

INTRODUCTION TO DOUBLE ENTRY BOOKKEEPING



Introduction

This part is concerned with the basic principles underlying the double entry system of bookkeeping.

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The accounting equation and the statement of financial position

Learning objectives

After you have studied this chapter, you should be able to:

- explain what accounting is about
- briefly describe the history of accounting
- explain the relationship between bookkeeping and accounting
- list the main users of accounting information and what accounting information they are interested in
- present and explain the accounting equation
- explain the relationship between the accounting equation and the layout of the statement of financial position [**balance sheet**]
- explain the meaning of the terms assets, capital, liabilities, accounts receivable (**debtors**), and accounts payable (**creditors**)
- describe how accounting transactions affect the items in the accounting equation
- draw up statements of financial position after different accounting transactions have occurred

Introduction

In this chapter, you will learn: what accounting is; what led to its development into what it is today; who uses accounting information; and the relationship between the various components that, together, comprise what is known as the 'accounting equation'.

1.1 What is accounting?

What do you think of when you read or hear the word, 'accounting'? What do you believe it means or represents?

If you have already attended some accounting classes or if you have spoken to someone who knows something about accounting, you will probably have a fairly good idea of what accounting is and what it is used for. If not, you may find it useful to have this knowledge before you start studying the subject. During the course of the next few pages, let's see if you can gain that knowledge and learn what accounting is.

Accounting can be defined as:

The process of identifying, measuring, and communicating economic information to permit informed judgements and decisions by users of that information.

A bit of a mouthful really but, what it means is that accounting involves deciding what amounts of money are, were, or will be involved in transactions (often buying and selling transactions) and then organising the information obtained and presenting it in a way that is useful for decision-making.

Despite what some people think, accounting is not a branch of mathematics, although the man credited with writing the first book to be printed on the subject, Luca Pacioli (c. 1445–1517), was a mathematician and teacher. He wrote on the topic ‘*in order that the subjects of the most gracious Duke of Urbino [his sponsor or benefactor] may have complete instructions in the conduct of business*’, and to ‘*give the trader without delay information as to his assets and liabilities*’. (‘Assets’ are things that you own; ‘liabilities’ are things that you owe.)

What Pacioli wrote is contained in 27 pages of a school textbook and reference manual for merchants on business and mathematics (*Summa de arithmetica, geometria, proportioni et proportionalita* – Everything about Arithmetic, Geometry and Proportion) which was first published in Italy in 1494. His treatise has been translated into many languages, including English, and is acknowledged as the chief reason why we maintain accounts in the way we do today.

Accounting may not require a knowledge of mathematics but you do need to be able to add, subtract, multiply and divide – things you need to be able to do in your daily life anyway. Otherwise, you would not know how much money you had with you, how much you would have if you spent some of it, or whether the change you received was correct. So, let’s remove one big misconception some people have concerning accounting: you do not need to be good at arithmetic to be good at accounting, though you will find it easier to ‘do’ accounting if you are.

1.2 The history of accounting

Accounting began because people needed to:

- record business transactions; and
- know how much they owned and how much they owed.

It is known to have existed in one form or another for at least 10,000 years. (Records exist which indicate its use at that time in Mesopotamia.) There is also considerable evidence of accounting being practised in ancient times in Egypt, China, India, Greece and Rome. In England, the ‘Pipe Roll’, the oldest surviving accounting record in the English language, contains an annual description of rents, fines and taxes due to the King of England, from 1130 to 1830.

In India, a system of accounting, called *Bahi-khata*, was developed many centuries ago but it did not spread beyond that region, probably because a description of it was never written down until the twentieth century. It spread by word of mouth and, even today, is a standardised method of keeping accounting records in parts of that region.

In the rest of the world, accounting appears to have developed slowly for thousands of years. The first known example of business records maintained using what we call ‘double entry bookkeeping’ – the method described by Pacioli and the method used universally today – was in a branch of an Italian firm in southern France in 1299. But, it was another 150 years before it became relatively commonly used by northern Italian partnerships and joint ventures. The rest of the world took considerably longer to adopt the method. That this system of double entry bookkeeping came to be universally adopted is due to Pacioli, and what he wrote about it in 1494.

It has been suggested that no standard system for maintaining accounting records had been developed before this because the circumstances of the day did not make it practicable for anyone to do so – there was little point, for example, in anyone devising a formal system of accounting if the people who would be required to ‘do’ accounting did not know how to read or write. Were such a system developed, there was no point in writing about it if people could not read what was written.

One accounting scholar (A. C. Littleton) has suggested that seven key ingredients were required before a formal system could be developed and that all seven existed when Pacioli wrote his treatise:

- *Private property.* The power to change ownership exists and there is a need to record the transaction.
- *Capital.* Wealth is productively employed such that transactions are sufficiently important to make their recording worthwhile and cost-effective.
- *Commerce.* The exchange of goods on a widespread level. The volume of transactions needs to be sufficiently high to motivate someone to devise a formal, organised system that could be applied universally to record transactions.
- *Credit.* The present use of future goods. Cash transactions, where money is exchanged for goods, do not require that any details be recorded of who the customer or supplier was. The existence of a system of buying and selling on credit (i.e. paying later for goods and services purchased today) led to the need for a formal organised system that could be applied universally to record credit transactions.
- *Writing.* A mechanism for making a permanent record in a common language. Writing had clearly been around for a long time prior to Pacioli but it was, nevertheless, an essential element required before accounting could be formalised.
- *Money.* There needs to be a common denominator for exchange. So long as barter was used rather than payment with currency, there was no need for a bookkeeping system based upon transactions undertaken using a uniform set of monetary values.
- *Arithmetic.* As with writing, this has clearly been in existence far longer than accounting. Nevertheless, it is clearly the case that without an ability to perform simple arithmetic, there was no possibility that a formal organised system of accounting could be devised.

Of these, the most important catalyst for the emergence of double entry bookkeeping was almost certainly the use of credit in business. In the middle ages, a businessman who did not know how much was owed to him and how much he owed, could lose his business, his home, and everything he owned.

During the Crusades (1096–1292), trade routes to the east were opened and merchants, many from the Italian ports like Venice, began to expand their activities along the new routes. Venice dominated trade and along with another Italian city, Florence, was the major banking centre in the western world up to at least the mid-fifteenth century.

This expansion of trade led merchants to start operating in joint ventures (where they shared costs and profits) with businessmen located elsewhere. The merchants employed agents to conduct business on their behalf. The need to record details of these arrangements was obvious.

When accounting information was recorded in the Middle Ages it sometimes simply took the form of a note of the details of each transaction and each receipt and payment. These notes were used by the owner mainly in order to keep track of moneys due.

In Florence, a custom had emerged in the twelfth century of maintaining a record of important personal events in a book called a *Ricordanze*. It was a very popular practice and Florentine merchants started to record transactions, receipts and payments in their *Ricordanze*.

The larger the business, the greater the number of entries that were made. The entries were made when they occurred and it could be some time before the next transaction with the same person occurred. Even with these records in the *Ricordanze*, it became difficult to tell what total amounts were owed and due.

To address this problem, merchants started transferring details from the *Ricordanze* into another book and entries in that book were organised into what we now call, ‘accounts’, one for each person or item.

This was the beginning of the system of double entry bookkeeping described by Pacioli. In his system, a book called a *Memorandum* replaced the *Ricordanze*. The details recorded in it were

abbreviated, organised and transferred into another book called a *Journal*. Details from that book were then further summarised and entered into accounts maintained in a third book called a *Ledger*.

The accountant of the Middle Ages was someone who knew how to enter data relating to financial transactions into the accounting books. He was what we call a 'bookkeeper'. Quite often, it would be the owner of the business who performed all the accounting tasks. Otherwise, an employee would be given the job of maintaining the accounting records.

As businesses grew in size, it became less common for the owner to personally maintain the accounting records and more usual for someone to be employed as a bookkeeper. Then, as companies began to dominate the business environment, managers became separated from owners – the owners of companies (shareholders) often have no involvement in the day-to-day running of the business. This led to a need for some monitoring of the managers. Auditing of the financial records became the norm and this, effectively, established the accounting profession.

The first association of accountants, the *Collegio dei Rexonati*, was formed in Venice in 1581 and had a role in training auditors, but the widespread emergence of an accounting profession was slow. It was not until the nineteenth century that the majority of Italian states required accountants to be members of a recognised association, but organisation was regional not national.

In 1854, the first national body of accountants was formed: the Institute of Chartered Accountants of Scotland. Thereafter, other national bodies began to emerge gradually throughout the world, with the English Institute of Chartered Accountants being formed in 1880 and the first US national accounting body being formed in 1887.

If you wish to discover more about the history of accounting, you will find that it is readily available on the Internet. Perform a search on either of the terms 'history of accounting' or 'accounting history' and you should find more information than you could ever realistically read on the subject.

1.3 Accountants

From its roots among the scribes of Mesopotamia, accounting is one of the oldest professions in the world. Today, there are around 200 professional accountancy bodies, each with its own entry requirements. While there are notable exceptions, nowadays these generally consist of a series of examinations plus relevant work experience, the same requirement as applied to anyone seeking admission to the Venetian *Collegio dei Rexonati* in 1581.

Today, accountants go beyond the role of the bookkeepers of the Middle Ages. As they did then, accountants record and manipulate financial data in order to provide financial information. In addition, today's accountants are also expected to interpret the information they produce, all in order to assist in decision-making.

Unlike Italy of the nineteenth century, in most of the world, it is not necessary to be member of a professional accountancy body in order to work as an accountant, although few without such membership are likely today to rise above the level of a bookkeeper.

Being a member of a professional accountancy body indicates a minimum level of knowledge and expertise that would be expected and upon which employers and others using information provided by such accountants may rely. Because membership of such a body presents an image of professional expertise and understanding, it is important that accountants act in a manner that is consistent with what is expected of them. Any failure to do so places the image of the profession at risk.

1.4 Professional ethics

It is for this reason that it is now recognised that accountants have a responsibility to be ‘ethical’. This is a relatively new development. For many years, ethics were an informal element of the training of accountants. However, an apparently never-ending stream of high-profile financial scandals since the 1960s has threatened the reputation of the accounting profession. As a result, the informal approach to ethics has been formalised in an attempt to stop such events occurring.

It is for this reason that some accountancy bodies now include a separate ethics course in their training. Others have embedded ethics into some of their courses and examinations. But, what does it mean to be ‘ethical’?

Being ethical involves showing integrity, fairness, respect and openness in behaviour and attitude in all situations. Members of all professions have a responsibility to society because they have the specialist knowledge and expertise to deal with certain situations in a more informed way than those who are not so qualified. For accountants, their professional ethics are not just concerned with how an accountant should be in the workplace, they relate to how accountants should behave in all aspects of their public life.

Ethics apply not only to what an accountant does, and to his or her interaction with those who are not accountants. Ethics also apply to how accountants conduct themselves with each other and with those aspiring to be accountants. Managers and trainers of accountants have an ethical responsibility to present themselves as respectful, honest, and trustworthy; and to ensure that their accounting trainees embrace those same values.

The International Federation of Accountants is the world umbrella body for professional accountancy bodies. It has currently (in 2011) 165 member bodies in 125 countries. Its 2010 *Code of Ethics for Professional Accountants* forms the basis for many of the ethical codes applied by its member bodies. The IFAC Code is available at <http://web.ifac.org/publications/international-ethics-standards-board-for-accountants/code-of-ethics>

In the IFAC Code, it is stated that a professional accountant must comply with the following fundamental principles:

- (a) *Integrity* – to be straightforward and honest in all professional and business relationships.
- (b) *Objectivity* – to not allow bias, conflict of interest or undue influence of others to override professional or business judgements.
- (c) *Professional competence and due care* – to maintain professional knowledge and skill at the level required to ensure that a client or employer receives competent professional services based on current developments in practice, legislation and techniques and act diligently and in accordance with applicable technical and professional standards.
- (d) *Confidentiality* – to respect the confidentiality of information acquired as a result of professional and business relationships and, therefore, not to disclose any such information to third parties without proper and specific authority, unless there is a legal or professional right or duty to disclose, nor to use the information for the personal advantage of the professional accountant or third parties.
- (e) *Professional behaviour* – to comply with relevant laws and regulations and avoid any action that discredits the profession.

To supplement their ethical codes, accountancy bodies worldwide operate their own disciplinary code which establishes what steps may be taken should a member act unethically. These disciplinary codes are designed to protect non-accountants and to maintain the reputation of the profession and the demand for its services. Accountants found guilty of unethical behaviour risk the possibility of fines or even expulsion from their professional body.

Activity 1.1

Do you think that such a system of self-regulation is appropriate?

1.5 The objectives of accounting

Accounting has many objectives, including letting people and organisations know:

- if they are making a profit or a loss;
- what their business is worth;
- what a transaction was worth to them;
- how much cash they have;
- how wealthy they are;
- how much they are owed;
- how much they owe to someone else;
- enough information so that they can keep a financial check on the things they do.

However, the primary objective of accounting is to provide information for decision-making. The information is usually financial, but can also be given in volumes, for example, the number of cars sold in a month by a car dealership or the number of cows in a farmer's herd.

So, for example, if a business recorded what it sold, to whom, the date it was sold, the price at which it was sold, and the date it received payment from the customer, along with similar data concerning the purchases it made, certain information could be produced summarising what had taken place. The profitability of the business and the financial status of the business could also be identified, at any particular point in time. It is the primary objective of accounting to take such information and convert it into a form that is useful for decision-making.

People and businesses

Accounting is something that affects people in their personal lives just as much as it affects very large businesses. We all use accounting ideas when we plan what we are going to do with our money. We have to plan how much of it we will spend and how much we will save. We may write down a plan, known as a **budget**, or we may simply keep it in our minds.

Recording accounting data

However, when people talk about accounting, they are normally referring to accounting as used by businesses and other organisations. The owners cannot remember all the details so they have to keep records of it.

Organisations not only record cash received and paid out. They will also record goods bought and sold, items bought to use rather than to sell, and so on. This part of accounting is usually called the *recording of data*.

Classifying and summarising

When the data is being recorded it has to be organised so as to be most useful to the business. This is known as *classifying* and *summarising* data.

Following such classifications and summaries it will be possible to work out how much profit or loss has been made by the business during a particular period. It will also be possible to show what resources are owned by the business, and what is owed by it, on the closing date of the period.

Communicating information

From the data, people skilled in accounting should be able to tell whether or not the business is performing well financially. They should be able to ascertain the strengths and weaknesses of the business.

Finally, they should be able to tell or *communicate* their results to the owners of the business, or to others allowed to receive this information.

Accounting is, therefore, concerned with:

- recording data;
- classifying and summarising data;
- communicating what has been learnt from the data.

1.6 What is bookkeeping?

Until about one hundred years ago all accounting data was *kept* by being recorded manually in *books*, and so the part of accounting that is concerned with recording data is often known as **bookkeeping**.

Nowadays, although handwritten books may be used (particularly by smaller organisations), most accounting data is recorded electronically and stored electronically using computers.

Bookkeeping is the process of recording data relating to accounting transactions in the accounting books.

1.7 Accounting is concerned with . . .

Accounting is concerned with the uses which accountants might make of the bookkeeping information given to them. This book will cover many such uses.

1.8 Users of accounting information

Possible users of accounting information include:

- *Managers*. These are the day-to-day decision-makers. They need to know how well things are progressing financially and about the financial status of the business.
- *Owner(s) of the business*. They want to be able to see whether or not the business is profitable. In addition they want to know what the financial resources of the business are.
- *A prospective buyer*. When the owner wants to sell a business the buyer will want to see such information.
- *The bank*. If the owner wants to borrow money for use in the business, then the bank will need such information.
- *Tax inspectors*. They need it to be able to calculate the taxes payable.
- *A prospective partner*. If the owner wants to share ownership with someone else, then the would-be partner will want such information.
- *Investors*, either existing ones or potential ones. They want to know whether or not to invest their money in the business.
- *Creditors*. They want to know if there is any risk of not being paid what they are due.

There are many other users of accounting information – suppliers and employees, for example. One obvious fact is that without properly recorded accounting data a business would have many difficulties providing the information these various users (often referred to as ‘**stakeholders**’) require.

Activity 1.2

Which two of these stakeholder groups do you think are considered to be the most important? Why?

However, the information produced by accounting needs to be a compromise – so many different groups of stakeholders make it impossible to produce accounting information at a reasonable cost in a form that suits them all. As a result, accounting focuses on producing information for owners. The other stakeholder groups often find the accounting information provided fails to tell them what they really want to know. However, if organisations made the effort to satisfy the information needs of all stakeholders, accounting would be a very costly exercise indeed!

1.9 The accounting equation

By adding up what the accounting records say belongs to a business and deducting what they say the business owes, you can identify what a business is worth according to those accounting records. The whole of financial accounting is based upon this very simple idea. It is known as the *accounting equation*.

It can be explained by saying that if a business is to be set up and start trading, it will need resources. Let's assume first that it is the owner of the business who has supplied all of the resources. This can be shown as:

$$\text{Resources supplied by the owner} = \text{Resources in the business}$$

In accounting, special terms are used to describe many things. The amount of the resources supplied by the owner is called **capital**. The actual resources that are then in the business are called **assets**. This means that when the owner has supplied all of the resources, the accounting equation can be shown as:

$$\text{Capital} = \text{Assets}$$

Usually, however, people other than the owner have supplied some of the assets. **Liabilities** is the name given to the amounts owing to these people for these assets. The accounting equation has now changed to:

$$\text{Capital} = \text{Assets} - \text{Liabilities}$$

This is the most common way in which the accounting equation is presented. It can be seen that the two sides of the equation will have the same totals. This is because we are dealing with the same thing from two different points of view – the value of the owners' investment in the business and the value of what is owned by the owners.

Activity 1.3

What piece of useful information that is available from these three items is not directly shown by this equation? (*Hint: you were introduced to it at the start of this section.*)

Unfortunately, with this form of the accounting equation, we can no longer see at a glance what value is represented by the resources in the business. You can see this more clearly if you switch assets and capital around to produce the alternate form of the accounting equation:

$$\text{Assets} = \text{Capital} + \text{Liabilities}$$

This can then be replaced with words describing the resources of the business:

$$\begin{array}{l} \text{Resources: what they are} = \text{Resources: who supplied them} \\ \text{(Assets)} \qquad \qquad \qquad \text{(Capital + Liabilities)} \end{array}$$

It is a fact that no matter how you present the accounting equation, the totals of both sides will *always* equal each other, and that this will *always* be true no matter how many transactions there may be. The actual assets, capital and liabilities may change, but the total of the assets will always equal the total of capital + liabilities. Or, reverting to the more common form of the accounting equation, the capital will always equal the assets of the business minus the liabilities.

Assets consist of property of all kinds, such as buildings, machinery, inventories (**stocks**) of goods and motor vehicles. Other assets include debts owed by customers and the amount of money in the organisation's bank account.

Liabilities include amounts owed by the business for goods and services supplied to the business and for expenses incurred by the business that have not yet been paid for. They also include funds borrowed by the business.

Capital is often called the owner's **equity** or net worth. It comprises the funds invested in the business by the owner plus any profits retained for use in the business less any share of profits paid out of the business to the owner.

Activity 1.4

What else would affect capital? (*Hint: this item causes the value of capital to fall.*)

1.10 The statement of financial position and the effects of business transactions

The accounting equation is expressed in a financial report called the **statement of financial position**.

Activity 1.5

Without looking back, write down the commonly used form of the accounting equation.

The statement of financial position shows the financial position of an organisation at a point in time. In other words, it presents a snapshot of the organisation at the date for which it was prepared. The statement of financial position is not the first accounting record to be made, nor the first that you will learn how to do, but it is a convenient place to start to consider accounting.

Let's now look at how a series of transactions affects the statement of financial position.

1 The introduction of capital

On 1 May 2011, B. Blake started in business and deposited £60,000 into a bank account opened specially for the business. The statement of financial position would show:

B. Blake Statement of Financial Position as at 1 May 2011	
	£
Assets: Cash at bank	<u>60,000</u>
Capital	<u>60,000</u>

Note how the top part of the statement of financial position contains the assets and the bottom part contains the capital. This is always the way the information is presented in a statement of financial position.

2 The purchase of an asset by cheque

On 3 May 2011, Blake buys a small shop for £32,000, paying by cheque. The effect of this transaction on the statement of financial position is that the cash at the bank is decreased and the new asset, shop, is added:

B. Blake Statement of financial position as at 3 May 2011	
Assets	£
Shop	32,000
Cash at bank	<u>28,000</u>
	<u>60,000</u>
Capital	<u>60,000</u>

Note how the two parts of the statement of financial position 'balance'. That is, their totals are the same. This is always the case with statements of financial position, and is why they are used to be called, 'balance sheets'.

3 The purchase of an asset and the incurring of a liability

On 6 May 2011, Blake buys some goods for £7,000 from D. Smith, and agrees to pay for them some time within the next two weeks. The effect of this is that a new asset, **inventory**, is acquired, and a liability for the goods is created. A person to whom money is owed for goods is known in accounting language as a **creditor**, and is described in the statement of financial position as an **account payable**. The statement of financial position becomes:

B. Blake Statement of financial position as at 6 May 2011	
Assets	£
Shop	32,000
Inventory	7,000
Cash at bank	<u>28,000</u>
	<u>67,000</u>
Less: Account payable	<u>(7,000)</u>
	<u>60,000</u>
Capital	<u>60,000</u>

Note how the liability (the account payable) is shown as a deduction from the assets. This is exactly the same calculation as is presented in the most common form of the accounting equation.

Activity 1.6

Why do you think the £7,000 value for account payable is shown in brackets?

Now, let's return to our example.

4 Sale of an asset on credit

On 10 May 2011, goods which cost £600 were sold to J. Brown for the same amount, the money to be paid later. The effect is a reduction in the amount of goods held, i.e. inventory, and the creation of a new asset. A person who owes the business money is known in accounting language as

a **debtor**, and is described in the statement of financial position as an **account receivable**. The statement of financial position is now:

B. Blake
Statement of financial position as at 10 May 2011

<i>Assets</i>	£
Shop	32,000
Inventory	6,400
Account receivable	600
Cash at bank	<u>28,000</u>
	67,000
Less: Account payable	<u>(7,000)</u>
	<u>60,000</u>
<i>Capital</i>	<u>60,000</u>

5 Sale of an asset for immediate payment

On 13 May 2011, goods which cost £400 were sold to D. Daley for the same amount. Daley paid for them immediately by cheque. Here one asset, inventory, is reduced, while another asset, cash at bank, is increased. The statement of financial position becomes:

B. Blake
Statement of financial position as at 13 May 2011

<i>Assets</i>	£
Shop	32,000
Inventory	6,000
Account receivable	600
Cash at bank	<u>28,400</u>
	67,000
Less: Account payable	<u>(7,000)</u>
	<u>60,000</u>
<i>Capital</i>	<u>60,000</u>

6 The payment of a liability

On 15 May 2011, Blake pays a cheque for £3,000 to D. Smith in part payment of the amount owing. The asset of cash at bank is therefore reduced, and the liability to the creditor is also reduced. The statement of financial position is now:

B. Blake
Statement of financial position as at 15 May 2011

<i>Assets</i>	£
Shop	32,000
Inventory	6,000
Account receivable	600
Cash at bank	<u>25,400</u>
	64,000
Less: Account payable	<u>(4,000)</u>
	<u>60,000</u>
<i>Capital</i>	<u>60,000</u>

Note how the total of each part of the statement of financial position has not changed. The business is still worth £60,000 to the owner.

7 Collection of an asset

J. Brown, who owed Blake £600, makes a part payment of £200 by cheque on 31 May 2011. The effect is to reduce one asset, account receivable, and to increase another asset, cash at bank. The statement of financial position becomes:

B. Blake Statement of financial position as at 31 May 2011	
Assets	£
Shop	32,000
Inventory	6,000
Account receivable	400
Cash at bank	<u>25,600</u>
	64,000
Less: Account payable	<u>(4,000)</u>
	<u>60,000</u>
Capital	<u>60,000</u>

1.11 Equality of the accounting equation

It can be seen that every transaction has affected two items. Sometimes it has changed two assets by reducing one and increasing the other. In other cases, the effect has been different. However, in each case other than the very first (when the business was started by the owner injecting some cash into it), no change was made to the total of either section of the statement of financial position and the equality between their two totals has been maintained. The accounting equation has held true throughout the example, and it always will. The effect of each of these seven accounting transactions upon the two sections of the statement of financial position is shown below:

Number of transaction as above	Assets	Capital and Liabilities	Effect on statement of financial position totals
1	+	+	Each side added to equally
2	+ –		A <i>plus</i> and a <i>minus</i> both on the assets side <i>cancelling each other out</i>
3	+	+	Each side has equal additions
4	+ –		A <i>plus</i> and a <i>minus</i> both on the assets side <i>cancelling each other out</i>
5	+ –		A <i>plus</i> and a <i>minus</i> both on the assets side <i>cancelling each other out</i>
6	–	–	Each side has equal deductions
7	+ –		A <i>plus</i> and a <i>minus</i> both on the assets side <i>cancelling each other out</i>

These are not the only types of accounting transactions that can take place. Two other examples arise when

- (8) the owner withdraws resources from the business for his or her own use; and where
- (9) the owner pays a business expense personally.

A summary of the effect upon assets, liabilities and capital of each type of transaction you've been introduced to so far is shown below:

Example of transaction	Effect	
(1) Owner pays capital into the bank	↑ Increase asset (Bank)	↑ Increase capital
(2) Buy inventory by cheque	↓ Decrease asset (Bank)	↑ Increase asset (Inventory)
(3) Buy inventory on credit	↑ Increase asset (Inventory)	↑ Increase liability (Accounts payable)
(4) Sale of inventory on credit	↓ Decrease asset (Inventory)	↑ Increase asset (Accounts receivable)
(5) Sale of inventory for cash (cheque)	↓ Decrease asset (Inventory)	↑ Increase asset (Bank)
(6) Pay creditor	↓ Decrease asset (Bank)	↓ Decrease liability (Accounts payable)
(7) Debtor pays money owing by cheque	↑ Increase asset (Bank)	↓ Decrease asset (Accounts receivable)
(8) Owner takes money out of the business bank account for own use	↓ Decrease asset (Bank)	↓ Decrease capital
(9) Owner pays creditor from private money outside the firm	↓ Decrease liability (Accounts payable)	↑ Increase capital

Transactions (8) and (9) cause the totals of each part of the statement of financial position to change (as did the very first, when capital was introduced to the business by the owner). When the capital changes, the totals of the two parts of the statement of financial position both change.

1.12 More detailed presentation of the statement of financial position

Let's now look at the statement of financial position of B. Blake as at 31 May 2011, presented according to how you will learn to present the information later in the book:

B. Blake Statement of financial position as at 31 May 2011

	£	£
<i>Non-current assets</i>		
Shop		32,000
<i>Current assets</i>		
Inventory	6,000	
Account receivable	400	
Cash at bank	<u>25,600</u>	
		<u>32,000</u>
Total assets		<u>64,000</u>
<i>Less Current liabilities</i>		
Account payable		<u>(4,000)</u>
Net assets		<u>60,000</u>
Capital		<u>60,000</u>

You will have noticed in this statement of financial position the terms ‘non-current assets’, ‘current assets’ and ‘current liabilities’. **Chapter 8** contains a full explanation of these terms. At this point we will simply say:

- **Non-current assets (fixed assets)** are assets which have a long life bought with the intention to use them in the business and not with the intention to simply resell them, e.g. buildings, machinery, fixtures, motor vehicles.
- **Current assets** are assets consisting of cash, goods for resale or items having a short life (i.e. no more than a year remaining on the date of the statement of financial position). For example, the value of inventory in hand goes up and down as it is bought and sold. Similarly, the amount of money owing to us by debtors will change quickly, as we sell more to them on credit and they pay their debts. The amount of money in the bank will also change as we receive and pay out money.
- **Current liabilities** are those liabilities which have to be paid within no more than a year from the date on the statement of financial position, e.g. accounts payable for goods purchased.

Don't forget that there is a Glossary of accounting terms at the back of the book.

Learning outcomes

You should now have learnt:

- 1 Accounting is concerned with the recording, classifying and summarising of data, and then communicating what has been learnt from it.
- 2 Accounting has existed for at least 10,000 years but a formal, generally accepted method of recording accounting data has only been in existence for the last 500 years.
- 3 It may not only be the owner of a business who will need the accounting information. It may need to be shown to others, e.g. the bank or the Inspector of Taxes.
- 4 Accounting information can help the owner(s) of a business to plan for the future.
- 5 The accounting equation is: $\text{Capital} = \text{Assets} - \text{Liabilities}$.
- 6 The two sides of the accounting equation are represented by the two parts of the statement of financial position.
- 7 The total of one part of the statement of financial position should always be equal to the total of the other part.
- 8 Every transaction affects two items in the accounting equation. Sometimes that may involve the same item being affected twice, once positively (going up) and once negatively (going down).
- 9 Every transaction affects two items in the statement of financial position.

Note: Generally, the values used in exhibits and exercises have been kept down to relatively small amounts. This has been done deliberately to make the work of the student that much easier. Constantly handling large figures does not add anything to the study of the principles of accounting. It simply wastes a lot of the student's time, and he/she will probably make far more errors if larger figures are used.

Doing this may lead to the authors being accused of not being ‘realistic’ with the figures given, but we believe that it is far more important to make learning easier for the student.

Answers to activities

- 1.1** As with all professions, enforcement of a code of ethics in a manner which encourages outsiders to believe that accountancy bodies are serious on this issue is not simply a case of having a disciplinary code. Outsiders can be very sceptical about self-regulation, especially if accountants found guilty of unethical conduct are let off with a warning or a minor fine. This is a difficult situation to address: non-accountants lack the technical knowledge and expertise to interpret accounting practice and so are incapable of truly understanding many of the situations that may arise. Finding something more appropriate is difficult, if not impossible.
- 1.2** Owners and creditors are considered to be the most important stakeholders because they have most to lose if the business fails.
- 1.3** Who supplied the resources of the business.
- 1.4** Capital will be reduced if a business makes a loss. The loss means that assets have been reduced and capital is reduced by the same amount so as to maintain the balance in the accounting equation.
- 1.5** Capital = Assets – Liabilities
- 1.6** It is a negative number. In accounting, we *always* use brackets to indicate negative numbers.

Review questions

If you haven't already started answering them, you now have a set of graded review questions to try. 'Graded' means that they get more difficult as you go through them. Ideally, they should be done in the sequence they appear. *However, don't forget that the questions with an 'A' after the question number do not have any answers provided in this book.* Your teacher or lecturer will be able to provide you with the answers to those questions but be sure to attempt them first before asking for the answers! The answers to the other questions can be found at the back of the book.

We realise that you would like to have *all* the answers in the book. However, teachers and lecturers would not then be able to test your knowledge with questions from this book, as you would already possess the answers. It is impossible to please everyone, and the compromise reached is that of putting a large number of review questions in the book.

This means that appropriate reinforcement of what you have learnt can take place, even if you are studying on your own and have to miss out all the 'A' questions because you have no access to the answers.

Multiple choice questions. In addition to these Review Questions, there are questions relating to the material in this chapter in a bank of multiple choice questions at the end of Chapter 6. You should wait and attempt them when you reach them, not before.

- 1.1** Complete the gaps in the following table:

	Assets	Liabilities	Capital
	£	£	£
(a)	20,000	3,400	?
(b)	23,000	8,800	?
(c)	19,200	?	3,200
(d)	8,100	?	6,500
(e)	?	7,900	17,300
(f)	?	18,500	51,900



**1.2A** Complete the gaps in the following table:

	<i>Assets</i>	<i>Liabilities</i>	<i>Capital</i>
	£	£	£
(a)	55,000	16,900	?
(b)	?	17,200	34,400
(c)	36,100	?	28,500
(d)	119,500	15,400	?
(e)	88,000	?	62,000
(f)	?	49,000	110,000

1.3 Which of the items in the following list are liabilities and which of them are assets?

- | | |
|---------------------------|--------------------------------------|
| (a) Loan from A. Sangster | (d) Bank overdraft |
| (b) We owe a supplier | (e) Inventory of goods held for sale |
| (c) Equipment | (f) Loan to F. Wood |

1.4A Classify the following items into liabilities and assets:

- | | |
|------------------------------------|------------------------|
| (a) Motor vehicles | (f) Owing to bank |
| (b) Premises | (g) Cash in hand |
| (c) Accounts payable for inventory | (h) Loan from D. Jones |
| (d) Inventory | (i) Machinery |
| (e) Accounts receivable | |

1.5 State which of the following are wrongly classified:

<i>Assets</i>	<i>Liabilities</i>
Loan to C. Smith	Delivery van
Mortgage on office building	Accounts payable
Accounts receivable	Office supplies
Warehouse	Computers
Our business website	Cash in hand

1.6A Which of the following are shown under the wrong headings?

<i>Assets</i>	<i>Liabilities</i>
Cash at bank	Loan from J. Graham
Fixtures	Machinery
Accounts payable	Motor vehicles
Building	
Inventory	
Accounts receivable	
Capital	

1.7 Luca Pacioli is setting up a new business. Before actually selling anything, he bought a van for £13,000, a transportable market stall for £1,050; a computer for £450; and an inventory of goods for £8,000. He did not pay in full for his inventory of goods and still owes £3,000 for them. He borrowed £10,000 from Basil Yamey. After the events just described, and before trading starts, he has £1,400 cash in hand and £4,700 in the bank. Calculate the amount of his capital.

1.8A F. Flint is starting a business. Before actually starting to sell anything, he bought fixtures for £1,200, a van for £6,000 and an inventory of goods for £2,800. Although he has paid in full for the fixtures and the van, he still owes £1,600 for some of the inventory. B. Rub lent him £2,500. After

the above, Flint has £200 in the business bank account and £175 cash in hand. You are required to calculate his capital.

1.9 Draw up N. Marriott's statement of financial position from the following information as at 31 December 2011:

	£
Capital	20,700
Accounts receivable	800
Car	8,300
Accounts payable	3,600
Equipment	7,900
Inventory	5,700
Cash at bank	1,600

1.10A Draw up M. Kelly's statement of financial position as at 30 June 2012 from the following items:

	£
Capital	10,200
Equipment	3,400
Accounts payable	4,100
Inventory	3,600
Accounts receivable	4,500
Cash at bank	2,800

1.11 Complete the columns to show the effects of the following transactions:

	<i>Effect upon</i>		
	<i>Assets</i>	<i>Liabilities</i>	<i>Capital</i>
(a) We pay a creditor £310 by cheque.			
(b) Bought fixtures £175 paying in cash.			
(c) Bought goods on credit £630.			
(d) The proprietor introduces another £1,200 cash into the business.			
(e) J. Walker lends the business £2,500 in cash.			
(f) A debtor pays us £50 in cash.			
(g) We return goods costing £90 to a supplier whose bill we had not paid.			
(h) Bought an office computer paying £610 by cheque.			

1.12A Complete the columns to show the effects of the following transactions:

	<i>Effect upon</i>		
	<i>Assets</i>	<i>Liabilities</i>	<i>Capital</i>
(a) Bought a van on credit £8,700.			
(b) Repaid by cash a loan owed to F. Duff £10,000.			
(c) Bought goods for £1,400 paying by cheque.			
(d) The owner puts a further £4,000 cash into the business.			
(e) A debtor returns to us goods worth £150. We agree to make an allowance for them.			
(f) Bought goods on credit £760.			
(g) The owner takes out £200 cash for his personal use.			
(h) We pay a creditor £1,150 by cheque.			





1.13 A. Park has the following items in her statement of financial position on 30 April 2012: Capital £31,700; Accounts payable £7,400; Fixtures £9,600; Car £12,300; Inventory £8,600; Accounts receivable £4,100; Cash at bank £1,600; Cash in hand £2,900.

During the first week of May 2012

- (a) She bought extra inventory for £1,100 on credit.
- (b) One of the debtors paid her £450 by cheque.
- (c) She bought a computer by cheque £610.

You are asked to draw up a statement of financial position as at 7 May 2012 after the above transactions have been completed.

1.14A J. Hill has the following assets and liabilities on 30 November 2012: Accounts payable £2,800; Equipment £6,200; Car £7,300; Inventory £8,100; Accounts receivable £4,050; Cash at bank £9,100; Cash in hand £195.

You are not given the capital amount at that date.

During the first week of December 2012

- (a) Hill bought extra equipment on credit for £110.
- (b) Hill bought extra inventory by cheque £380.
- (c) Hill paid creditors by cheque £1,150.
- (d) Debtors paid Hill £640 by cheque and £90 by cash.
- (e) Hill put an extra £1,500 into the business, £1,300 by cheque and £200 in cash.

You are to draw up a statement of financial position as at 7 December 2012 after the above transactions have been completed.



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