

## Chapter 7 The profit and loss account

### Questions

1. Thaddeus is in business selling a range of luxury goods. Included in his range is a Swiss watch which retails for £675. The cost to Thaddeus of each watch is £400. At 1 January 20X4, the start of Thaddeus' trading year, there are 26 watches in stock. He sells 156 watches during the year, and has 15 left in stock at the year end.

Prepare Thaddeus' trading account in respect of the Swiss watches for the year ending 31 December 20X4.

2. In the year ending 30 November 20X2, Tarak incurs the following expenses in his hairdressing business:

*Materials:* lotions, dyes, shampoos, conditioners, hair gel, etc.: £1243.

*Staffing costs:* Tarak employs a senior stylist at a salary of £19 800 per year. Also, he employs hourly paid staff to wash hair, make coffee, sweep up, and so on. In the year to 30 November he has paid for 2000 hours of time at an hourly rate of £5.93.

*Premises costs:* Tarak pays an annual rental for his salon of £15 760, plus business rates of £3 994. Electricity costs are £2 888, water rates are £983 and there is general business insurance of £650.

*Administration:* Tarak has incurred phone charges in the year of £987. His accountant charges him £750 for preparing the final accounts and sorting out his tax. In addition, he pays a book-keeper £15 per week (based on a 50 week year) for keeping his accounting records straight. Stationery and other odds and ends amount to £1523.

Tarak's sales for the year total £99 000.

Prepare Tarak's profit and loss account for the year ending 30 November 20X2 and calculate his net profit percentage.

3. Urma runs a shop selling fashion clothing for the under-25 age group. She has asked you, her accountant, to look at her business performance for the last three years. She is concerned because her net profit figures do not appear to have increased over that period.

You summarise the following information from the most recent three years accounts:

	20X8	20X7	20X6
	£	£	£
Sales	279 950	272 111	268 340
Cost of sales	168 810	168 165	166 640
Gross profit	111 140	103 946	101 700
Expenses	74 185	66 117	63 869
Net profit	36 955	37 829	37 831

- a) calculate the gross profit margin and net profit margin for each of the three years;
  - b) comment upon Urma's business performance trends over the three year period.
4. Venus runs a shop which sells art and craft supplies. The shop premises and a delivery van are owned by the business. Most of Venus's sales are for cash but she supplies some goods on credit to the nearby art college. She counts and values her stock on the final day of her trading year, 31 May 20X4, and calculates a total value of £10 466.

She supplies you with the following additional information so that you can prepare her profit and loss account and balance sheet at 31 May 20X4.

	£
Water rates	399
Purchases	97 150
Sundry expenses	1 225
Creditors	9 662
Capital at 1 June 20X3	56 414
Amounts owed to the Inland Revenue	366
Premises	51 000
Drawings	21 000
Debtors	1 520
Shop fittings	1 220
Insurance	684
Sales	135 667
Stock at 1 June 20X3	9 979

Amounts owed for VAT	127
Delivery van	5 250
Business rates	1 279
Telephone charges	661
Cash at bank	2 470
Administration costs	2 929
Part-time assistant's wages	5 470

5. Keith has small shop unit in a town centre selling ready-made sandwiches and a range of cakes, bottled drinks, crisps and similar snack foods, mainly to office workers. At the end of each day any surplus sandwiches and cakes are taken round to the local shelter for the homeless. The only stock kept in the shop are supplies of drinks and snack foods in packets. Anything that has passed its sell-by date is disposed of.

The value of stock in Keith's business is low. Apart from the cost of food, drinks and similar items, his principal business expenses are rental and staff wages. He employs two full-time and a part-time member of staff. His accounting year-end is 31 December.

Information about the business expenses is as follows:

*Staff costs.* The two full-time members of staff are paid £149 per week each for a five-day week, with four weeks paid holiday in each year. During staff holidays, Keith's wife, Penny, and their daughter Gloria, come in and help out.

Penny works for nothing but Gloria is no fool, and insists on payment of £149 for each of the four weeks she works each year. The part-time member of staff is a student who works all day on Saturday for £28. She gets no holiday pay or sick pay, and during the year to 31 December 20X9 has worked 45 Saturdays.

*Shop rental.* Keith is appalled at the level of shop rental he pays for a very small unit in the town centre. Under his lease arrangement his rental was due to increase on 1 January 20X9; it increased from £17 400 to £25 750 for the year. As a result Keith has had to increase his prices to customers.

*Other premises costs.* These include the following:

	£
Business rates	2 998
Gas	986

Electricity	1 351
Insurance	1 850
Sundry shop supplies	96

*Administrative and financial expenses.* The helpful Penny keeps the books of the business, so Keith saves on accountants' fees. He pays the accountant £375 for tax advice. He has also paid a solicitor £220 for advice about resisting the rent increase. Keith has paid bank charges during the year of £360 and bank interest of £284. Phone bills total £382 for the year, stationery was £35 and office sundries were £93.

Keith's sales for the year are £183 600 on which he has made gross profit of £88 128. Draw up Keith's profit and loss account for the year ending 31 December 20X9.

**Answers**

1. Thaddeus

**Thaddeus: trading account for year ending 31 December 20X4 (Swiss watches)**

	£	£
Sales: 156 x £675		105 300
Cost of sales		
Opening stock: 26 × £400	10 400	
Purchases (missing figure) 145 × £400	58 000	
	68 400	
Closing stock: 15 × £400	(6 000)	
		62 4000
Gross profit: 156 × (£675 – £400)		42 900

First, calculate the gross profit on sales of 156 watches. It is then possible to calculate a total for cost of sales. The figures for opening and closing stock are known, so the missing figure is purchases.

2. Tarak

**Tarak: profit and loss account for the year ending 30 November 20X2**

	£	£
Sales		99 000
Expenses:		
Materials	1 243	
Staffing: senior stylist's salary	19 800	
Staffing: hourly paid staff (2000 × £5.93)	11 860	
Premises rental	15 760	
Business rates	3 994	
Electricity costs	2 888	

Water rates	983	
Business insurance	650	
Phone	987	
Accountant's fees	750	
Book-keeping (£15 × 50)	750	
Stationery and sundry expenses	1 523	
		61 188
Net profit		37 812

Tarak's net profit margin is:

$$\frac{37812}{99000} \times 100 = 38.2\%$$

3. Urma

a)

	20X8	20X7	20X6
Gross profit margin	111 140/279 950 × 100 = <b>39.7%</b>	103 946/272 111 × 100 = <b>38.2%</b>	101 700/268 340 × 100 = <b>37.9%</b>
Net profit margin	36 955/279 950 × 100 = <b>13.2%</b>	37 829/272 111 × 100 = <b>13.9%</b>	37 831/268 340 × 100 = <b>14.1%</b>

b) Urma's sales have increased over the three year period and so has her gross profit margin. Gross margin has risen from 37.9% to 39.7% – a significant increase in a relatively short period. However, Urma's net profit margin has fallen. The total figures for net profit are virtually identical in 20X6 and 20X7, but there has been a fall of (£37 829 – 36 955) £874 between 20X7 and 20X8. Expenses have increased significantly. The increase from 20X6 to 20X7 is 3.5% and from 20X7 to 20X8 is 12.2%. Urma should investigate the reasons for these increases and should take action wherever appropriate to reduce her business expenses.

#### 4. Venus

##### Venus: Profit and loss account for the year ending 31 May 20X4

	£	£
Sales		135 667
Less: cost of sales		
Opening stock	9 979	
Add: purchases	97 150	
	107 129	
Less: closing stock	(10 466)	
		<hr/> 96 663
Gross profit		<hr/> 39 004
Expenses		
Business rates	1 279	
Water rates	399	
Insurance	684	
Part-time assistant's wages	5 470	
Telephone	661	
Administration costs	2 929	
Sundry expenses	1 225	
		<hr/> 12 647
		<hr/> 26 357
		<hr/>

##### Venus: Balance sheet at 31 May 20X4

	£	£
Fixed assets		
Premises	51 000	
Delivery van	5 250	
Shop fittings	1 220	
		<hr/> 57 470
		<hr/>
Current assets		

Stock	10 466	
Debtors	1 520	
Cash	2 470	
	<hr/>	
	14 456	
	<hr/>	
Current liabilities		
Creditors	9 662	
Creditor: Inland Revenue	366	
Creditor: VAT	127	
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Net current assets (£14 456 – 10 155)	10 155	
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Net assets		4 301
		<hr/>
		61 771
		<hr/>
Capital		
Opening capital balance 1 June 20X3	56 414	
Add: net profit for the year	26 357	
	<hr/>	
	82 771	
Less: drawings	(21 000)	
	<hr/>	
Closing capital balance 31 May 20X4		61 771
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5. Cost of sales are calculated as follows:

	£
Sales	183 600
Less: gross profit	88 128
= Cost of sales	95 472

Staff costs are calculated as follows:

	£
Full-time staff: £149 × 52 weeks x 2 staff	15 496
Gloria's holiday cover: £149 × 4 weeks	596
Saturday part-time staff: £28 × 45 days	1 260
Total	17 352