

Where are we headed?

After completing this chapter, you should be able to:

- **identify** and **define** assets, liabilities and owner's equity
- **explain** the relationship between the elements of the accounting equation
- **calculate** owner's equity using the accounting equation
- **explain** the relationship between the accounting equation and the Balance Sheet
- **identify** and **define** current and non-current items
- **prepare** a fully classified Balance Sheet
- **apply** the rules of double-entry accounting
- **identify** how transactions affect the accounting equation and Balance Sheet
- **explain** liquidity and **calculate** the Working Capital Ratio
- **explain** stability and **calculate** the Debt Ratio.

CHAPTER 2

THE ACCOUNTING EQUATION

KEY TERMS

After completing this chapter, you should be familiar with the following terms:

- asset
- liability
- owner's equity
- equities
- Balance Sheet
- classifying/classification
- current asset
- non-current asset
- current liability
- non-current liability
- indicator
- liquidity
- Working Capital Ratio (WCR)
- stability
- Debt Ratio

2.1 ASSETS, LIABILITIES AND OWNER'S EQUITY

The role of an accountant is to provide advice to small business owners so that they can make more informed decisions. When consulting the accountant, one of the first questions the owner should ask about their business is: what is our current financial position? The financial position of a business can be represented in two ways:

- in the form of an equation – the accounting equation
- by preparing a formal accounting report known as a Balance Sheet.

Although the presentation will be different, in each case the assessment of the firm's financial position will consider the economic resources it controls (its assets) and its obligations (its liabilities), thus allowing owners to assess their owners' equity – the *net worth* of their investment in the business.

Assets

An **asset** is a resource controlled by the entity (as a result of past events) from which future economic benefits are expected.

Thinking of assets as 'what the business owns' is okay as a starting point, and the items the business owns are certainly assets, but the definition above is far more sophisticated (and thus a little more complex). Let's break the definition down into its main components.

A resource controlled by an entity

From an accounting viewpoint, resources are items, physical (such as a motor vehicle) and intangible (such as a trademark), that assist the business to actually carry out its operations to earn revenue. In many cases the business will own these resources, but this is not necessary for the item to be classified as an asset: all that is required is that the business has *control* of the item. This means the business must be able to determine how and when the item is used. For instance, it is up to the business to determine how and when the cash in its bank account will be spent, and how and when the vehicles will be used.

Future economic benefit

To be considered as an asset, an item must be capable of bringing the firm an economic benefit some time *in the future*. That is, it must represent some sort of benefit that is yet to be received. For example, cash in the bank will provide a future economic benefit as it will be spent on things the business will need to function. An item such as office equipment will usually be used for a number of years into the future, and in each year that it is used it will bring some form of economic benefit. A common list of assets for a service business might include the cash in its bank account, its debtors (customers who owe the business for services provided to them on credit), the supplies it has on hand, and its equipment, vehicles and perhaps premises.

Liabilities

Liabilities are present obligations of the entity (arising from past events), the settlement of which is expected to result in an outflow of economic benefits.

Once again, a simplistic view of liabilities as 'what the business owes' will do only as a starting point: the definition is much broader.

Asset

a resource controlled by the entity (as a result of past events), from which future economic benefits are expected

Liability

a present obligation of the entity (as a result of past events), the settlement of which is expected to result in an outflow of economic benefits

Present obligations

If the business has an *obligation* to settle a debt, then this debt is likely to be a liability. In the case of a bank overdraft (a debt owed to the bank) or creditors (a debt owed to suppliers), the business is obliged to repay the amount owing, so these items should be classified as liabilities.

In contrast, next year's wages are *not* a liability, as there is no obligation to pay the employees until they perform the work. Only those debts the business is presently *obliged* to make should be recognised as liabilities.

Expected to result in an outflow of economic benefits

The fact that a liability is *expected* to result in an outflow of economic benefits means that the outflow, or *sacrifice*, is yet to occur. In this way, a liability could be seen as requiring a *future economic sacrifice*. This means the firm will 'give up' some kind of economic benefit, which in most cases will be cash. (However, there will be circumstances where other economic benefits, like stock or even a vehicle, are used to settle a liability.)

A common list of liabilities might include a bank overdraft, creditors, loans, and mortgages (loans secured against property).

Owner's equity

Owner's equity is defined as the residual interest in the assets of the entity after the deduction of its liabilities. In effect, owner's equity is what is left over for the owner once a firm has met all its liabilities, or the owner's claim on the firm's assets. (Given that the owner and the firm are considered to be separate *entities*, it can also be described as the amount the business owes the owner.)

STUDY TIP

Look for opposites in definitions – like benefit versus sacrifice – to make them easier to remember.

Owner's equity the residual interest in the assets of the entity after the liabilities are deducted

REVIEW QUESTIONS 2.1

- 1 **Define** the following terms:
 - asset
 - liability.
- 2 **List** four assets and four liabilities, which would be common to most small businesses.
- 3 **Define** the term 'owner's equity'.
- 4 Referring to one Accounting Principle, **explain** why owner's equity is said to be what the 'business owes the owner'.

2.2 THE ACCOUNTING EQUATION

Equities

claims on the assets of the firm, consisting of both liabilities and owner's equity

What liabilities and owner's equity have in common is that they are both **equities** – claims on the assets of the firm. That is, liabilities are what the business owes to external parties, while owner's equity is what the business owes to the owner. And both of these claims must be funded from the business's assets.

This relationship between assets, liabilities and owner's equity, is described by the accounting equation:

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

The accounting equation has exactly the same impact on small businesses as it does on multinational corporations, and all reporting entities are subject to one fundamental accounting law: *the accounting equation must always balance*. That is, assets must always equal liabilities plus owner's equity; it is not possible for the equation to be out of balance.

For instance, if a firm has assets of \$162 000 and liabilities worth \$110 000, its owner's equity *must be* the residual (what is left over): \$52 000. It is not possible for owner's equity to equal an amount *greater* than this, because there would be insufficient assets to pay the owner. Conversely, it is not possible for owner's equity to equal an amount *less* than this. If liabilities claimed \$110 000, and the owner claimed only \$35 000, that would leave an amount not claimed by liabilities, nor by the owner – who would then claim this remaining \$17 000 worth of assets? The answer is that the owner would be entitled to this extra, so owner's equity would have to be \$52 000 rather than \$35 000.

REVIEW QUESTIONS 2.2

- 1 **Define** the term 'equities'.
- 2 **Explain** the difference between liabilities and owner's equity.
- 3 **State** the accounting equation.
- 4 Referring to the definition of owner's equity, **explain** why the accounting equation must always balance.

2.3 THE BALANCE SHEET

The relationship between assets, liabilities and owner's equity, as described by the accounting equation, is at the heart of the Balance Sheet.

Assets	=	Liabilities	+	Owner's Equity
Assets TOTAL ASSETS		Liabilities Plus Owner's Equity TOTAL EQUITIES		

Balance Sheet

an accounting report that details a firm's financial position at a particular point in time by reporting its assets, liabilities and owner's equity

The **Balance Sheet** is an accounting report that details a firm's financial position at a particular point in time by listing its assets and liabilities and the owner's equity. Figure 2.1 shows the unclassified Balance Sheet for a service firm – Handsome Hair.

Figure 2.1 Balance Sheet for a service firm

HANDSOME HAIR			
Balance Sheet as at 31 December 2016			
Assets		Liabilities	
Cash at Bank	3 000	Creditors	7 000
Stock of Shampoo	9 000	Loan – PSA Bank	12 000
Debtors	4 000	Owner's Equity	
Fixtures and Fittings	18 000	Capital – Henrietta	15 000
Total Assets	34 000	Total Equities	34 000

Note how the title of the report refers to *who* the report is prepared for (Handsome Hair), *what* type of report it is (a Balance Sheet), and *when* it is accurate (as at 31 December 2016). This reference to **as at** 31 December 2016 is important, because it reflects the fact that a Balance Sheet is only ever accurate on the day it is prepared. The following day, the assets and liabilities it reports will probably change, meaning a new Balance Sheet is required.

The elements of the accounting equation (assets, liabilities and owner's equity) provide the headings within the Balance Sheet, with individual items reported under those headings. The actual item representing the owner's claim is known as Capital, with the name of the owner listed next to it. (Any profits earned by the business, and thus owed to the owner, would also be listed under this heading of owner's equity, as would the owner's drawings.)

STUDY TIP

The title of all accounting reports must state who, what and when.

REVIEW QUESTIONS 2.3

- 1 **Explain** the role of the Balance Sheet.
- 2 **List** the three pieces of information that must be present in the title of each Balance Sheet.
- 3 **State** one reason why a Balance Sheet is titled 'as at'.
- 4 **Explain** the relationship between the Balance Sheet and the accounting equation.

2.4 CLASSIFICATION IN THE BALANCE SHEET

Given that accounting exists to provide financial information to assist decision-making, accountants are always seeking ways to improve the usefulness of the information they provide. One simple, but very effective, way of improving the usefulness of the Balance Sheet is by **classifying** the information it contains.

Classification involves grouping together items that have some common characteristic. In relation to the Balance Sheet, the assets and liabilities have already been grouped together, but within these groupings the items can be classified according to whether they are 'current' or 'non-current'. This further classification enhances the quality of the information that will allow further analysis and more informed decisions to be made.

Classifying/classification
grouping together items that have some common characteristic

Current versus non-current assets

All assets are defined as future economic benefits, but it is the definition of 'future' that determines whether they are 'current' or 'non-current'. Put simply, assets are classified as 'current' or 'non-current' according to the length of time for which the benefit is expected to flow.

If the asset is expected to be sold, used up or turned into cash within a year; that is, if it is expected to provide an economic benefit for 12 months or less, then it should be classified as a **current asset**. Common current assets include the cash in the business's bank account, any stock of supplies it is holding for completing a job, and the amounts owed to it by its debtors. Any assets that are expected to provide an economic benefit for more than 12 months, such as business equipment, vehicles, or shop fittings, should be classified as **non-current assets**.

Current asset

a resource controlled by the entity (as a result of a past event), from which a future economic benefit is expected for in 12 months or less

Non-current asset

a resource controlled by the entity (as a result of a past event), from which a future economic benefit is expected for more than 12 months

Current liability

a present obligation of the entity (arising from past events), the settlement of which is expected to result in an outflow of economic benefits in the next 12 months

Non-current liability

a present obligation of the entity (arising from past events), the settlement of which is expected to result in an outflow of economic benefits sometime after the next 12 months

Current versus non-current liabilities

The same 12 month test applies to liabilities. Items such as obligations to creditors, which are expected to be met sometime in the next 12 months, are classified as **current liabilities**. A bank overdraft would also be classified as a current liability, *not* so much because it *will* be met in the next 12 months as because it *can* be. (Although it is unlikely to occur, it is possible that an overdraft could be called in for repayment on very short notice.)

By contrast, **non-current liabilities** are present obligations that must be met sometime after the next 12 months. Longer-term loans like mortgages are the most common non-current liabilities.

Loans

When classifying loans, it is important to recognise that some of the amount owing may be current, and some non-current. For example, with a loan like a mortgage, the lender (usually a bank) would expect the borrower (the business) to make regular instalments to pay off the principal rather than pay one massive amount at the end of the loan. In such a case, the amount that is due for repayment in the next 12 months would be classified as a current liability, with the remainder (which does not have to be repaid until after 12 months) classified as a non-current liability. As a result, the amount owing on a long-term loan may need to be split between current and non-current liabilities.

Assuming the Loan – PSA Bank is repayable in equal instalments of \$3 000 per year (or per annum), then the classified Balance Sheet of Handsome Hair would be as is shown in Figure 2.2.

Figure 2.2 Classified Balance Sheet

HANDSOME HAIR			
Balance Sheet as at 31 December 2016			
Current Assets		Current Liabilities	
Cash at Bank	3 000	Creditors	7 000
Stock of Shampoo	9 000	Loan – PSA Bank	<u>3 000</u> 10 000
Debtors	<u>4 000</u> 16 000	Non-Current Liabilities	
Non-Current Assets		Loan – PSA Bank	9 000
Fixtures and Fittings	18 000	Owner's Equity	
		Capital – Henrietta	15 000
Total Assets	<u><u>\$34 000</u></u>	Total Equities	<u><u>\$34 000</u></u>

In this example, the Loan – PSA Bank for \$12 000 has been split between current and non-current liabilities: \$3 000 must be repaid in the next 12 months, with the remaining \$9 000 due for repayment sometime after that.

(Note also the use of columns – where necessary, the left-hand column on each side of the Balance Sheet has been used for listing *individual* amounts, leaving only the *total* of each classification in the right-hand column. This is a simple mechanism for improving the layout of the report, and making it more user-friendly.)

STUDY TIP

Check the date when a loan has to be repaid – this is the key to whether it is current or non-current.

REVIEW QUESTIONS 2.4

- 1 **Define** the term 'classification'.
- 2 **Distinguish** between a current asset and a non-current asset.
- 3 **List** three assets that would be classified as current, and three that would be classified as non-current.
- 4 **Distinguish** between a current liability and a non-current liability.
- 5 **List** three liabilities that would be classified as current, and three that would be classified as non-current.

2.5 TRANSACTIONS AND THE ACCOUNTING EQUATION

When a firm exchanges goods and/or services with another entity, its accounting equation will change in a variety of ways. In fact, every transaction will change at least two items in the accounting equation but after those changes are recorded, the accounting equation must still balance. This is known as *double-entry accounting*.

- 1 Every transaction will affect at least two items in the accounting equation.
- 2 After recording these changes, the accounting equation must still balance.

Because the Balance Sheet is based on the accounting equation, the same two rules of double-entry accounting also apply to the Balance Sheet.

The following transactions for Rupert's Roof Repairs occurred during January 2016.

Jan. 1 Rupert contributed \$16 000 cash to commence business as Rupert's Roof Repairs.

EXAMPLE

As a result of this transaction, the business now has \$16 000 in its bank account – an increase in its assets of \$16 000. In addition, because that cash came from the owner (who is assumed to be a separate accounting entity) the owner's equity has increased by \$16 000.

The accounting equation for Rupert's Roof Repairs after this transaction would be:

Assets	=	Liabilities	+	Owner's Equity
↑ Bank \$16 000				↑ Capital \$16 000

The Balance Sheet would show:

RUPERT'S ROOF REPAIRS
Balance Sheet as at 1 January 2016

Assets		Liabilities	
Bank	16 000	nil	
		Owner's Equity	
		Capital – Rupert	16 000
Total Assets	\$16 000	Total Equities	\$16 000

Note how the transaction has changed two items – **Bank** (asset) and **Capital** (owner's equity) – both of which have increased by \$16 000. As a result, the accounting equation still balances.

2 January Purchased a van on credit from Vic's Vans for \$23 000

This time it is not the Bank which increases, but a different asset called Van. On the other side of the accounting equation, a liability called Creditors is created, representing the amount owed to Vic's Vans. The effect on the accounting equation for Rupert's Roof Repairs after this transaction would be:

Assets	=	Liabilities	+	Owner's Equity
↑ Van \$23 000		↑ Creditor – Vic's Vans \$23 000		

The Balance Sheet for Rupert's Roof Repair's after this transaction would be:

RUPERT'S ROOF REPAIRS
Balance Sheet as at 2 January 2016

Assets		Liabilities	
Bank	16 000	Creditors	23 000
Van	23 000	Owner's Equity	
		Capital – Rupert	16 000
Total Assets	\$39 000	Total Equities	\$39 000

While there is no change to Bank, the new asset Van increases the assets to \$39 000. On the other side of the Balance Sheet, Creditors increases equities to the same amount and once again, the Balance Sheet, and the accounting equation on which it is based, balances.

3 January Paid \$14 000 to purchase new safety equipment

This transaction creates a third asset, Safety Equipment, but in the process decreases Bank. Thus, the amounts of the individual assets change without changing the total assets figure. There is in fact no change on the equities side proving that although two items must change, they can both be on the same side of the accounting equation/ Balance Sheet, provided that the result still balances. The effect on the accounting equation for Rupert's Roof Repairs after this transaction would be:

Assets	=	Liabilities	+	Owner's Equity
↓ Bank \$14 000				
↑ Safety Equipment \$14 000				

The Balance Sheet for Rupert's Roof Repairs after this transaction would be:

RUPERT'S ROOF REPAIRS
Balance Sheet as at 3 January 2016

Assets		Liabilities	
Bank	2 000	Creditors	23 000
Van	23 000	Owner's Equity	
Safety Equipment	14 000	Capital – Rupert	16 000
Total Assets	\$39 000	Total Equities	\$39 000

Each and every transaction will have at least two effects on the accounting equation, and after these effects have been recorded the equation must balance. If it does not balance, then the recording is incorrect.

REVIEW QUESTIONS 2.5

State the two rules of double-entry accounting.

2.6 PERFORMANCE INDICATORS AND THE BALANCE SHEET

The classification of the items in the Balance Sheet as current or non-current enhances the usefulness of the report because it allows for the calculation of performance **indicators**. These indicators, or ratios as they are sometimes known, compare items within the Balance Sheet in order to assist management in determining the financial health of their business. Specifically, the Balance Sheet allows for the calculation of indicators to assess the firm's liquidity and stability.

Indicator

a measure that expresses profitability, liquidity or stability in terms of the relationship between two different elements of performance



Liquidity

the ability of the business to meet its short-term debts as they fall due

Working Capital Ratio (WCR)

a liquidity indicator that measures the ratio of current assets to current liabilities to assess the firm's ability to meet its short-term debts

Liquidity

Liquidity refers to the ability of a business to meet its debts as they fall due, which is essential to its survival. One of the most popular measures of liquidity is the **Working Capital Ratio (WCR)**. This indicator compares a firm's current assets and current liabilities to determine whether the business has sufficient economic resources to cover its present obligations.

Working Capital Ratio formula

$$\text{Working Capital Ratio (WCR)} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

EXAMPLE

As at 28 February 2016, the Balance Sheet of Millsy's Music Lessons showed current assets of \$7 500, and current liabilities of \$5 000.

Figure 2.3 Calculating Working Capital Ratio

$$\begin{aligned} \text{Working Capital Ratio (WCR)} &= \frac{\text{Current Assets}}{\text{Current Liabilities}} \\ &= \frac{7\,500}{5\,000} \\ &= \mathbf{1.5 : 1} \end{aligned}$$

This indicates that the firm has \$1.50 of current assets for every \$1.00 of current liabilities.

Assessing Working Capital Ratio

What is a suitable level for the WCR? As long as the ratio is above a minimum of 1:1 then this would indicate sufficient liquidity, as there are enough current assets to cover the current liabilities of the business. Obviously a Working Capital Ratio of less than 1:1 is worrying; however, the owner should also be wary of having a Working Capital Ratio that is *too high* as this may indicate that the business has an overabundance of current assets that are not being employed effectively.

Stability

the ability of the business to meet its debts and continue its operations in the long term

Debt Ratio

measures the proportion of the firm's assets that are funded by external sources

Stability

Whereas liquidity focuses on the short-term, **stability** concentrates on the firm's ability to meet its obligations in the longer term. A good indicator of stability is the **Debt Ratio**, which measures what percentage of the firm's assets are funded by external (outside) sources. In this way, it measures the firm's reliance on outside finance.

Debt Ratio formula

$$\text{Debt Ratio} = \frac{\text{Total Liabilities}}{\text{Total Assets}} \times 100$$

As at 30 June 2016, the Balance Sheet of Choice Physios showed Total Liabilities of \$170 000 and Total Assets of \$200 000.

EXAMPLE**Figure 2.4** Calculating the Debt Ratio

$$\begin{aligned} \text{Debt Ratio} &= \frac{\text{Total Liabilities}}{\text{Total Assets}} \times 100 \\ &= \frac{170\,000}{200\,000} \times 100 \\ &= 85\% \end{aligned}$$

STUDY TIP

The Debt Ratio considers all of the assets and liabilities, not just the non-current items.

This means that 85% of the firm's assets are financed by external debt (liabilities), with the remaining 15% funded by the owner's capital.

Assessing the Debt Ratio

There is no set level at which the Debt Ratio is said to be satisfactory, but it is a good indicator of financial risk. A high Debt Ratio means that a high proportion of the firm's assets are funded by external sources. This in turn means there is pressure on the firm's cash flow to meet principal and interest repayments, and therefore a greater risk of the business facing financial collapse.

The Debt Ratio will increase from increased borrowing by the business; however, changes in owner's equity will also affect the Debt Ratio, not just changes in the assets and liabilities. Excessive drawings that decrease owner's equity will increase the Debt Ratio and the risk to the business as well as affecting the level of liquidity. However, capital contributions by the owner can reduce the Debt Ratio and the financial risk of the business as well as providing short-term relief to liquidity.

REVIEW QUESTIONS 2.6

- 1 **Explain** one benefit of classifying the items in a Balance Sheet as current or non-current.
- 2 **Define** the term 'liquidity'.
- 3 **State** what is measured by the Working Capital Ratio. **Show** how it is calculated.
- 4 **Explain** how the Working Capital Ratio can be used to assess whether liquidity is satisfactory or not.
- 5 **Define** the term 'stability'.
- 6 **State** what is measured by the Debt Ratio. **Show** how it is calculated.
- 7 **Explain** how a high Debt Ratio can have negative consequences for liquidity.

WHERE HAVE WE BEEN?

- Assets are resources controlled by the entity (as a result of past events), from which future economic benefits are expected.
- Liabilities are present obligations of the entity (arising from past events), the settlement of which is expected to result in an outflow of economic benefits.
- Owner's equity is the residual interest in the assets of the entity after the liabilities are deducted.
- The relationship between assets, liabilities and owner's equity is described by the accounting equation, which must always balance.
- The Balance Sheet details the firm's financial position at a particular point in time by listing its assets and liabilities, and the owner's equity.
- Every transaction will change at least two items in the accounting equation but after those changes are recorded, the accounting equation must still balance.
- Assets and liabilities, can be classified as current or non-current depending on whether they will exist for more or less than 12 months.
- Classification in the Balance Sheet as current or non-current enhances the usefulness of the report because it allows for the calculation of performance indicators.
- Liquidity refers to the ability of a business to meet its debts as they fall due and can be measured using the Working Capital Ratio, which should be above 1:1.
- Stability refers to the ability of a business to meet its long-term obligations and remain a going concern.
- The Debt Ratio measures the percentage of the firm's assets that are funded by external (outside) sources, and is a good indicator of financial risk.

EXERCISES

EXERCISE 2.1



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ASSETS, LIABILITIES AND OWNER'S EQUITY

Classify each of the following items as an asset, a liability or owner's equity.

- | | |
|----------------------------|-------------------------|
| a Stock of supplies | f Creditors |
| b Mortgage | g Equipment |
| c Cash at bank | h Bank overdraft |
| d Debtors | i Vehicle |
| e Loan | j Capital |

EXERCISE 2.2



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ACCOUNTING EQUATION

For each of the following examples, use the accounting equation to **calculate** the value of owner's equity.

- Mark's Dog Washing Service has \$4 500 in assets, but owes \$500 to the local newspaper for advertising.
- Bianca owns and operates Bianca for Hair. The firm has \$5 600 in assets, but owes a supplier \$250.

- c Andrew is the owner of an accounting firm. He owns a car worth \$1 500, a stereo worth \$800, clothing worth \$750 and other assets worth \$1 000. His firm owns office equipment worth \$15 000 and a vehicle worth \$20 000, but owes \$600 to an employee.
- d Sasha Enterprises has \$4 500 in the bank, but owes \$1 000 on a loan it took out to buy equipment. The equipment is worth \$1 500, and a company car is worth \$17 000. A client still owes \$500 for work done by the firm, and Sasha owes \$150 on her Visa card.

EXERCISE 2.3 ACCOUNTING EQUATION



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For each of the following examples, use the accounting equation to **calculate** the value of the assets.

- a John knows that his equity in his firm is \$3 000, and that his firm owes \$600 to a supplier.
- b Ella has equity of \$10 000 in her business, and has \$5 000 worth of personal assets. She owes Branko \$500, and the firm has debts of \$3 000.

EXERCISE 2.4 CLASSIFICATION



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Classify each of the following items as a current asset, non-current asset, current liability or non-current liability.

- | | |
|----------------------------|------------------------------|
| a Creditors | g Capital |
| b Cash on hand | h Debtors |
| c Equipment | i Mortgage owing on premises |
| d Premises | j Bank overdraft |
| e Stock of supplies | k Vehicles. |
| f Wages owing to employees | |

EXERCISE 2.5 ACCOUNTING EQUATION



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For each of the following examples, use the accounting equation to **calculate** the missing figures.

	Current Assets	Non-Current Assets	Current Liabilities	Non-Current Liabilities	Owner's Equity
a	14 200	10 400		6 400	10 300
b		15 800	400	2 000	17 800
c	12 000	18 000	600	1 600	
d	41 300	25 200	19 900		29 600

EXERCISE 2.6

CLASSIFIED BALANCE SHEET



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As at 31 May 2016, the assets and liabilities of 'Paris for Hair' were as follows:

Stock of hair care products	\$ 42 000
Creditors	3 400
Loan – nab (repayable \$6 000 per annum)	30 000
Shop Fittings	22 000
Bank Overdraft	4 900
Debtors	8 600
Office Equipment	15 300

The shop fittings were purchased three years ago for \$22 000, but the owner has estimated their current value at \$8 200.

Required

- a Referring to one Qualitative Characteristic, **explain** why the shop fittings must be valued at \$22 000.
- b **Calculate** Owner's Equity as at 31 May 2016.
- * c **Prepare** a classified Balance Sheet for Paris for Hair as at 31 May 2016.
- d Referring to your answer to part 'c', **explain** your treatment of Office Equipment.

EXERCISE 2.7

CLASSIFIED BALANCE SHEET



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Noel Season is the owner of Noel's Plumbing and has provided the following list of assets and liabilities as at 1 February 2016.

Creditors	8 500
Stock of Fittings	12 000
Wages Owing	400
Tools	12 000
Mortgage (due 2026) (repayable \$8 000 per year)	80 000
Cash at Bank	3 000
Premises	90 000
Loan – nab (due Dec. 2016)	20 000
Company Vans	30 000
Debtors	1 500
Owner's Equity	?

Required

- * a **Prepare** a Balance Sheet for Noel's Plumbing as at 1 February 2016.
- b Referring to your answer to part 'a', **explain** your treatment of:
 - Stock of Fittings
 - Loan – nab.
- c **State** one reason why a Balance Sheet is titled 'as at'.
- d **State** two external users who may be interested in the Balance Sheet of Noel's Plumbing.

EXERCISE 2.8

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CLASSIFIED BALANCE SHEET

Robert James owns and operates Rob's CD Library, and has provided the following list of the firm's assets and equities as at 31 December 2016.

Wages Owing	1 200
Mortgage (repayable \$500 per month)	80 000
Equipment	12 000
Debtors	1 500
Owing to Suppliers	4 500
Cash at Bank	1 000
Stock of CD's	24 000
Premises	95 000
Owner's Equity	?

Required

- a **Calculate** Rob's owner's equity as at 31 December 2016.
- * b **Prepare** a Balance Sheet for Rob's CD Library as at 31 December 2016.
- c Referring to your answer to part 'a', **explain** your treatment of:
 - Debtors
 - Wages Owing.
- d **State** one reason why liabilities and owner's equity are classified as equities.

EXERCISE 2.9

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TRANSACTIONS AND THE ACCOUNTING EQUATION

Jan Philpott is the owner of Jan's Public Relations, and has supplied the following details relating to the firm's transactions for February 2016.

Feb.	1	Purchased a new data projector on credit from EZ Supplies \$1 000
	2	Made a loan repayment of \$700
	3	Jan took home stationery worth \$40 for personal use
	4	Paid \$450 for stationery
	5	Paid EZ Supplies \$300

Required

- a **Show** the effect of each transaction on the accounting equation on Jan's Public Relations.
- b Referring to one Accounting Principle, **explain** why the transaction on 3 February 2016 results in a decrease in owner's equity.
- c Referring to one Qualitative Characteristic, **explain** why it is important that Jan keeps the source document for the new data projector.

EXERCISE 2.10

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TRANSACTIONS AND THE ACCOUNTING EQUATION

Murray Cook is the owner of Cook's Catering, and has supplied the following details relating to the firm's transactions for April 2016.

April	1	Purchased new oven worth \$3 000 on credit
	2	Received \$300 from a debtor
	3	Paid \$700 for a kitchen trolley
	4	Murray donated his personal computer to the firm (It was worth \$1 200.)
	5	Borrowed \$10 000 from the Patterson Bank

Required

- a **Show** the effect of each transaction on the accounting equation on Cook's Catering.
- b Referring to one Qualitative Characteristic, **explain** why the transaction on 4 April 2016 results in an increase in Owner's Equity.
- c **Explain** how the new oven should be classified in the Balance Sheet of Cook's Catering.

EXERCISE 2.11

page 28

WORKING CAPITAL RATIO

As at 30 June 2016, McCormack Motors had current assets of \$40 000 and current liabilities of \$30 000.

Required

- a **Calculate** the Working Capital Ratio for McCormack Motors as at 30 June 2016.
- b Referring to your answer to part 'a', **explain** whether the liquidity of McCormack Motors is satisfactory or unsatisfactory.
- c **Explain** the role of a classified Balance Sheet in calculating the Working Capital Ratio.

EXERCISE 2.12

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DEBT RATIO

As at 31 January 2016, All Suits Dry Cleaning had total liabilities of \$120 000 and total assets of \$300 000.

Required

- a **Calculate** the Debt Ratio for All Suits Dry Cleaning as at 31 January 2016.
- b Referring to your answer to part 'a', **explain** what this indicator measures.
- c **Explain** why the Debt Ratio is a good indicator of risk.

EXERCISE 2.13

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INDICATORS

Quick as a Flash processes photos, and has presented the following report as at 31 May 2016.

QUICK AS A FLASH
Balance Sheet as at 31 May 2016

Current Assets			Current Liabilities		
Processing Supplies	3 800		Creditors	2 000	
Debtors	1 000		Mortgage	<u>18 000</u>	20 000
Bank	<u>200</u>	5 000			
Non-Current Assets			Non-Current Liabilities		
Imaging Equipment	45 000		Mortgage		85 000
Premises	<u>160 000</u>	205 000			
Total Assets			Owner's Equity		
		<u>\$210 000</u>	Capital – Bright		<u>105 000</u>
			Total Equities		
					<u>\$ 210 000</u>

Required

- a Calculate** the Working Capital Ratio for Quick as a Flash as at 31 May 2016.
- b Comment** on the liquidity of Quick as a Flash as at 31 May 2016.
- c Calculate** the Debt Ratio for Quick as a Flash as at 31 May 2016.
- d State** one action the owner could take to improve both the Working Capital Ratio and the Debt Ratio.

EXERCISE 2.14

INDICATORS



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Maria Khallouf owns Checked Pages, an editing business, and has provided the following report as at 31 August 2016.

CHECKED PAGES
Balance Sheet as at 31 August 2016

Current Assets		Current Liabilities	
Bank	14 000	Creditors	12 000
Debtors	6 000	Mortgage – ANZ	6 000
Stock of Materials	16 000		18 000
	36 000		
Non-Current Assets		Non-Current Liabilities	
Vehicle	10 000	Mortgage	72 000
Printing Equipment	59 000		
Land and building	120 000		
	189 000		
Total Assets	\$225 000	Owner's Equity	
		Capital – Khallouf	135 000
		Total Equities	\$225 000

Required

- a** Referring to one Qualitative Characteristic, **explain** why the Balance Sheet does not identify each individual creditor of Checked Pages.
- b Calculate** the Working Capital Ratio for Checked Pages as at 31 August 2016.
- c** Referring to your answer to part 'b', **explain** whether this level of liquidity is satisfactory.
- d Calculate** the Debt Ratio for Checked Pages as at 31 August 2016.
- e** After inspecting the Balance Sheet, Maria has decided to use \$11 000 cash to purchase another vehicle. **State** the effect (increase/decrease/no effect) of this decision on:
 - Working Capital Ratio
 - the Debt Ratio.



EXERCISE 2.15

CLASSIFIED BALANCE SHEET

The unclassified Balance Sheet for Andrew's Painting Service as at 30 September 2016 showed the following information.

ANDREW'S PAINTING SERVICE

Balance Sheet (unclassified) as at 30 September 2016

Assets	\$	Equities	\$
Cash at Bank	1 200	Creditors	5 000
Debtors	1 000	Wages Owing	500
Printing Equipment	12 000	Loan – ANZ	30 000
Vans	25 000	(repayable \$6000 p.a.)	
Stock of Paint	10 000	Owner's Equity – Andrew	?
Total Assets	\$49 200	Total Equities	\$49 200

In the first week of October, the following transactions occurred:

- Oct. 1 Paid \$1 000 to a creditor
- 2 Borrowed \$8 000 from Barry's Bank (loan to repaid in October 2017)
- 3 Received \$400 from a debtor
- 4 Bought more paint on credit: \$2 000
- 5 Andrew withdrew \$200 paint for his own purposes
- 6 Sold \$1 500 worth of equipment for cash
- 7 Paid the wages owing
- 8 Andrew contributed to the firm's assets his personal computer worth \$4 000

Required

- a **Calculate** capital as at 30 September 2016.
- b **Show** the effect on the accounting equation of each transaction for October 2016.
- * c **Prepare** a classified Balance Sheet for Andrew's Painting Service as at 8 October 2016.
- d **Explain** one benefit Andrew will derive by classifying the Balance Sheet.