apter 7

Income statements: an introduction

Learning objectives

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

- explain why income statements are not part of the double entry system
- explain why profit is calculated
- calculate cost of goods sold, gross profit, and net profit
- explain the difference between gross profit and net profit
- explain the relationship between the trading account and the profit and loss account
- explain how the trading account and the profit and loss account fit together to create the income statement
- explain how to deal with closing inventory when preparing the trading account section of an income statement
- close down the appropriate accounts and transfer the balances to the trading account
- close down the appropriate accounts and transfer the balances to the profit and loss account
- prepare an income statement from information given in a trial balance
- make appropriate double entries to incorporate net profit and drawings in the capital account

Introduction

In this chapter, you will learn how to close down revenue and expenditure accounts in order to calculate profit and prepare an income statement. You will learn how to adjust purchases with inventory and arrive at the cost of goods sold, and will discover the difference between gross profit and net profit. You will learn how to prepare an income statement, and, finally, you will learn how to transfer net profit and drawings to the capital account at the end of a period.

7.1 Purpose of income statements

The main reason why people set up businesses is to make profits. Of course, if the business is not successful, it may well incur losses instead. The calculation of such profits and losses is probably the most important objective of the accounting function. The owners will want to know how the actual profits compare with the profits they had hoped to make. Knowing what profits are being made helps businesses to do many things, including:

- planning ahead
- obtaining loans from banks, from other businesses, or from private individuals
- telling prospective business partners how successful the business is
- telling someone who may be interested in buying the business how successful the business is
- calculating the tax due on the profits so that the correct amount of tax can be paid to the tax authorities.

Chapter 4 dealt with the grouping of revenue and expenses prior to bringing them together to compute profit. In the case of a trader (someone who is mainly concerned with buying and selling goods), the profits are calculated by drawing up an **income statement.**

When it is shown in detail rather than in summary form (as is the case for the published income statements of companies), it contains something called the **trading account.** The trading account is prepared in order to arrive at a figure for **gross profit.**

Below the trading account is shown a summary of another account – the **profit and loss account.** The profit and loss account is prepared so as to arrive at the figure for **net profit.**

It is these two accounts that together comprise the income statement. Both the trading account and the profit and loss account are part of the double entry system. At the end of a financial period, they are closed off. They are then summarised and the information they contain is then copied into an income statement. **Income statements are not part of the double entry system.**

7.2 Gross profit

One of the most important uses of income statements is that of comparing the results obtained with the results expected. In a trading organisation, a lot of attention is paid to how much profit is made, before deducting expenses, for every £1 of sales revenue. As mentioned in Section 7.1, so that this can easily be seen in the profit calculation, the statement in which profit is calculated is split into two sections – one in which the gross profit is found (**this is the trading account section of the statement**), and the next section in which the net profit is calculated (**this is the 'profit and loss account' section of the statement**).

Gross profit is the excess of sales revenue over the **cost of goods sold.** Where the cost of goods sold is greater than the sales revenue, the result is a **gross loss.** By taking the figure of sales revenue less the cost of goods sold to generate that sales revenue, it can be seen that the accounting custom is to calculate a trader's profits **only on goods that have been sold.**

Activity 7.1

What does this tell you about the costs and revenues that are included in the calculation of gross profit? (*Hint*: what do you not include in the calculation?)

To summarise:

Gross profit (calculated in the **trading account**)	is the excess of sales revenue over the cost of goods sold in the period.

Activity 7.2 Calculate the gross profit or gross loss of each of the following businesses:

	Cost of goods purchased	*Sales*	*Gross profit/(Gross loss)*
	£	£	£
A	9,820	10,676	______
B	7,530	14,307	______
C	10,500	19,370	______
D	9,580	9,350	______
E	8,760	17,200	______

7.3 Net profit

Net profit, found in the profit and loss account, consists of the gross profit plus any revenue other than that from sales, such as rents received or commissions earned, less the total costs used up during the period other than those already included in the 'cost of goods sold'. Where the costs used up exceed the gross profit plus other revenue, the result is said to be a **net loss**. Thus:

Net profit (calculated in the profit and loss account)	is what is left of the gross profit after all other expenses have been deducted.

Activity 7.3 Using the answer to Activity 7.2, complete the following table:

	Other revenues	*Expenses*	*Net profit/(Net loss)*
	£	£	£
A	–	2,622	______
B	4,280	2,800	______
C	500	2,500	______
D	–	1,780	______
E	3,260	2,440	______

7.4 Information needed

Before drawing up an income statement you should prepare the trial balance. This contains nearly all the information needed. (Later on in this book you will see that certain adjustments have to be made, but we will ignore these at this stage.)

We can now look at the trial balance of B Swift, drawn up as on 31 December 2008 after the completion of his first year in business.

Exhibit 7.1

B Swift
Trial balance as at 31 December 2008

	Dr	*Cr*
	£	£
Sales		38,500
Purchases	29,000	
Rent	2,400	
Lighting expenses	1,500	
General expenses	600	
Fixtures and fittings	5,000	
Accounts receivable	6,800	
Accounts payable		9,100
Bank	15,100	
Cash	200	
Drawings	7,000	
Capital		20,000
	67,600	67,600

***Note*: To make this easier to follow, we shall assume that purchases consist of goods that are resold without needing any further work. You'll learn later that these are known as 'finished goods' but, for now, we'll simply refer to them as 'goods'.**

We have already seen that gross profit is calculated as follows:

Sales – Cost of goods sold = Gross profit

It would be easier if all purchases in a period were always sold by the end of the same period. In that case, cost of goods sold would always equal purchases. However, this is not normally the case and so we have to calculate the cost of goods sold as follows:

What we bought in the period:	Purchases
Less Goods bought but not sold in the period:	(Closing inventory)
	= Cost of goods sold

In Swift's case, there are goods unsold at the end of the period. However, there is no record in the accounting books of the value of this unsold inventory. The only way that Swift can find this figure is by checking his inventory at the close of business on 31 December 2008. To do this he would have to make a list of all the unsold goods and then find out their value. The value he would normally place on them would be the cost price of the goods, i.e. what he paid for them. Let's assume that this is £3,000.

The cost of goods sold figure will be:

	£
Purchases	29,000
Less Closing inventory	(3,000)
Cost of goods sold	26,000

Based on the sales revenue of £38,500 the gross profit can be calculated:

Sales – Cost of goods sold = Gross profit
£38,500 – £26,000 = £12,500

We now have the information we need to complete the trading account section of the income statement. Next, we need to close off the sales and purchases accounts at the end of the period so that they start the next period with no balance. To do so, we need to create a trading account (this is *not* the same as the trading part of the income statement, though it does produce the same gross profit figure) and then make the following entries:

(A) The balance of the sales account is transferred to the trading account by:

1 Debiting the sales account (thus closing it)
2 Crediting the trading account.

(B) The balance of the purchases account is transferred to the trading account by:

1 Debiting the trading account
2 Crediting the purchases account (thus closing it).

(C) There is, as yet, no entry for the closing inventory in the double entry accounts. This is achieved as follows:

1 Debit a closing inventory account with the value of the closing inventory.
2 Credit the trading account (thus completing the double entry).

The trading account will look like this:

Trading

				£					£
2008					2008				
Dec	31	Purchases	(B)	29,000	Dec	31	Sales	(A)	38,500
						31	Closing inventory	(C)	3,000

We now close off the trading account in the normal way. In this case, revenues exceed costs so we describe the balance as 'gross profit'.

Trading

				£					£
2008					2008				
Dec	31	Purchases	(B)	29,000	Dec	31	Sales	(A)	38,500
	31	Gross profit		12,500		31	Closing inventory	(C)	3,000
				41,500					41,500

Note that the balance shown on the trading account is described as 'gross profit' rather than being described as a balance. Also, note that the balance (i.e. the gross profit) is not brought down to the next period. The other accounts used in these double entries appear as shown below. (Note that there is no detail of the entries prior to the end of the period as all the information we have been given is the closing balances. These closing balances are simply described here as 'balance'.)

Sales

			£				£
2008				2008			
Dec	31	Trading	38,500	Dec	31	Balance	38,500

Purchases

			£				£
2008				2008			
Dec	31	Balance	29,000	Dec	31	Trading	29,000

Closing inventory

2008			£	2008			£
Dec	31	Trading	3,000	Dec	31	Balance	3,000

The entry of the closing inventory on the credit side of the trading account is, in effect, a deduction from the purchases on the debit side. As you will see when we look later at the trading account part of the income statement, the closing inventory is shown as a deduction from the purchases and the figure then disclosed is described as 'cost of goods sold'.

It must be remembered that we are concerned here with the very first year of trading when, for obvious reasons, there is no opening inventory. In Chapter 9, we will examine how to account for inventory in the later years of a business.

We can now draw up a profit and loss account (which is an 'account' opened so that the end-of-period double entries can be completed). Double entries are then prepared, firstly transferring the gross profit from the trading account to the credit of the profit and loss account. To do this, you would change the entry in the trading account to read 'Gross profit transferred to profit and loss':

Trading

2008			£	2008			£
Dec	31	Purchases	29,000	Dec	31	Sales	38,500
	31	Gross profit transferred to Profit and loss	12,500		31	Closing inventory	3,000
			41,500				41,500

Then, any revenue account balances, other than sales (which have already been dealt with in the trading account), are transferred to the credit of the profit and loss account. Typical examples are commissions received and rent received. In the case of B Swift, there are no such revenue accounts.

The costs used up in the year, in other words, the expenses of the year, are then transferred to the debit of the profit and loss account. (It may also be thought, quite rightly, that, as the fixtures and fittings have been used during the year with subsequent deterioration of the assets, something should be charged for this use. **This charge is known as 'depreciation'.** The methods for calculating this are left until Chapter 26.)

The profit and loss account will now appear as follows:

Profit and loss

2008			£	2008			£
Dec	31	Rent	2,400	Dec	31	Gross profit transferred from Trading	12,500
	31	Lighting expenses	1,500				
	31	General expenses	600				
	31	Net profit	8,000				
			12,500				12,500

The expense accounts closed off will now appear as:

Rent

2008			£	2008			£
Dec	31	Balance	2,400	Dec	31	Profit and loss	2,400

Lighting expenses

			£				£
2008				2008			
Dec	31	Balance	1,500	Dec	31	Profit and loss	1,500

General expenses

			£				£
2008				2008			
Dec	31	Balance	600	Dec	31	Profit and loss	600

You now have all the information you need in order to prepare the income statement for the year ending 31 December 2008. It looks like this:

Exhibit 7.2

B Swift
Income statement for the year ending 31 December 2008

	£	£
Sales		38,500
Less Cost of goods sold:		
Purchases	29,000	
Less Closing inventory	(3,000)	
		(26,000)
Gross profit		12,500
Less Expenses		
Rent	2,400	
Lighting expenses	1,500	
General expenses	600	
		(4,500)
Net profit		8,000

Note: 'Revenue' is often used instead of 'sales' in this statement.

7.5 Effect on the capital account

Although the net profit has been calculated at £8,000 and is shown as a balancing figure on the debit side of the profit and loss account, no credit entry has yet been made to complete the double entry. In other accounts, the credit entry would normally be the 'balance b/d' at the start of the next period. However, as net profit increases the capital of the owner, the credit entry must be made in the capital account by transferring the net profit from the profit and loss account. (You would change the entry in the profit and loss account from 'net profit' to read 'net profit transferred to capital'.)

The trading account and the profit and loss account, and, indeed, all the revenue and expense accounts, can thus be seen to be devices whereby the capital account is saved from being concerned with unnecessary detail. Every sale made at a profit increases the capital of the proprietor, as does each item of revenue, such as rent received. On the other hand, each sale made at a loss, or each item of expense, decreases the capital of the proprietor.

Instead of altering the capital after each transaction, the respective bits of profit and loss, and of revenue and expense, are collected together using suitably described accounts. Then all the balances are brought together in one financial statement, the 'income statement', and the increase in the capital, i.e. the net profit, is determined. Alternatively, in the case of a net loss, the decrease in the capital is ascertained.

The fact that a separate drawings account has been in use can now also be seen to have been in keeping with the policy of avoiding unnecessary detail in the capital account. There will, therefore, only be one figure for drawings entered in the debit side of the capital account – the total of the drawings for the whole of the period.

The capital account, showing these transfers, and the drawings account now closed are as follows:

Capital

2008			£	2008			£
Dec	31	Drawings	7,000	Jan	1	Cash	20,000
	31	Balance c/d	21,000	Dec	31	Net profit	8,000
			28,000				28,000
				2006			
				Jan	1	Balance b/d	21,000

Drawings

2008			£	2008			£
Dec	31	Balance	7,000	Dec	31	Capital	7,000

Activity 7.4

Bertram Quigley opened a pet shop on 1 January 2008. He invested £10,000 in the business. The following Information was obtained from his accounting records at the end of the year: Purchases of goods for resale £7,381; Sales £13,311; Expenses £1,172; Drawings £800; Inventory £410. What is the balance on Bertram Quigley's capital account at 31 December 2008?

7.6 The balances still in our books

It should be noticed that not all the items in the trial balance have been used in the income statement. The remaining balances are assets or liabilities or capital, they are not expenses or revenue. These will be used later when a balance sheet is drawn up. (You'll remember learning in Chapter 1 that assets, liabilities and capital are shown in balance sheets.)

Go back to Chapter 1 to refresh your understanding of assets, liabilities and capital.

Exhibit 7.3 shows the trial balance after the entries to the trading account and the profit and loss account have been made and the income statement prepared. All the accounts that were closed off in that process have been removed, and drawings and net profit have been transferred to the capital account. Notice also that the inventory account, which was not originally in the trial balance, is in the redrafted trial balance, as the item was not created as a balance in the books until the trading account was prepared. We will be using this trial balance when we start to look at balance sheets in the next chapter.

***Note*: As the income statement was prepared using all this information, the trial balance shown in Exhibit 7.3 can also be described as having been prepared following preparation of the income statement.**

Exhibit 7.3

B Swift
Trial balance as at 31 December 2008
(after the trading account and the profit and loss account have been completed and the income statement prepared and the capital account adjusted for net profit and drawings)

	Dr	Cr
	£	£
Fixtures and fittings	5,000	
Accounts receivable	6,800	
Accounts payable		9,100
Inventory	3,000	
Bank	15,100	
Cash	200	
Capital		21,000
	30,100	30,100

Note for students: Now that you have learnt how to prepare a T-account for the trading account and a T-account for the profit and loss account, we will only rarely ask you to prepare them again. You should remember how they are used to calculate gross profit and net profit and the typical entries they may contain. From now on, we will concentrate on producing the financial statement that combines these two accounts: the income statement.

Note also that under UK GAAP (i.e. UK accounting rules) the Income statement was called the 'profit and loss account'. This confusing use of the same title for a financial statement and for an account in the ledger caused many problems. However, even though we now use the term 'income statement' for the financial statement you may sometimes see such a statement with the old title, or you may even be asked to prepare a financial statement using that title. If so, remember that it is the same as the one we call an income statement.

Learning outcomes

You should now have learnt:

1. Why income statements are not part of the double entry system.
2. Why profit is calculated.
3. How to calculate cost of goods sold, gross profit and net profit.
4. The double entries required in order to close off the relevant expense and revenue accounts at the end of a period and post the entries to the trading account and to the profit and loss account.
5. How to deal with inventory at the end of a period.
6. How to prepare an income statement from a trial balance.
7. How to transfer the net profit and drawings to the capital account at the end of a period.
8. That balances on accounts not closed off in order to prepare the income statement are carried down to the following period, that these balances represent assets, liabilities and capital, and that they are entered in the balance sheet.

Answers to activities

7.1 You only include the costs that were incurred in creating those goods that were sold. These costs include the cost of buying those goods and any costs incurred in converting goods purchased into the goods that were sold – for example, the costs of converting raw materials into finished goods. The only costs you include are those that relate to the goods sold. The costs relating to goods that have not yet been sold are not included. You do not include other costs of the business, such as postage, motor expenses, office expenses, salaries of managers, and advertising costs. Nor do you include any costs relating to the purchase or use of any assets, such as motor vehicles, computers, machinery, fixtures and fittings, and buildings.

7.2

	Cost of goods purchased	Sales	Gross profit/(Gross loss)
	£	£	£
A	9,820	10,676	856
B.	7,530	14,307	6,777
C	10,500	19,370	8,870
D	9,580	9,350	(230)
E	8,760	17,200	8,440

7.3

	Other revenues	Expenses	Net profit/(Net loss)
	£	£	£
A	–	2,622	(1,766)
B	4,280	2,800	8,257
C	500	2,500	6,870
D	–	1,780	(2,010)
E	3,260	2,440	9,260

7.4 £14,368. That is, £10,000 + £13,311 – (£7,381 – £410) – £1,172 – £800.

Review questions

7.1 From the following trial balance of A Moore, extracted after one year's trading, prepare an income statement for the year ending 31 December 2008. A balance sheet is not required.

Trial balance as at 31 December 2008

	Dr	*Cr*
	£	£
Sales		190,576
Purchases	119,832	
Salaries	56,527	
Motor expenses	2,416	
Rent	1,894	
Insurance	372	
General expenses	85	
Premises	95,420	
Motor vehicles	16,594	
Accounts receivable	26,740	
Accounts payable		16,524
Cash at bank	16,519	
Cash in hand	342	
Drawings	8,425	
Capital		138,066
	345,166	345,166

Inventory at 31 December 2008 was £12,408.

(Keep your answer; it will be used later in Review Question 8.1.)

7.2 From the following trial balance of B Lane after his first year's trading, you are required to draw up an income statement for the year ending 30 June 2008. A balance sheet is not required.

Trial balance as at 30 June 2008

	Dr	Cr
	£	£
Sales		265,900
Purchases	154,870	
Rent	4,200	
Lighting and heating expenses	530	
Salaries and wages	51,400	
Insurance	2,100	
Buildings	85,000	
Fixtures	1,100	
Accounts receivable	31,300	
Sundry expenses	412	
Accounts payable		15,910
Cash at bank	14,590	
Drawings	30,000	
Vans	16,400	
Motor running expenses	4,110	
Capital		114,202
	396,012	396,012

Inventory at 30 June 2008 was £16,280.

(Keep your answer; it will be used later in Review Question 8.2.)

7.3A From the following trial balance of B Morse drawn up on conclusion of his first year in business, draw up an income statement for the year ending 31 December 2008. A balance sheet is not required.

Trial balance as at 31 December 2008

	Dr	Cr
	£	£
General expenses	305	
Business rates	2,400	
Motor expenses	910	
Salaries	39,560	
Insurance	1,240	
Purchases	121,040	
Sales		235,812
Car	4,300	
Accounts payable		11,200
Accounts receivable	21,080	
Premises	53,000	
Cash at bank	2,715	
Cash in hand	325	
Capital		23,263
Drawings	23,400	
	270,275	270,275

Inventory at 31 December 2008 was £14,486.

(Keep your answer; it will be used later in Review Question 8.3A.)

→

→ **7.4A** Extract an income statement for the year ending 30 June 2008 for G Graham. The trial balance as at 30 June 2008 after his first year of trading was as follows:

	Dr	*Cr*
	£	£
Equipment rental	940	
Insurance	1,804	
Lighting and heating expenses	1,990	
Motor expenses	2,350	
Salaries and wages	48,580	
Sales		382,420
Purchases	245,950	
Sundry expenses	624	
Lorry	19,400	
Accounts payable		23,408
Accounts receivable	44,516	
Fixtures	4,600	
Shop	174,000	
Cash at bank	11,346	
Drawings	44,000	
Capital		194,272
	600,100	600,100

Inventory at 30 June 2008 was £29,304.

(Keep your answer; it will be used later in Review Question 8.4A.)

7.5 Henry York is a sole trader who keeps records of his cash and bank transactions. His transactions for the month of March were as follows:

March
- 1 Cash in hand £100, Cash at bank £5,672.
- 4 York received a cheque for £1,246 from W Abbot which was paid directly into the bank. This represented sales.
- 6 Paid wages in cash £39.
- 8 Sold goods for cash £152.
- 10 Received cheque from G Smart for £315, in full settlement of a debt of £344; this was paid directly into the bank.
- 11 Paid sundry expenses in cash £73.
- 14 Purchased goods by cheque for £800.
- 18 Paid J Sanders a cheque of £185 in full settlement of a debt of £201.
- 23 Withdrew £100 from the bank for office purposes.
- 24 Paid wages in cash £39.
- 26 Sold goods for cash £94.
- 28 Paid salaries by cheque £230.
- 31 Retained cash amounting to £150 and paid the remainder into the bank.

Required:
(*a*) Enter the above transactions within T-accounts and bring down the balances.
(*b*) Assuming no opening accounts receivable, accounts payable, or inventory, prepare an income statement for the month ended 31 March.

You can find a range of additional self-test questions, as well as material to help you with your studies, on the website that accompanies this book at www.pearsoned.co.uk/wood.