit margin
  - iii** the expenses of running the business
  - iv** current ratio
  - v** liquid ratio
  - vi** trade receivables turnover ratio.
- b** Comment on the profitability, liquidity and efficiency of the two businesses.

## 23 INTER-FIRM COMPARISON

- 2** Sarah, a sole trader, would like to compare her results with those of other businesses. She is aware that even comparing with a business of a similar size dealing in similar goods can produce misleading results.
- a** Explain four factors Sarah should consider when comparing her results with those of a similar business. The first is given as an example:
- i** There may be differences that affect profitability. For example, one business may rent premises and the other business may own premises.
- 3** The ratios of two businesses, Kala and Saphed, are given below.

	<b>Kala</b>	<b>Saphed</b>
Gross margin	20%	40%
Profit margin	7%	10%

- a** Suggest two reasons for the difference in the gross profit margin.
- b** State who had better control of the expenses. Give a reason for your answer

### Revision checklist

In this chapter, you have learnt:

- ✓ why ratios are better than absolute figures for inter-firm comparison
- ✓ why inter-firm comparison is useful
- ✓ about problems with inter-firm comparison
- ✓ to use ratios to carry out inter-firm comparisons
- ✓ to comment and make recommendations based on the results of inter-firm ratio analysis.

# Interested parties

By the end of this chapter you will be able to explain the uses of accounting information by the following interested parties for decision making:

- ★ owners
- ★ managers
- ★ trade payables
- ★ banks
- ★ investors
- ★ club members
- ★ other interested parties such as governments, tax authorities, etc.

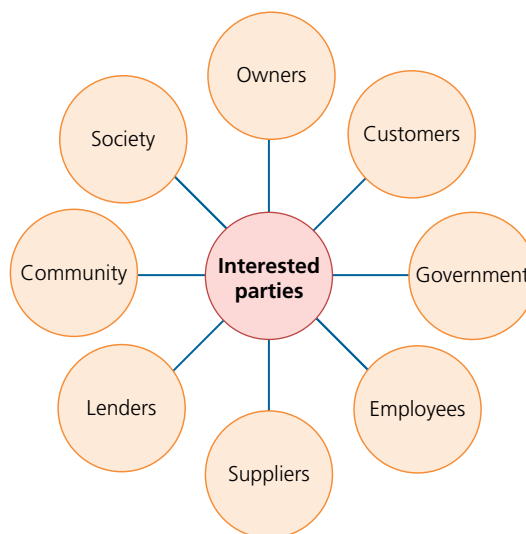
## Key terms

**Internal users** of accounting information are interested parties within the business, such as owners and managers.

**External users** of accounting information are interested parties outside the business organisation, such as trade payables, government.

## Introduction

Accounting involves communicating accounting data to people who have an interest in the business, who are referred to as interested parties. These interested parties use accounting information to help them make better financial decisions. The interested parties or users of financial information can be broadly classified into two groups: **internal users** and **external users**.



▲ Interested parties

## Internal users

Internal users include the owners and managers. Information presented to this group of interested parties is normally in the form of budgets, forecasts, management accounts and above all, financial statements.

### Owners

This group of interested parties include sole traders and partners. They have the biggest stake in the business as they are the ones who have invested capital to start and run the business. Their primary objective is to earn a profit. Therefore they need accurate financial information that will tell them how much they have lost or earned during the accounting period and what their future earnings will be. On the basis of this information, owners make important decisions about their investment in the business, whether to expand or contract the business or even shut it down.

*Think about it!*



The main objective of an owner is profit making. What are the objectives of a manager?

### Managers

Managers are the stewards of the business. They have been given the responsibility of increasing profitability and future prospects of the business. Accounting information assists managers in their tasks of planning, controlling and making decisions about the working of the business.

#### Study tip

It is important to remember at least one reason why interested parties use financial statements.

#### Activity 1

- 1 State what is meant by the term 'interested parties'.
- 2 Name two internal interested parties.
- 3 State why the following are interested in the financial statements of a business.
  - a Owners
  - b Managers
- 4 Explain how financial data is analysed.
- 5 State
  - a two functions that managers perform
  - b one main objective of owners of a business
  - c two sources of information that are available to internal users.

#### Key info



In small businesses, such as sole traders and partnerships, the owners are also usually the managers.

### External users

The source of accounting information for external users is usually the financial statements of the business. Some of the external users are:

- » trade payables
- » banks
- » investors
- » club members.

### Trade payables

This group of interested parties comprise the suppliers who sell goods and services to the business on credit. They would primarily be interested in the business' liquidity position and its ability to pay its debts in the short term.

### Banks

Banks and other financial institutions are interested in a business' financial statements mainly when the business has applied for a loan from them. Banks earn interest on the loan annually and therefore must make certain that the business is liquid enough to pay this interest. The principal amount of the loan will also have to be paid back in the future. This means banks will look at the future prospects of growth the business has, particularly in the case of a

company, as the owners (shareholders) have limited liability. Should a company go bankrupt, the bank will lose out as the shareholders are not legally bound to pay anything beyond what they have invested in the business.



▲ Banks are an interested party

## Investors

Current and potential investors in small businesses such as sole traders and partnerships will be concerned with the risk of investing. They will also be interested in the returns they can get annually.

Current investors will be interested in the use of capital and will be looking at the return on capital employed to tell them how well their investment is doing. Potential investors will want to know whether or not to invest in a particular company to meet their investment targets.

## Club members

Clubs and other non-profit organisations are run with the main objective of providing a service or welfare to their members. Members of such organisations will want to know whether there are enough funds for facilities to be maintained in a good state of repair and whether they can be expanded in the future. If the club's expenditure has been more than its income for several years, there is a possibility that it will have to close down. There are ways that this situation can be improved, for example, the club could:

- » hold a profit-generating one-off activity such as a competition
- » run a profit-making activity on a regular basis such as a restaurant or a café
- » rent out equipment or other facilities such as fields or hall to increase income
- » increase subscription income, either increasing existing subscriptions or recruiting more members
- » ask for donations.

## Other interested parties

### The government

The government needs to know how much profit the business makes in order to determine the tax due. This information is available in the financial statements of a company.

### Tax authorities

Local and state authorities also charge taxes that a business has to pay from time to time. The business' records are therefore of interest to these tax authorities so that they can check whether taxes have been accurately calculated and paid.

### Employees

Employees are external users if they are not involved in managing the business. They might check a business' financial statements to determine whether they can ask for salary raises or bonuses if the business has been very profitable. The financial health of the business will also determine whether the business is growing and not at risk of closing down. From this information, employees can work out their levels of job security and opportunities for future promotions.

### Customers

Customers can be manufacturers who buy raw materials from the business, retailers and wholesalers who sell the business' products or end users of the business' products. Manufacturers want to know if the business will continue to supply them with raw materials and components in the future. Wholesalers and retailers need a continuous supply of goods to run their own business. End users will be interested in after-sales service of expensive items such as cars. If an end user needs spare parts in the future, they want to be assured that the business will be around to supply them. For all these reasons, customers will be interested in the future financial health of a business.

### Competitors

Competitors in the same industry will be interested in the financial performance and position of the business to assess how well they are doing in comparison. We have seen that ratio analysis is used for this purpose.

### General public

Students, researchers, job seekers and financial analysts will make use of a business' financial statements to help them with data for their particular need.

#### **Activity 2**

- 1 Name five external users of accounting information.
- 2 Suggest two ways in which a non-profit organisation could raise funds.



## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Which of the following stages of the accounting process involves the government using a business' financial statements?  
 A Classifying financial data  
 B Collecting financial data  
 C Communicating financial data  
 D Recording financial data [1]
- 2 Which of the following is an internal user of accounting information?  
 A Customers  
 B General public  
 C Government  
 D Managers of the business [1]
- 3 Which of the following is not an internal user of accounting information?  
 A Managers  
 B Owners  
 C Partners  
 D Trade payables
- 4 Why would prospective investors be interested in a company's financial statements?  
 A They would like to know if there are any job prospects  
 B They would like to know the dividend declared by other similar companies  
 C They would like to know what growth prospects the company has  
 B They would like to know what the country's economic climate is [1]
- 5 In which of the following will ownership and management be separated?  
 A Club  
 B Limited company  
 C Partnership  
 D Sole trader

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 The following is the bank statement of Ilya, a sole trader.

2018		Debit	Credit	Balance
		\$	\$	\$
Jan 1	Balance			2 300 (cr)
Jan 4	Direct debit (rent)	1 500		800 (cr)
Jan 17	Paul Abassi		100	900 (cr)
Jan 20	Jane Nlovu	400		500 (cr)
Jan 27	Equipment	1 500		1 000 (dr)



- a State, giving two reasons, which internal user of accounting information would be interested in this statement. [4]
  - b Name the financial statement in which the bank balance would be recorded. [2]
  - c Name two users of accounting information who would be interested in the bank balance. Give a reason for your answer. [8]
- 7 The following information was extracted from the financial statements of Hogarthy Ltd.

	\$
Profit for the year	9 000
Capital employed	45 000
Sales	36 000

- a State the two users of accounting information who would be interested in the information above. Give a reason for your answer. [8]
  - b Explain how they would analyse the information given. [2]
- 8 Pitchers Cricket Club has had a deficit for the last two years. As a result, it does not have the funds to repair and maintain the facilities at the club. The treasurer thinks that the club will have another deficit this year as well. Suggest four ways that could be used to improve the situation. [4]
- 9 Susan Morgan is a trader. State one reason why each of the following business people are interested in Susan Morgan's financial statements.
- a Bank manager
  - b Employee
  - c Supplier of goods on credit
  - d Potential purchaser of the business [4]

(Adapted from Cambridge IGCSE Accounting 0452/23, October/November 2011, Q 5 j)

## ? Chapter review questions

- 1 State two internal users of accounting information.
- 2 State four external users of accounting information.
- 3 State and explain one way in which the following use accounting information:
  - a Tax authorities
  - b Employees
  - c Trade payables
  - d Club members
  - e Central government
- 4 Copy and complete the table below by filling in boxes with the words 'true' or 'false'.

Statement	True/False
A student, who is a member of the public, uses a company's financial statements when doing an exercise in calculating the company's profitability ratios.	
A competitor, X, uses business Y's financial statements to find out if Y is more profitable than X.	
Customers are one of the users of a business' financial records because they make loans to businesses.	
The government is interested in a sole trader's ability to pay tax.	
Trade payables represent the customers of a business.	

## Revision checklist



In this chapter, you have learnt:

- ✓ what is meant by the term 'external users'
- ✓ what is meant by the term 'internal users'
- ✓ to classify the users of accounting information into internal users and external users
- ✓ that all owners use accounting information to assist in decision making
- ✓ why managers use accounting information
- ✓ that sole traders use accounting information as they are owners as well as managers
- ✓ why suppliers use accounting information
- ✓ how useful accounting information is to lenders such as banks
- ✓ how investors use financial information to help them make decisions that will affect their present and future financial needs
- ✓ why club members use financial information
- ✓ which remedies club members can take if their club is running low on funds
- ✓ how the government uses a business' financial statements
- ✓ why employees would be interested in the financial health of a company
- ✓ why customers find financial statements useful
- ✓ how competitors use financial statements
- ✓ how the general public can use financial statements.

# Limitations of accounting statements

By the end of this chapter you will be able to recognise the limitations of accounting statements due to such factors as:

- ★ historic cost
- ★ difficulties of definition
- ★ non-financial aspects.

## Introduction

Accounting statements can be useful in helping interested parties make good sound financial decisions. However, it is important to realise the limitations of accounting statements when forming those decisions. We will be examining the following limitations in this chapter:

- » limitations due to the historic cost factor
- » limitations due to difficulties of definition
- » limitations due to non-financial aspects.

### Key term

**Historic cost** is the value placed on an asset in the statement of financial position based on the original cost at which the asset was acquired.

## Limitations due to historic cost

**Historic cost** is a measure of the value of a non-current asset used in the statement of financial position. This value is based on the original cost paid by the business to obtain that asset less the accumulated depreciation. This depreciation figure is an estimate. This is a drawback, as similar businesses may use different methods to calculate depreciation, making it difficult to make comparisons for the purpose of decision making.

Historic cost may not reflect the market value of the asset. Therefore, the use of historic cost is a limitation as it does not account for changes in the price level of the asset over the period of its economic life.

### → Worked example 1

Sondra Ltd acquired a plant on 1 January 2014 for \$200 000. This plant had a useful life of ten years. On 31 December 2018, Toga Ltd acquired a similar plant for \$400 000. Depreciation is charged on a straight-line basis. Here are extracts from the statement of financial position for the two companies on 31 December 2018:

Sondra Ltd			
Statement of financial position as at 31 December 2018 (extract)			
	Cost	Accumulated depreciation	NBV
	\$	\$	\$
Plant	200 000	100 000	100 000

Toga Ltd			
Statement of financial position as at 31 December 2018 (extract)			
	Cost	Accumulated depreciation	NBV
	\$	\$	\$
Plant	400 000	-	400 000

Even though the plant listed in Sondra Ltd's statement of financial position is capable of generating for the company economic benefits worth 50 per cent of Toga Ltd's plant, it is valued at a historic cost of only 25 per cent of Toga Ltd's plant.

Another drawback of this method is that some assets listed in the statement of financial position may be worthless if the company were to liquidate.

### Activity 1

- 1 Explain what is meant by the term 'historic cost'.
- 2 State one asset or liability that is usually valued at historic cost in the statement of financial position.
- 3 In Worked example 1 above, briefly explain why historic cost valuation is a limitation.

## Limitations due to difficulties of definition

Definitions of accounting principles and concepts used worldwide can differ from country to country. Therefore, if there were no global standard to follow, difficulties would arise when businesses try to make comparisons with other businesses in different countries. Due to globalisation, some businesses have now established branches in many different countries. As we have seen, comparisons are essential to discover the financial health and performance of businesses. The use of accounting frameworks such as the **International Accounting Standards (IAS)** have enabled global businesses to communicate accounting data using standardised methods of valuation and presentation.

#### Key term

**International Accounting Standards (IAS)** provide an accounting framework to minimise differences in presentation and content of financial statements around the world.

### Activity 2

- 1 Name three companies that have branches in more than one country.
- 2 State what the abbreviation 'IAS' stands for.
- 3 Explain why it is important to have one common set of rules for preparing financial statements.

## Limitations due to non-financial aspects

Financial statements normally do not include resources that cannot be valued in money terms. This means that the net worth of a business, measured by the net assets that it owns, may be underestimated. Assets such as customer satisfaction, customer loyalty, the efficiency of management and staff and good supplier relationships may also not be included, though they are all vital and contribute to the overall health of the business.

#### Key Tip

It is important to remember what IAS stands for.

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Which group contains an asset which cannot be valued in money terms?
  - A Brand recognition, motor vehicles, machinery
  - B Fixtures, stationery, furniture
  - C Inventory, trade receivables, cash
  - D Long-term loan, trade payables, bank overdraft[1]
- 2 Which of the following is not a limitation of financial statements?
  - A Different definitions being used globally
  - B Financial aspects
  - C Historic cost
  - D Non-financial aspects[1]
- 3 The historic cost principle was applied in valuing an asset. What was the basis of this valuation?
  - A Original cost
  - B Market value
  - C Realisable value
  - D Saleable value[1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 4 Copy and complete the following table. Indicate with a tick the category to which each asset belongs. [5]

	Assets that cannot be given monetary value	Non-current asset	Current asset
Premises			
Well-trained staff			
Machinery			
Inventory			
Customer satisfaction			

- 5 A person studying the financial statements of a business must be aware that these statements do have limitations and will not provide a complete picture of the performance and position of a business. State how each of the following may be regarded as a limitation of financial statements.
  - a Non-financial aspects [2]
  - b Historical cost [2]

*(Adapted from Cambridge IGCSE Accounting 0452/21, October/November 2010, Q3 e)*

## ? Chapter review questions

- 1 State three limitations of financial statements.
- 2 Why do international businesses need accounting frameworks such as the IAS?

## Revision checklist

.....  
In this chapter, you have learnt:

- ✓ what historic cost is
- ✓ how non-current assets are valued using historic cost
- ✓ why historic cost is a limitation of financial statements
- ✓ why multinational companies can find comparisons between its branches difficult
- ✓ what international accounting frameworks do and why they're important
- ✓ what intangible assets are
- ✓ that not recording non-financial data can be a limitation of financial statements.



# SECTION 7

## Accounting principles and policies

### Chapters

26 Accounting principles

27 Accounting policies

In this section you are introduced to the principles and policies, influenced by the objectives of relevance, reliability, comparability and understandability, that should underpin all accounting statements to enable them to be used by interested parties all over the world.

INNOVATION  
SOLUTION  
BRANDING  
IDEAS  
MARKETING  
SUCCESS  
MANAGEMENT  
ANALYSIS



# Accounting principles

By the end of this chapter you should be able to explain and recognise the application of the following accounting principles:

- ★ matching
- ★ business entity
- ★ consistency
- ★ duality
- ★ going concern
- ★ historic cost
- ★ materiality
- ★ money measurement
- ★ prudence
- ★ realisation.



## Introduction

Financial statements should follow a common set of accounting principles. If every business followed its own rules, its financial statements would not be useful. Users would find it difficult to compare the results of a business with those of other businesses.

Accounting principles are also referred to as concepts or conventions. Principles such as the matching and prudence principles have already been seen in previous chapters. They will be explained, along with the other principles listed above, in this chapter.

## Matching principle

### Key term

The **matching principle** requires a business to record in its financial statements, revenues and any related expenses in the same accounting period.

The **matching principle** states that a business should report an expense in the same accounting period as the revenue it helped earn, regardless of whether there was a transfer of money. This principle is based on accrual accounting as opposed to cash based accounting, as it recognises that expenses and revenue accrued (owing) should be included in the financial year to which they relate, even if the expense was not paid or the revenue was not received. Similarly, expenses and income prepaid should not be included in the year in which they were paid, but in the following year. Sales, expenses and profits, for example, can then be meaningfully compared from one year to the next. In keeping with this principle, expenses and income need adjustments, as we saw earlier in Chapter 12.

### → Worked example 1



Maria D'Souza is a sales person who works on a commission basis. She earned a commission of four per cent on sales shipped and recorded in December 2018. The commission of \$4 000 was paid by Gala Ltd in March 2019.

This is how the commission is recorded in Gala Ltd's financial statements for the year ended 31 December 2018:

Gala Ltd	
Income statement for the year ended 31 December 2018 (extract)	
	\$
*Sales	100 000
Expenses:	
Commission	\$4 000

$$*Sales = 100 \div 4 \times 4\,000$$

#### Study tip

Remember, unused stationery is a current asset and not a non-current asset.

### Activity 1

- 1 Explain the matching principle.
- 2 On 1 January 2018, Betsy had an inventory of stationery valued at \$100. At 31 December 2018, her inventory of stationery was valued at \$70. During the year, Betsy purchased stationery costing \$170. Applying the matching principle, calculate the amount to be charged for stationery in the income statement for the year ended 31 December 2018.

## Business entity principle

#### Key term

The **business entity principle** requires that the affairs of the business are treated as being separate from the non-business activities of its owner(s).

The affairs of a business must be treated as separate from the non-business activities of its owner(s) – this is known as the **business entity principle**. The business and the owner are two separate things and should be accounted for separately in the financial records. This applies to partnerships and limited companies as well. The partners and shareholders' personal transactions should be kept separate from the partnership and company transactions.

A user of financial statements can then see the difference between the actual activities of the business and the personal activities of the owner. Therefore, if a business has a good cash flow, an investor can tell whether it is because the business itself is efficient in chasing up its trade receivables or because the owner is injecting regular contributions of cash into the business.

When the owner contributes to the business by way of cash or in any other way, the capital account is credited. This is because the business now owes the owner this amount. Similarly, when the owner withdraws money or any other asset from the business, the drawings account is debited. This amount reduces capital and therefore the amount owing by the business to the owner.

#### Think about it!

The owner of a business making ovens takes one home. She plans to gift it to her sister. Each oven is sold for \$250. In pairs, decide how this is recorded in the books of the business.

## → Worked example 2



Leopold, a dentist, rents a three-bedroom property for \$6 000 a month. He uses one of the bedrooms for his dental practice and the others for his personal use. Under the business entity principle, Leopold can only record \$2 000 as rent for the month in his business income statement. The other \$4 000 is his personal expense and not a business expense.

### Activity 2

- 1 Explain why the affairs of a business are treated separate from those of the owner.
- 2 A business' expenses include \$500 for electricity used in the owner's home. State the double entry to record this adjustment by completing the table below. Tick (✓) the box which shows the correct alternative.

Account debited	Account credited	
Electricity \$500	Income statement \$500	<input type="checkbox"/>
Income statement \$500	Electricity \$500	<input type="checkbox"/>
Drawings \$500	Electricity \$500	<input type="checkbox"/>
Electricity \$500	Drawings \$500	<input type="checkbox"/>

## Consistency principle

### Key term

The **consistency principle** states that similar transactions should be recorded using the same accounting method year after year. This creates consistency for users of accounting information.

The **consistency principle** states that accounting methods, practices and procedures should not change from one accounting period to the next; accountants should be consistent in the way they maintain accounting records. This means that users of financial statements can safely assume that the statements have been reported on the same basis year after year. For example, if a business has been using the straight-line method of depreciation and suddenly decides to switch to the reducing balance method, the profits for that particular year will be altered. If a change *is* made, it should be after careful consideration and thought. A full disclosure of the change with an explanation of the effects of the change on the financial statements should accompany the statements.

### Activity 3

Copy and complete the table below. Tick (✓) the statement which describes the principle of consistency.

Financial statements should use the same methods from year to year	<input type="checkbox"/>
Financial statements should provide for all accruals and prepayments	<input type="checkbox"/>
Financial statements should only include items with a monetary value	<input type="checkbox"/>
Financial statements should include all probable losses and should not anticipate profits	<input type="checkbox"/>

**Key term**

The **duality principle** requires two entries to be posted for every transaction. One account should be debited and one account should be credited.

**Think about it!**

Will assets be debited or credited if they decrease?  
Will liabilities be debited or credited if they decrease?

## Duality principle

The **duality principle** is the foundation of the double entry system of book-keeping. Every transaction has a double (dual) effect on the accounting records maintained by a business.

For example, when an asset is bought for cash, the amount of that asset increases and cash will decrease. As we saw in Chapter 2, every financial transaction works in this way. The asset, which increases, is debited, and cash, which decreases, is credited. For every debit there has to be a corresponding credit. An increase in assets and expenses is debited and an increase in liabilities, capital and income is credited. Double entry, therefore, implies that each transaction should be entered twice in the books of accounts.

### Activity 4

Each financial transaction has two equal and opposite accounting entries. Which accounting principle is being described?

- a Business entity
- b Duality
- c Going concern
- d Money measurement

## Going concern principle

**Key term**

The **going concern principle** implies that the business will continue to operate in the near future which is at least 12 months.

A going concern is a business that is running without the likelihood of closure in the near future. This is usually regarded as within the next 12 months. This is a basic assumption in accounting and is referred to as the **going concern principle**. Financial statements are prepared with this assumption in mind. If the business is not considered to be a going concern and is going to liquidate in the coming year, then assets will be listed in the statement of financial position at their net realisable value, not at historic cost. All assets will also be listed as current assets.

### Activity 5

- 1 Explain the going concern principle.
- 2 State one reason why this principle is important when financial statements are being prepared.

**Key terms**

The **historic cost principle** states that assets should be valued at the cost at which they were acquired.

**Reliability** of financial information is when it can be verified by interested parties and when interested parties use this information time and again, they get the same results.

## Historic cost principle

Assets are recorded in the statement of financial position at the original cost at which they were acquired. This is due to the **historic cost principle** which states that a business must record its assets and liabilities at their purchase price. This price remains unchanged by market or economic conditions. This principle is a trade-off between **reliability** and usefulness. The historic cost of an asset is reliable as it is a known fact and can be verified. However, this cost may not be very useful, as you will see from the following example.

- » A company was founded in 1953, when it purchased its premises for \$40 000. This is the value at which premises will be recorded in the statement of financial position, though they are worth in excess of \$150 000 today.

Therefore, the historic cost principle does not allow for the adjustment of values based on replacement cost or economic conditions.

Liabilities are also reported at historical cost. For example, debentures issued are recorded at the price paid.

### Activity 6

Explain the historic cost principle.

#### Key term

The **materiality principle** states that financial information is only material to the financial statements if it will affect the decisions of interested parties using the information.

## Materiality principle

Financial statements are prepared to help users make good financial decisions. If information is reasonably expected to affect decisions, it is considered to be material. If items are not material, then the **materiality principle** allows for them not to be treated in the same way as material amounts or transactions. This is because the impact of doing so on the financial statements and the users of financial statements is too small to be important.

It is therefore necessary to use judgement when deciding whether an item is material or not. The size and nature of the transaction and the relevance of the information it contains, should be taken into account when making this decision. For example, a laminator that cost the business \$30 but which has a useful life of three years will be treated as an office expense in the year in which it is bought and charged against the profits of that year. As the laminator can be described as an asset, the normal accounting treatment would be to spread the cost of \$30 over the three years of its economic life. This is in keeping with the matching principle. However, this does not have to be done due to the materiality principle as interested parties will not be misled if the item is treated as an expense.

What is considered material to one company may not be material to another. A multinational corporation will not treat an item such as a filing cabinet costing \$2 000 as material, as their policy could be to treat any item costing \$2 500 or less, not as an asset but as an expense. A small company could have the same policy but with a much lower figure. Therefore, to them a filing cabinet costing \$2 000 is material. The filing cabinet will be recorded as a non-current asset.

The principle is also applied when small expense items such as batteries or cleaning materials are grouped together under the heading 'sundry expenses' or 'other operating expenses'.

## Money measurement principle

According to the **money measurement principle**, only those transactions or events that can be measured in terms of money are included in the financial statements

A large number of items are therefore left out of the financial statements because they cannot be expressed in terms of money. These include:

- » customer satisfaction
- » brand recognition
- » employee skills
- » efficiency of administrative processes.

#### Key term

The **money measurement principle** states that only transactions or events that can be measured in terms of money are included in the financial statements.

**Think about it!**

If businesses were to try to include items which do not have a reliable value in their financial statements, what would the impact be on the 'true and fair view' that the statements are meant to convey?

These items however, *do* have an impact on either the revenues, expenses, assets or liabilities of a business and are therefore indirectly reflected in the financial statements. For example, customer loyalty means repeat customers who help boost sales revenue. However great an impact these items have, they are never recorded in the financial statements. This is because it would be impossible to calculate the value of these items, in terms of money, in a way that would be acceptable by everyone.

**Activity 7**

- 1 Explain why important aspects of a business, such as a loyal customer base, are not recorded in the statement of financial position.
- 2 The skills and knowledge of the workforce are not shown as an asset in the statement of financial position of a business. Which of these accounting principles is being applied?
  - a Matching
  - b Historic cost
  - c Money measurement
  - d Realisation

## Prudence principle

**Key term**

The **prudence principle** ensures that liabilities and expenses are not understated and assets and income are not overstated in the financial statements of a business.

Some accounting transactions can have uncertain effects in the future, but for them to be relevant, they have to be recorded in time. This means cautious estimates have to be made. This is where the **prudence principle** can be applied as the principle requires that revenue should not be overstated and expenses should not be understated. Assets should not be overstated and liabilities should not be understated. Therefore, only when revenue is certain should it be recorded, but expenses or liabilities should be provided for when they are probable or expected. We have seen this principle being used to provide for doubtful debts (see Chapter 13). The principle was also used in the statement of financial position where assets were written down by deducting accumulated depreciation (see Chapter 11).

When there is a conflict between two principles, the prudence principle should be used as it overrules all other principles.

**Key info**

The prudence principle is usually applied to uncertain transactions or events that will occur in the future.

**Activity 8**

- 1 Explain the prudence concept.
- 2 Jenny Soares, a sole trader, is preparing her financial statements for the year ended 30 June 2019. Tick (✓) the box which tells her what to do to observe the prudence principle.

Include all foreseeable revenue	
Record expenses at as low a level as possible	
Include all foreseeable losses	
Show all prepaid expenses	



**Key term**

The **realisation principle** states that revenue can only be recognised when it is earned.

## Realisation principle

Revenue is the foundation of a business' performance, so sometimes it might wish to overstate sales revenue. This is why the **realisation principle** should be applied.

The realisation principle states that profit from a sale can be recorded only when the legal title has passed from the seller to the buyer. The seller must transfer all the risks and rewards associated with the ownership of the goods to the buyer for revenue from a sale of goods to be recognised. The goods should be exchanged for either cash (if they were sold for cash) or another asset such as trade receivables, if they were sold on credit.

Sometimes goods are sold on a 'sale or return basis.' This is when a seller (such as a wholesaler or manufacturer) provides goods to a reseller (such as a retailer) but the title of the goods stays with the seller until the reseller pays for the goods when sold. If the goods are not sold after a certain period of time, the reseller can return the goods to the seller. For instance, if Jamie is a seller who provides goods to Sally on a 'sale or return basis', then he cannot record it as a sale in his books, according to the realisation principle. This is because the title is still with him and has not been passed on to Sally. The sale can only be realised by Jamie when Sally sells the goods and pays him for them.

When a service is given, especially in the case of lawyers involved in long-drawn-out cases, a contract specifies when revenue will be due. The job is normally broken down into stages and revenue is earned after the completion of each stage. If a customer has prepaid or is owing money at the end of each stage, the matching principle is applied.

## Realisation principle and the prudence principle

The realisation principle states that profit is earned when the legal title passes from seller to buyer, which is usually when the goods have been delivered. However, if the customer does not pay after a reasonable time, the prudence principle will be applied and the debt is written off.

### → Worked example 3

A customer of Halliston Furniture pays \$2500 in advance for a bespoke piece of furniture. The revenue of \$2500 will only be recorded in the books when the finished product is delivered to the customer by Halliston Furniture.

### Activity 9

- 1 Explain the realisation principle.
- 2 Dennison supplies goods on credit to Rowland. When will Dennison recognise the sales revenue from this transaction, if he applies the realisation principle?
  - a When Rowland places the order
  - b When Rowland acquires the legal title to the goods
  - c When Rowland pays for the goods by cheque
  - d When Rowland receives a statement of account from Dennison

## Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 A business sends its staff on an annual professional development retreat for which it spends \$40 000 a year. The expense of \$40 000 is recorded in the business accounts, but the increased value of the staff is not recorded. Which accounting principle is being applied? [1]
  - A Duality
  - B Going concern
  - C Money measurement
  - D Realisation
- 2 Profit is only recognised as being earned when the legal title of goods pass from the seller to the buyer. Which accounting principle is being described? [1]
  - A Duality
  - B Matching
  - C Prudence
  - D Realisation
- 3 Missy, a sole trader, always uses the reducing balance method to depreciate her non-current assets. Which accounting principle is she applying? [1]
  - A Consistency
  - B Duality
  - C Going concern
  - D Money measurement
- 4 Lamington Ltd received cash from Seri, a customer. It recorded it in Seri's account and in the cash book. Which accounting principle is the company applying? [1]
  - A Business entity
  - B Duality
  - C Matching
  - D Money measurement
- 5 Ganesh, a sole trader, included his personal assets and liabilities in the business' statement of financial position. Which accounting principle is *not* being applied? [1]
  - A Business entity
  - B Consistency
  - C Money measurement
  - D Realisation

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 Name and explain the accounting principles being used in the following cases: [10]
  - A Financial statements should only include items that can be valued in terms of money.
  - B Financial statements should include all probable losses and no anticipated profits.
  - C Financial statements should provide for all prepayments and accruals.
  - D Businesses should use the same accounting methods year after year.
  - E It is assumed that a business will continue to trade in the foreseeable future.



- 7 John's stationery account is provided below. On 5 July 2019, he took \$59 worth of stationery for his own personal use.

John's stationery account					
2019			2019		
		\$			\$
Jan 1	Balance b/d	150	Jul 5	Drawings	59
Jan 8	Cash	25	Dec 31	Income statement	66
			Dec 31	Balance c/d	50

Explain how the business entity principle has been applied in the preparation of the stationery account. [2]

- 8 A business' rent and rates account is given below:

Rent and rates account					
2019			2019		
		\$			\$
Jan 13	Bank	141	Dec 31	Income statement	866
Jun 18	Cash	325			
Dec 31	Balance c/d	<u>400</u>			
		<u>866</u>			<u>866</u>

Explain how the matching principle has been applied in the preparation of the rent and rates account. [2]

- 9 Ashraf Jaffer, a sole trader, did not reduce the value of his business when his highly experienced manager retired. State the name of the accounting principle he had been applying. [1]
- 10 Emily records credit sales when the goods are invoiced to customers rather than when the customers order goods. State the name of the accounting principle she is applying. [1]
- 11 John is considering the following proposals to improve his profit for the year.
- i Change the depreciation methods for non-current assets.
  - ii Remove the provision for doubtful debts from the financial statements.
  - iii Value the inventory at market price.
  - iv Place a value on the skill of the workforce in the financial statements.
  - v Exclude expenses owing from the income statement.
- Name the accounting principle which would **not** be compiled with if each proposal was implemented. The first one has been completed as an example. [4]

	Proposal	Accounting principle
i	Change the depreciation methods for non-current assets	Consistency
ii	Remove the provision for doubtful debts from the financial statements	
iii	Value the inventory at market price	
iv	Place a value on the skill of the workforce in the financial statements	
v	Exclude expenses owing from the income statement	

(Adapted from Cambridge O Level Principles of Accounts 7110/21, May/June 2015, Q4)

### Chapter review questions

- 1 State what is meant by the money measurement principle.
- 2 Explain the matching principle.
- 3 State what is meant by the prudence principle.
- 4 State what is meant by the materiality principle.
- 5 Explain the following statements, applying your knowledge of accounting principles:
  - a 'The historic cost principle looks backwards but the going concern principle looks forwards.'
  - b 'Every transaction has two aspects.'
  - c 'The affairs of a business should be treated as being completely separate from those of its owner.'
  - d 'The prudence principle involves cautious estimates.'

### Revision checklist

In this chapter, you have learnt:

- ✓ to explain what the matching principle is and to recognise when it is being used
- ✓ to explain what the business entity principle is
- ✓ to recognise that the business' affairs should be separated from those of its owners
- ✓ to explain the principle of consistency and to recognise when it is being used
- ✓ to explain the duality principle
- ✓ to recognise that the double entry system of book-keeping is based on the principle of duality
- ✓ to explain what the going concern principle is
- ✓ to recognise when a business is a going concern and its implications for the business
- ✓ to explain the meaning of the historic cost principle and how it is used in financial statements
- ✓ to explain what the materiality principle is and how it is used in accounting records
- ✓ to explain the money measurement principle
- ✓ why items which cannot be measured in money terms are not recorded in the financial statements
- ✓ to explain the prudence principle and why accountants apply this principle when preparing financial records
- ✓ to explain the realisation principle
- ✓ why a sale is not always recognised
- ✓ to recognise when a sale has taken place and profit earned.

# Accounting policies

By the end of this chapter you will be able to recognise the influence of international accounting standards and understand the following objectives in selecting accounting policies:

- ★ comparability
- ★ relevance
- ★ reliability
- ★ understandability.

## Introduction

Accounting policies are different from accounting principles. Accounting principles are rules, applied by a business, to its financial records; accounting policies are how a company follows and keeps to those rules.

Policies are used to deal with complicated methods such as depreciation and inventory valuation. A business selects those policies that enable it to prepare and present financial statements that present a 'true and fair view' of its performance and financial position. A user of financial statements should be aware of the standards and policies adopted by the business to properly understand the information provided in those statements.

The quality of information contained in financial statements, as a result of a business choosing appropriate policies, can be measured in terms of the following:

- » Comparability objective
- » Relevance objective
- » Reliability objective
- » Understandability objective.

### Activity 1

- 1 Explain why it is important for an interested party to know the accounting policies that a business uses to prepare its financial statements.
- 2 Explain how accounting policies are different from accounting principles.
- 3 State the basis on which a business selects its accounting policies.

#### Key term

For accounting statements to be **comparable**, accounting standards, principles and policies should be applied consistently from one accounting period to the next and from one region to another.

## Comparability

As we have seen in previous chapters, information in the financial statements of a business can only be useful if it is **comparable** with similar information about the same business at another period of time. Comparisons should also be possible between similar businesses in the same industry. Users of financial statements should be able to identify similarities and differences between the information in the statements they are comparing. Users should be aware of the policies used in the preparation of these statements, changes in the policies (if any) and the effects of such changes.

To ensure that the objective of comparability has been adhered to when framing business policies, ask the following questions:

- » Can the business' financial statements of the present year be compared to those of previous years?
- » Can the business' financial statements be compared to those of similar businesses?

*Think about it!*

*'Without the objective of comparability, financial ratios would not exist.'  
Do you agree?*



### Key term

For financial statements to be **relevant**, the information they contain should be timely and useful for decision making.

## Relevance

Users of financial statements make their decisions based on the information contained within them. Hence, the financial statements should contain **relevant** information about the performance and financial position of a business which the interested parties can use. In this way, interested parties can assess the efficiency with which the business is managed and base their decisions on this.

Information contained in the statements should also be timely. Information is useless if it is too late to influence decision making accurately.

Interested parties should be able to use the information provided to confirm prior expectations or correct them. They should then be able to revise and form new expectations and decisions about the future, based on the information contained in the financial statements.

To ensure that the objective of relevance has been adhered to, ask the following questions:

- » Can the information contained in the financial statements be used to assess the stewardship of the managers?
- » Can the information be used to confirm prior expectations?
- » Can the information be used to revise past expectations and form new expectations about the future?
- » Is the information timely?

*Think about it!*

*In pairs, discuss which financial statements have more relevance: those that are issued two weeks after the financial year ends, or those that are issued two months after the financial year has ended?*



### Study tip

It is important to learn each objective well. Remember these objectives are used when businesses frame their accounting policies.

### Activity 2

Explain the following statement using your knowledge of the objective of relevance:

*'A five-year-old income statement does not do an investor a lot of good when he is trying to understand the current financial position of the company.'*

## Reliability

Information contained in financial statements is reliable if it:

- » can be depended upon as being a faithful representation of the underlying transactions and events it is representing
- » can be independently verified
- » is free from bias
- » is free from material errors
- » is prepared with suitable caution being applied to any necessary judgements and estimates.

**Key term**

The **objective of reliability** ensures that financial information can be verified and used consistently by interested parties with the same results. For financial information to be reliable, it should be trustworthy and materially accurate.

To ensure that the **objective of reliability** has been adhered to, ask the following questions:

- » Does the information contained in the financial statements reflect the substance of the transactions and events that have taken place during the financial year?
- » Can the information be verified, for example, by an independent auditor?
- » Is the information neutral?
- » Is the information free from errors of significance?
- » Has prudence been used to make estimates and judgements when the information was based on uncertain criteria?

**Activity 3**

A company reported cost of goods sold of \$100 000 when its cost was actually \$159 000.

- a Explain whether the financial statements accurately reflect the reality of what actually happened.
- b Explain whether the financial statements are reliable.

**Key info**

There is usually a trade-off between relevance and reliability. When accounting information is timely, it is relevant. However, in its early stages, accounting information may be uncertain and therefore not reliable. If the business waits for the information to gain reliability, relevance may be lost.

*Think about it!*

*A business discovers which debts were paid and which were not, after it prepared its financial statements. They could have used this (reliable) information when they were estimating their provision for doubtful debts for the year. However, the information is not relevant as the year is already over. Therefore, though the information was reliable, it was not timely enough to make it relevant.*

## Understandability



▲ It is important to understand what you are reading

**Key terms**

**Understandability** ensures that financial statements are presented in a way that a person with a reasonable knowledge of economics, business and finance is able to understand it.

For financial statements to be useful they should be **understandable**. This is dependent on the presentation of the information and also on the users' capabilities. It is assumed that users have a reasonable knowledge of business, economic activities and accounting. It is also assumed that they will be reasonably diligent when studying the statements. Information should not be omitted from the financial statements simply on the assumption that it is too complex for users to understand.

### Key terms

The **objective of understandability** states that financial statements should be presented in a way that a person who is willing to study the information and who has a reasonable knowledge of finance and business is able to comprehend them.

To ensure that the **objective of understandability** has been adhered to, ask the following questions:

- » Is the information in the financial statements provided clearly, concisely and completely to help users' understanding?
- » Do the users have sufficient knowledge of business, the economy and accounting?
- » Are the users being diligent when studying the statements?
- » Is any information omitted because the business thought it was too complex?

### Exam-style questions

The following multiple choice questions should be completed within five minutes. Four possible answers are given for each question and you must choose the one most appropriate answer.

- 1 Which accounting objective requires information to represent actual events?  
 A Comparability  
 B Relevance  
 C Reliability  
 D Understandability [1]
- 2 Which accounting objective requires that a company should present their financial records in the most clear and concise form?  
 A Comparability  
 B Relevance  
 C Reliability  
 D Understandability [1]
- 3 Which accounting objective requires information to be provided in a timely manner?  
 A Comparability  
 B Relevance  
 C Reliability  
 D Understandability [1]
- 4 Which accounting objective requires that financial statements be free from bias?  
 A Comparability  
 B Relevance  
 C Reliability  
 D Understandability [1]
- 5 Which accounting objective ensures that financial statements prepared by a business in one year will be similar to those prepared in the following year?  
 A Comparability  
 B Relevance  
 C Reliability  
 D Understandability [1]

The marks allotted to the following structured questions are a guide to the length of time that should be taken to complete them.

- 6 State two questions that should be asked to determine if the objective of comparability has been followed by a business when preparing financial statements. [2]
- 7 State two ways in which information reported in financial statements can be reliable. [2]
- 8 State two ways in which information supplied by financial statements can be relevant. [2]
- 9 List one quality that an interested party should possess when trying to understand financial statements. [1]

### Chapter review questions

- 1 State the name of the objective being met in each of the situations described below.
  - a The name of the financial statement, the name of the entity and the period covered by the statement is mentioned on the financial statement of a business.
  - b The financial statements of Picky, a department store, have figures for 2018 and 2019 presented side by side.
  - c A business has had a profitable year. This information is conveyed to trade payables in a timely manner so that they can increase the amount of credit granted to the business.
  - d A business accountant decides to issue financial statements in three days instead of the standard three weeks used previously. This improves the speed with which the internal and external users receive their financial statements.
- 2 Explain the following objectives used in selecting accounting policies:
  - a relevance
  - b reliability
  - c understandability
  - d comparability
- 3 Malini understands that certain objectives must be considered when selecting accounting policies. She knows that one of these objectives is relevance. State the name of two other accounting objectives.
- 4 State the name of the objective which requires that financial information should be included only if it affects business decisions.
- 5 State the name of the objective which states that accounting information should represent actual events and be free from error and bias?

### Revision checklist

In this chapter, you have learnt:

- ✓ what an accounting policy is
- ✓ why and how accounting policies are used by businesses
- ✓ what the objectives of a business are when selecting accounting policies
- ✓ what the objective of comparability is and how this influences the preparation of a financial statement
- ✓ what the objective of relevance is and how this influences the preparation of a financial statement
- ✓ what the objective of reliability is and how this influences the preparation of a financial statement
- ✓ what the objective of understandability is and how this influences the preparation of a financial statement.

# Appendix: Accounting ratios

## Commonly used accounting ratios

### Profitability ratios

*Gross ratio or % of gross profit to revenue (gross profit margin)*

$$= \frac{\text{Gross profit}}{\text{Sales revenue}} \times 100$$

$$\text{Mark-up} = \frac{\text{Gross profit} \times 100}{\text{Cost of sales}}$$

*Profit margin or % of profit to revenue (profit for the year margin)*

$$= \frac{\text{Profit for year} \times 100}{\text{Sales revenue}}$$

$$\text{Return on capital employed (ROCE)} = \frac{\text{Profit before interest}}{\text{Capital employed}} \times 100$$

where Owner's equity employed = Issued shares + Reserves + Non-current liabilities

### Liquidity ratios

$$\text{Current ratio (working capital ratio)} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

$$\text{Liquid ratio} = \frac{\text{Current assets} - \text{Inventory}}{\text{Current liabilities}}$$

$$\text{Trade receivables turnover ratio}^* \text{ in days} = \frac{\text{Trade receivables}}{\text{Credit sales}} \times 365$$

\*Also referred to as Trade Receivables collection period

$$\text{Trade payables turnover ratio}^{**} \text{ in days} = \frac{\text{Trade payables}}{\text{Credit purchases}} \times 365$$

\*\* Also referred to as Trade Payables payment period

$$\text{Rate of inventory turnover (in times)} = \frac{\text{Cost of sales}}{\text{Average inventory}}$$



# Glossary

**Account** A record in ledgers, used to collect and store debit and credit amounts relating to an asset, a liability, capital, an income or an expense. For example, every transaction that involves machinery will be recorded in the machinery account.

**Accounting equation** A formula that is used to illustrate the relationship between the assets, liabilities and owner's equity of a business. It shows that all the assets of a business are provided or funded either by the owner or the trade payables of the business.

**Accounting** The process of collecting, recording, classifying, summarising, analysing, interpreting and communicating financial data to allow the users of accounting information to make informed judgements and decisions.

**Accounting ratios** Used to reveal the interrelationships that exist between the different items in financial statements.

**Accrued expense** An expense owing either at the beginning, or at the end of the financial year. It is recognised in the financial records of a business before it is paid for. It is recorded in the business' statement of financial position as a current liability.

**Accrued income** An income owing either at the beginning, or at the end of the financial year. It is recognised in the financial records of a business before it is received. It is recorded in the business' statement of financial position as a current asset.

**Accumulated depreciation** The total depreciation charged to the income statement from the time the asset was bought and made available for use, to the present time.

**Accumulated fund** Replaces the capital in the statement of financial position of a non-profit making organisation. It represents the surpluses that have collected over the life of the organisation.

**Acid test ratio** See liquid ratio.

**Administration expenses** Expenses that a company incurs which are not included in selling and distribution and finance costs.

**Apportionment of costs** The division of costs in a given proportion over two or more departments.

**Assets** Resources of monetary value that a business owns or are owed to the business. Examples are cash, motor vehicles, trade receivables and property.

**Bank reconciliation** A process that explains the difference between the bank balance as shown in the bank statement, supplied by the business' bank on a particular date, and the corresponding amount shown in the business' cash book. It takes the form of a working document known as a bank reconciliation statement.

**Bank statement** A copy of the bank's customer's account as shown in the books of the bank.

**Bank transfer** This takes place when funds are transferred from one bank account to another by electronic means.

**Book of prime entry** A book where transactions are first listed in date order. These entries are later posted to ledger accounts, using the double entry system of accounting.

**Book-keeping** Involves the collection, recording, storage and retrieval of financial transactions of a business.

**Business entity principle** Requires that the affairs of the business are treated as being separate from the non-business activities of its owner(s).

**Capital employed** The total money being used (employed) by the business on a given day.

**Capital expenditure** Money spent to purchase or improve a productive asset with the intention of increasing its efficiency or capacity to generate income for more than one accounting period.

**Capital owned** The amount owed to the owner of a business by the business on a given day.

**Capital receipts** Money received from the non-operating activities of the business is called capital receipts.

**Carriage inwards** The cost of transporting purchases to the business.

**Carriage outwards** The cost of transporting goods to the customer.

**Cash book** All cash transactions are recorded in the cash book.

**Cash discount** Given to customers for paying their debts promptly.

**Casting** Means totalling. Therefore, if a total is overcast, it has been incorrectly added up to give a sum that is greater than it should be. Undercasting is when a column of figures has been incorrectly added up to give a total that is less than it should be.

**Closing inventory** The value of inventory that has remained unsold at the end of the financial year.

**Comparability** For accounting statements to be comparable, accounting standards, principles and policies should be applied consistently from one accounting period to the next and from one region to another.

**Compensating errors** This is when two or more errors cancel each other out.

**Consistency principle** Similar transactions should be recorded using the same accounting method year after year. This creates consistency for users of accounting information.

**Cost of production of goods** Consists of the prime cost and the factory overheads. The manufacturing account is used to calculate this.

**Cost of sales** This is opening inventory plus net purchases plus carriage inwards less closing inventory.

**Credit balance** A balance c/d on the debit side of an account represents a credit balance. It is the result of the total debits being less than the total credits.

**Credit control** A form of credit management whereby credit is extended to creditworthy customers and denied to those who do not pay their debts. It involves establishing a credit limit for each customer

and thereafter, constantly monitoring the customers' accounts in the sales ledger.

**Current accounts** In a partnership, they are required to be maintained in addition to fixed capital accounts in which profits and losses, drawings, partners' salaries and interest are recorded.

**Current assets** Assets that can be sold, exhausted or consumed through the normal workings of a business with no more than a year remaining on the date of the statement of financial position in which they are listed.

**Current liabilities** Those debts that must be paid within a year from the date of the statement of financial position in which they are listed, for example, trade payables and overdraft.

**Current ratio** Compares the current assets, assets that will remain 'current' or liquid for one year, and current liabilities, or liabilities that will be due for payment within one year.

**Debentures** A source of long-term funds for a limited company. They are charged to the income statement and a company must pay them, regardless of whether it has made a profit or loss.

**Debit balance** A balance c/d on the credit side of an account represents a debit balance. It is the result of the total debits being more than the total credits.

**Depreciation** An operational expense that represents the spreading cost of a non-current asset over the estimated working life of the asset.

**Direct cost** A cost that can be directly attributed to the production of a specific good, for example, direct labour.

**Direct debit** Represents an arrangement by a business with its bank for a creditor to transfer money from the business' account on pre-arranged dates.

**Direct expenses** A form of direct costs that can be directly traced to the manufacture of an item.

**Discounts allowed** Cash discounts given to a customer by a business for prompt payment. It is an expense incurred by the business for having its debts settled promptly.

**Discounts received** Cash discounts allowed by a supplier to a business when payment is made within the qualifying period. It is an income.

**Dishonoured cheque** A cheque that has been rejected for payment when deposited in the bank.

**Dividend** A portion of a company's earnings distributed to its shareholders.

**Double entry system of book-keeping** A simple yet proven concept that ensures each business transaction has equal and opposite effects in at least two different accounts in the accounting system.

**Drawee** The bank where the drawer has an account from which the cheque is to be paid.

**Drawer** The person or company who writes a cheque.

**Drawings** The term given to the value of assets in the form of cash or inventory, withdrawn from a business by the owners for personal use. Drawings reduce owner's equity.

**Duality principle** Requires two entries to be posted for every transaction. One account should be debited and one account should be credited.

**Electronic direct payment** The facility to transfer money from one bank account to another electronically via the internet.

**Equity** The total monetary value of a company represented by issued share capital and reserves.

**Errors of commission** Occurs when the correct amount is entered, both debit and credit, but in the wrong account of the same class.

**Errors of complete reversal of entries** Occurs when the correct amounts are used but double entries are made on the wrong side of the accounts concerned.

**Errors of omission** Occurs when a transaction is completely omitted from the books.

**Errors of original entry** Occurs when an incorrect figure was used to record a transaction, both debit and credit.

**Errors of principle** Occurs when the correct amount is entered, both debit and credit, but one of the entries is made in an account belonging to a different class.

**External users (of accounting information)** Interested parties outside the business organisation such as trade payables, the government.

**Finance costs** Those expenses that are incurred when servicing a loan or a debenture.

**Financial data** Refers to any aspect of the business that can be measured in terms of money. For example sold goods for cash \$400.

**Financial statements** Made up of an income statement and a statement of financial position.

**Finished goods** Goods ready for sale that have gone through the manufacturing process.

**Fixed capital account** When the capital account of each partner remains at the figure of capital contributed by the partner.

**Fixed costs** See overheads.

**Float** See imprest.

**Fluctuating capital accounts** Capital accounts that record all the earnings, charges and withdrawals made by a partner.

**General journal** A book of prime entry meant for the records of all transactions that cannot be recorded in other books of prime entry.

**Going concern principle** Implies that the business will continue to operate in the near future which is at least 12 months.

**Gross margin** The gross profit as a percentage of sales revenue. It uses data from the trading account section of the income statement to analyse the profitability of sales made by a business during a financial year.

**Gross profit** The difference between sales revenue and the cost of sales.

**Historic cost** The value placed on an asset in the statement of financial position based on the original cost at which the asset was acquired.

**Historic cost principle** States that assets should be valued at the cost at which they were acquired.

**Imprest** Also known as a float, this is a fixed amount of money with which the petty cashier starts an accounting period.

**Income statement** Summarises important economic data to help calculate the profit made by a business. Along with the statement of financial position, it makes up the financial statements of a business.

**Indirect costs** Those costs that are not directly linked to the production of a product, for example, rent.

**Intangible assets** Those assets that are non-physical in nature.

**Interested parties** All those people or groups of people who have a special interest in a business. They may be internal or external to the business, for example, prospective investors, the government, trade payables, managers.

**Interim dividends** Paid before the financial statements are prepared, either half-yearly or quarterly.

**Internal users (of accounting information)** These are interested parties within the business, such as owners, managers.

**International Accounting Standards (IAS)** Provide an accounting framework to minimise differences in presentation and content of financial statements around the world.

**Inventory** Goods that a business purchases for resale.

**Irrecoverable debt** A debt that will never be paid.

**Irrecoverable debts recovered** Debts that were written off as irrecoverable, but are now paid.

**Ledgers** Books that collect groups of similar accounts.

**Liabilities** Amounts that the business owes people for resources supplied to the business. Examples of liabilities are trade payables, overdraft and loans.

**Limited company** A form of business structure that is owned by shareholders who have limited liability. A limited company has a legally distinct entity.

**Limited liability** The risk or liability that each interested party bears is limited to the value of the shares they hold.

**Liquid assets** Those assets that can be quickly converted to cash with no loss in value.

**Liquid ratio** Also called the acid test ratio, it measures the business' ability to meet its current liabilities with its most liquid assets.

**Liquidity crisis** A business' lack of liquidity to meet its immediate needs for cash.

**List price** The price at which the manufacturer recommends that the trader sell the product.

**Manufacturing account** An accounting statement which is part of the financial statements of a manufacturing organisation. It is used to calculate the total cost of manufactured goods for sale during the period of a financial year.

**Mark-up** The gross profit as a percentage of cost of sales.

**Matching principle** Requires a business to record in their financial statements, revenues and any related expenses in the same accounting period.

**Materiality principle** States that financial information is only material to the financial statements if it will affect the decisions of interested parties using the information.

**Money measurement principle** States that only those transactions or events that can be measured in terms of money are included in the financial statements.

**Narrative** A brief explanation of the transaction recorded in a journal entry. It sometimes contains a reference to the source document that proves the transaction has taken place.

**Net book value** The net value of the non-current asset. It is calculated by subtracting accumulated depreciation from the cost of the asset.

**Net realisable value (NRV)** The estimated saleable value of the inventory in question, less a reasonable estimate of costs associated with the completion and eventual sale of goods.

**Non-current assets** Those assets that the business has bought with the intention of keeping them and using them for a period of more than a year, for example, machinery, motor vehicles and premises.

**Non-current liabilities** Those debts that do not need to be paid within a year from the date of the statement of financial position, for example, a long-term bank loan or lease.

**Objective of reliability** Ensures that financial information can be verified and used consistently by interested parties with the same results. For financial information to be reliable, it should be trustworthy and materially accurate.

**Objective of understandability** States that the financial statements should be presented in a way that a person who is willing to study the information and who has a reasonable knowledge of finance and business is able to comprehend them.

**Opening inventory** Inventory that a business has at the start of the year. It represents an asset and hence will be a debit balance. It is last year's closing inventory.

**Ordinary shares** Form what is known as the equity of a company.

**Overcast** To record a total that is more than the true total.

**Overheads or fixed costs** Indirect costs are also called overheads or fixed costs.

**Owner's equity** In accounting, it is usually what the business owes the owner. It can refer to funds raised by the owner to fund a business idea.

**Partnership** Owned by two or more people (up to a maximum of twenty, with some exceptions) who enter into a commitment to do business together with a view to make profits.

**Partnership agreement** A contract drawn up and signed by partners.

**Payee** The person or company who is paid when a cheque is cleared.

**Paying-in slip** A small document that a person depositing money (depositor) fills in with the date and amount of money being paid by them into their bank account.

**Personal account** The account of a person or business.

**Petty cash book** Used to record low-value cash transactions such as petrol charges, cleaning expenses and postage stamps.

**Petty cash voucher** A document showing the purpose for which the money is required and the date. It is signed by the person making a claim for cash for an expense.

**Posting** The act of using one book to transfer entries into accounts in another book, thereby performing or completing double entry.

**Preference shares** Entitle preference shareholders to certain rights which ordinary shareholders do not enjoy.

**Prepaid expense** An expense paid in advance for the next financial year. It is recorded on the business' statement of financial position as a current asset.

**Prepaid income** Income received in advance, for the next financial year. It is recorded on the business' statement of financial position as a current liability.

**Prime cost** Includes all the costs that can be directly attributed to the manufacture of a product. Usually it is the sum of direct labour, direct materials and direct expenses.

**Profit and loss appropriation account** Shows the distribution of profit among the partners of a partnership.

**Profit for the year** The difference between the gross profit and expenses incurred by the business.

**Profit margin** Also known as profit for the year as a percentage of sales. The ratio shows the profit for the year for every \$100 of sales revenue.

**Profitability ratios** Used to show the relationships between profit and other figures in the financial statements prepared by a business for the accounting period.

**Provision for depreciation** An account used to accumulate estimated depreciation of an asset over the years of its useful life.

**Provision for doubtful debts** An estimate of the proportion of trade receivables who will not pay.

**Prudence principle** Ensures that liabilities and expenses are not understated and assets and income are not overstated in the financial statements of a business.

**Purchases** Refers to the value of goods bought for resale. For example, to a used car dealer, a car bought for resale.

**Purchases invoice** The invoice received by a customer for a credit purchase made.

**Purchases journal** A book of prime entry where credit purchases are recorded.

**Purchases ledger control account** An account used to record the totals of the books of prime entry, related to credit purchases, to check the accuracy of the purchases ledger. It is also known as the total trade payables account.

**Rate of inventory turnover** The number of times inventory is sold and replaced by a business in a given period.

**Realisation principle** States that revenue can only be recognised when it is earned.

**Reducing balance method of depreciation** Results in diminishing annual depreciation expenses over the economic life of a non-current asset.

**Relevance** For financial statements to be relevant, the information they contain should be timely and useful for decision making.

**Reliability** Financial information is reliable when it can be verified by interested parties and when interested parties use this information time and again, they get the same results.

**Reserves** Profits ploughed back into the business. They are normally used for future expansion of the business, for example, a general reserve.

**Residual value** An estimate of the value of a non-current asset at the end of its working life. Also known as scrap value.

**Retained earnings** Profit that is kept in the company and not paid out as dividends to shareholders. It is a very important source of finance for the business who normally use it for future growth. It is a reserve.

**Return on capital employed (ROCE)** Measures a business' efficiency with which money invested in it is used.

**Revaluation method of depreciation** This is a method in which annual depreciation of an asset is calculated as the difference in its value at the end of the year compared to the start of the year.

**Revenue expenditure** This is expenditure incurred in the day-to-day running of the business.

**Revenue receipts** These are recurring in nature. They are income generated from the main operating activities of the business.

**Royalty** If a product is manufactured using a licensed manufacturing process, then a royalty has to be paid for the use of that process. For example, the manufacturer will have to pay the holder of the license a percentage of the gross sale price of the product manufactured.

**Sales invoice** A copy of an invoice retained by a seller that documents details of the credit sales made.

**Sales journal** A book of prime entry where credit sales are recorded.

**Sales ledger control account** An account used to record the totals of the books of prime entry related to credit sales, to check the accuracy of the sales ledger. It is also known as the total trade receivables account.

**Scrap value** See residual value.

**Selling and distribution expenses** Those expenses incurred in the sales and promotion of the company's products.

**Service businesses** Earn income by providing services, not physical products, for example, banks.

**Set off** This is the smaller of the two debts that make up the inter-indebtedness between a supplier and a customer.

**Share** A unit of investment in a company. These make up the capital of the company. They can have a nominal or face value of \$1, \$0.50, \$10, etc.

**Shareholders** Part owners of a limited company. They are people or institutions who hold one or more shares in a company.

**Standing order** An order to a bank by a business for the bank to pay a certain set amount of money regularly at a stated date to an individual or an organisation.

**Statement of affairs** Lists the assets, liabilities and capital of a business that does not maintain a full set of records.

**Statement of changes in equity** Records events that were responsible for the increase or decrease of total equity in an accounting period.

**Statement of financial position** A statement listing the assets, liabilities and owner's equity (or capital). It is one of the financial statements prepared at the end of a financial year. It records the assets, liabilities and capital of a business.

**Straight-line method of depreciation** Results in the same annual depreciation expense over the economic life of a non-current asset.

**Subscription** A fee paid regularly by the members of a non-profit making organisation in order to belong to the organisation.

**Suspense account** A temporary account opened to make the trial balance totals equal. It acts as a holding account until the error(s) causing the inequality in the trial balance totals are discovered.

**Total equity** The sum of the ordinary share capital and ploughed back profits in the form of the general reserve and retained earnings.

**Total trade payables account** See purchases ledger control account.

**Total trade receivables account** See sales ledger control account.

**Trade discount** Given to customers who buy in bulk. It is a deduction on the list price.

**Trade payables** Businesses or individuals to whom money is due for services or goods supplied to the business.

**Trade payables turnover ratio** Measures the average time the business takes to pay its trade payables.

**Trade receivables turnover ratio** Measures the average time the business' trade receivables take to pay their debts.

**Trade receivables** Businesses or individuals who have received goods or a service from the business on credit, with the understanding that payment is due within the credit period.

**Trial balance** A statement that lists account names and their balances, recorded in debit and credit columns, on a certain day.

**Undercast** To record a total that is less than the true total.

**Understandability** Financial statements must be presented in a way that a person with a reasonable knowledge of economics, business and finance will be able to understand.

**Unpresented cheques** Those cheques issued by the business but not presented by the drawee to the bank.

**Winding up** The process of selling all the assets of a business, paying off trade and other payables and any loans, then distributing any remaining funds between the shareholders.

**Work in progress** Items that are not yet completed and only partly made.

**Working capital** The difference between current assets and current liabilities. It is the capital used in the day-to-day running of the business.

**Year-end adjustment** An adjustment made to the financial records of a business so that a 'true and fair view' of the profit or loss for the financial year in question, is shown.



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