

Chapter 9 Adjustments to the Profit and Loss Account and Balance Sheet: 2

Questions

1. Oriana is a chiropodist who works from a small converted house which she bought freehold on 1 January 20X1 for £145 000. She lets out the upstairs offices to a firms of financial advisers. Downstairs, Oriana and her assistant, Jackie, provide a range of chiropody and aromatherapy footbath services.

Of the £145 000 paid for the house, £35 000 is estimated to relate to the value of the land on which the house stands, and the remainder is the value of the building itself. Oriana depreciates the freehold building over 100 years (i.e. at 1% per year) on the assumption that it will have no value at the end of the 100 year period.

Oriana's chiropody equipment, which originally cost £36 906, is depreciated on the reducing balance basis at 20% per year. It was included in her balance sheet at 31 December 20X4 at a net book value of £23 620.

During the accounting year to 31 December 20X5 Oriana has not bought or disposed of any fixed assets.

- a) Show the amounts for depreciation to be shown in Oriana's profit and loss account for the year ending 31 December 20X5

b) Show the tangible fixed assets section of Oriana's balance sheet at 31 December 20X5.

2. Odile is the sole UK distributor of a French quick-drying cement product. She paid £100 000 on 21 January 20X4 for a licence which grants her the sole distribution rights for a five year period. Odile's amortisation policy is to calculate amortisation for inclusion in the profit and loss account for each complete month of ownership of an intangible asset.

What amount of amortisation in respect of this licence will be included in Odile's profit and loss account for the year ending 31 May 20X4?

3. Padma runs a specialist textile and soft furnishings business in shop premises rented from the local authority. At the back of the shop is a small workshop where Padma's two part-time employees produce made-to-measure curtains and covers, and carry out repairs and alterations.

At Padma's 31 August 20X7 year end, her balance sheet showed the following fixed asset details:

	£	£
Fixed assets		
Shop fittings at cost	16 660	

Less: depreciation	(12 420)	
	<hr/>	4 240
Workshop equipment at cost	12 604	
Less: depreciation	(7 287)	
	<hr/>	5 317
Delivery vehicle at cost	13 772	
Less: depreciation	(10 465)	
	<hr/>	3 307
Fixed assets at net book value		<hr/> 12 864

In the year ending 31 August 20X8, the following events take place:

1. Padma's made-to-measure service is doing very well. She takes on another part-time employee and buys a new sewing machine and a new cutting table for a total cost of £4 200.
2. Padma sells the delivery vehicle for £5 200 and buys a new one for £19 275.

Padma's depreciation policy is as follows:

1. Shop fittings are depreciated at 10% of cost each year. (NB: of the £16 660 of shop fittings at cost, £8 200 is fully depreciated).

2. Workshop equipment is depreciated at 25% per year on the reducing balance basis.
 3. The delivery vehicle is depreciated at 30% per year on the reducing balance basis.
 4. A full year's depreciation is included in the accounts in the year of purchase of an asset. There is no depreciation in the year of disposal.
- a) Show the amounts for depreciation and the profit or loss on sale to be included in Padma's profit and loss account for the year ending 31 August 20X8.
 - b) Show the fixed assets section of Padma's balance sheet at 31 August 20X8.

Work to the nearest £.

4. Quincey is a marketing consultant working from rented offices in a city centre. The principal fixed assets of his business are his luxurious car (for impressing clients), the business computer system and some high quality office furniture.

The accounting records show the following totals at Quincey's year end date of 30 June 20X6:

	£
Car at cost	42 446

Depreciation on car at 1 July 20X5	18 570
Business computer system at cost	7 800
Depreciation on business computer system at 1 July 20X5	4 680
Office furniture at cost	12 690
Depreciation on office furniture at 1 July 20X5	3 807
Entertaining expenses	6 460
Electricity	1 624
Consultancy fee income	138 780
Secretary's salary	15 520
Sundry expenses	3 869
Debtors	10 565
Capital at 1 July 20X5	54 342
Travelling expenses	4 420
Office rental	18 884
Telephone	1 200
Interest received	960
Drawings	58 500
Creditors	1 200
Insurance	870
Assistant's salary	24 800
Cash at bank	12 691

Notes:

1. It is necessary to take account of the depreciation expense for the year ending 30 June 20X6. The following rates apply:

Car	25% on the reducing balance basis
Business computer system	20% on the straight line basis
Office furniture	10% on the straight line basis

None of the fixed assets are fully depreciated, and there have been no additions or disposals of fixed assets during the accounting year.

2. An accrual of £384 is necessary in respect of telephone charges at 30 June 20X6.

Prepare a profit and loss account for Quincey's business for the year ending 30 June 20X6 and a balance sheet at that date.

5. Qasim is a wholesaler of specialist cable products for telecommunications businesses. He runs the business from a rented warehouse with office attached. The business owns a range of specialised warehouse fittings, two

fork lift trucks and various delivery vehicles. Also, there is a computer system to deal with on-line orders and despatch and invoicing documentation.

- a) At 31 December 20X8, Qasim's balance sheet contained the following information relating to fixed assets:

	£	£
Fixed assets		
Warehouse fittings at cost	12 800	
Less: depreciation	(7 680)	
		5 120
Fork lift trucks	26 200	
Less: depreciation	(17 910)	
		8 290
Delivery vehicles	48 804	
Less: depreciation	(28 420)	
		20 384
Fixed assets at net book value		33 794

During the year ending 31 December 20X9 the following events take place:

One of the fork lift trucks, which cost £13 100, was sold for £5 200. Half of the depreciation at 31 December 20X8 of £17 910 related to this truck. A new fork

lift, with computerised controls, was bought during the year for £18 250. There were no other additions or disposals of fixed assets.

Qasim's depreciation policy includes the following:

1. Warehouse fittings are depreciated at 10% per year on the straight line basis.
 None of the fittings was fully depreciated at 31 December 20X8.
2. Fork lift trucks are depreciated at 25% per year on the reducing balance basis.
3. Delivery vehicles are depreciated at 30% on the reducing balance basis.
4. A full year's depreciation is charged in the year of acquisition of an asset, but none in the year of disposal.

i) Show the amounts for depreciation and the profit or loss on sale to be included in Qasim's profit and loss account for the year ending 31 December 20X9.

ii) Show the fixed assets section of Qasim's balance sheet at 31 December 20X9.

b) The remainder of Qasim's accounting totals at 31 December 20X9 are as follows:

	£
Interest charges	1 402

Purchases returns	1 500
Drawings	21 000
Stock at 31 December 20X9	54 352
Administrative expenses	24 448
Long-term loan	25 000
Capital at 1 January 20X9	61 833
Overdraft	15 491
Debtors	68 150
Sales	518 276
Stock at 1 January 20X9	45 098
Purchases	387 878
Secretarial salaries	18 276
Warehouse operatives salaries	36 370
Warehouse heating, lighting etc.	10 228
Warehouse rental	25 000
Trade creditors	62 594

Building on the information calculated in part a) of the question, complete Qasim's profit and loss account for the year ending 31 December 20X9 and his balance sheet at that date.

Chapter 9 *Students' questions*

ANSWERS

1. Oriana

Working 1

Value of building = £145 000 – 35 000 = £110 000

Annual depreciation charge on building = £110 000 x 1% = £1100

Working 2

Depreciation of machinery = 20% of net book value

Net book value at start of year = £23 620; there are no additions or disposals of fixed assets.

So, charge for depreciation of equipment = 20% x £23 620 = £4724

Working 3

Depreciation of the building from 20X1 to 20X5 (for inclusion in the balance sheet): £1100 (annual depreciation charge) x 5 years = £5500.

Working 4

Depreciation of equipment:

At 31 December 20X4 cost of equipment = £36 906 and net book value = £23

620. Depreciation in the balance sheet at that date was: £36 906 – 23 620 = £13 286.

Depreciation in the balance sheet at 31 December 20X5 = amount accumulated up to the end of 20X4 (£13 286) + the charge for the year (£4724) = £18 010.

a) Depreciation to be included in Oriana's profit and loss account for the year ending 31 December 20X5:

Depreciation of building	£1100 (working 1)
Depreciation of equipment	£4724 (working 2)

b) Extract from Oriana's balance sheet at 31 December 20X5

	£	£
Fixed assets		
Land at cost		35 000
Building at cost	110 000	

Less: depreciation (working 3)	(5500)	
	<hr/>	104 500
Equipment at cost	36 906	
Less: depreciation (working 4)	(18 010)	
	<hr/>	18 896
Fixed assets at net book value		<hr/> £158 396

2. Odile

The number of full months of ownership in the accounting year = 4 (February, March, April and May).

Annual amortisation charge: $\frac{£100\,000}{5\text{ years}}$ = £20 000 per year

4 months amortisation, therefore, is: $£20\,000 \times \frac{4}{12}$ = £6 667 (to the nearest £)

3. Padma

Working 1: depreciation of shop fittings

£8200 of the cost of shop fittings is fully depreciated; this means that only £8460 (£16 660 – 8200) is subject to depreciation at 10% on cost:

$$£8460 \times 10\% = £864$$

Working 2: depreciation of workshop equipment

	£
Net book value at 1 September 20X6	5317
Additions in the year	<u>4200</u>
Total	<u>9517</u>

Depreciation for the year = £9517 x 25% = £2379 (to the nearest £)

Working 3: disposal of delivery vehicle

There is no depreciation in the year of disposal so the profit or loss is calculated by comparing sale proceeds with the net book value at the start of the year, as follows:

	£
Proceeds of sale	5200
Net book value	<u>3307</u>

Profit on sale 1893

Working 4: depreciation of new delivery vehicle

There is a full year's depreciation in the year of acquisition, so depreciation is calculated as follows:

$$£19\,275 \times 30\% = £5782$$

- a) Depreciation and profit on sale to be included in Padma's profit and loss account for the year ending 31 August 20X8:

Depreciation of shop fittings	£864 (working 1)
Depreciation of workshop equipment	£2379 (working 2)
Depreciation of delivery vehicle	£5782 (working 4)
Profit on disposal of delivery vehicle	£1893 (working 3)

- b) Extract from Padma's balance sheet at 31 August 20X8

	£	£
Fixed assets		
Shop fittings at cost	16 660	
Less: depreciation (£12 420 + 864)	(13 284)	

		3 376
Workshop equipment at cost (£12 604 + 4200)	16 804	
Less: depreciation (£7287 + 2379)	(9 666)	
		7138
Delivery vehicle at cost	19 275	
Less: depreciation	(5 782)	
		13 493
Fixed assets at net book value		24 007

4. Quincey

Working 1: depreciation of car

Net book value at 1 July 20X5 = £42 446 – 18 570 = £23 876

Depreciation for the year = £23 876 x 25% = £5969

Working 2: depreciation of business computer system

Depreciation = 20% of cost (i.e. the straight line basis) = £7800 x 20% = £1560

Working 3: depreciation of office furniture

Depreciation = 10% of cost = £12 690 x 10% = £1269

Quincey: profit and loss account for the year ending 30 June 20X6

	£	£
Consultancy fees		138 780
Interest received		960
		<hr/> 139 740
Expenses		
Depreciation of car (working 1)	5 969	
Depreciation of business computer system (working 2)	1 560	
Depreciation of office furniture (working 3)	1 269	
Secretary's salary	15 520	
Assistant's salary	24 800	
Office rental	18 884	
Telephone (£1200 + accrual of £384)	1 584	
Insurance	870	
Electricity	1 624	
Travelling expenses	4 420	
Entertaining expenses	6 460	
Sundry expenses	3 869	
	<hr/>	86 829
Net profit		<hr/> 52 911 <hr/>

Quincey: balance sheet at 30 June 20X6

	£	£
Fixed assets		
Car at cost	42 446	
Less: depreciation (18 570 + 5969)	(24 539)	
	<hr/>	17 907
Business computer system	7 800	
Less: depreciation (£4 680 + 1 560)	(6 240)	
	<hr/>	1 560
Office furniture at cost	12 690	
Less: depreciation (£3 807 + 1 269)	(5 076)	
	<hr/>	7 614
		<hr/>
		27 081
Current assets		
Debtors	10 565	
Cash at bank	12 691	
	<hr/>	
	23 256	
Current liabilities		
Creditors	1 200	
Accrual	384	
	<hr/>	
	1 584	
	<hr/>	

Net current assets	21 672
	<hr/>
	48 753
	<hr/>
Capital at 1 July 20X5	54 342
Profit for the year	52 911
Drawings	(58 500)
	<hr/>
	48 753
	<hr/>

5. Qasim

Working 1

Depreciation of warehouse fittings: $10\% \times \text{cost} = £12\,800 \times 10\% = £1280$

Working 2

Disposal of fork lift truck: compare disposal proceeds with net book value at the date of sale. Net book value is calculated as follows:

Cost	£13 100
Less: depreciation ($1/2 \times £17\,910$)	<u>(8 955)</u>
Net book value	4 145
Proceeds of sale	<u>5 200</u>

Profit on sale £1 055

Working 3

Depreciation of fork lift trucks:

Net book value at 1 January 20X9	8 290
Less: disposed of (see working 2)	<u>(4 145)</u>
	4 145
Addition of new fork lift truck during the year	<u>18 250</u>
	<u>22 395</u>

Depreciation at 25% per year (reducing balance) = 25% x £22 395 = £5599

Working 4

Depreciation of delivery vehicles = 30% x net book value = 30% x £20 384 =
 £6115.

- a) i) The amounts to be shown for depreciation and profit or loss on sale in
 Qasim's profit and loss account for the year ending 31 December 20X9 are:

Depreciation of warehouse fittings	£1 280 (working 1)
Depreciation of fork lift trucks	£5 599 (working 3)

Depreciation of delivery vehicles	£6 115 (working 4)
Profit on disposal of fork lift truck	£1 055 (working 2)

ii) Fixed assets section of Qasim's balance sheet at 31 December 20X9

	£	£
Fixed assets		
Warehouse fittings at cost	12 800	
Less: depreciation (£7 680 + 1 280)	8 960	
	<hr/>	3 840
Fork lift trucks at cost (£26 200 + 18 250 – 13 100)	31 350	
Less: depreciation (£17 910 – 8 955 + 5 599)	(14 554)	
	<hr/>	16 796
Delivery vehicles at cost	48 804	
Less: depreciation (£28 420 + 6 115)	(34 535)	
	<hr/>	14 269
		<hr/>
		34 905
		<hr/>

b) Qasim: profit and loss account for the year ending 31 December 20X9

£ £

Sales			518 276
Cost of sales			
Opening stock		45 098	
Purchases	387 878		
Less: purchases returns	(1 500)		
	<hr/>	386 378	
		<hr/>	431 476
Closing stock		(54 352)	
		<hr/>	377 124
Gross profit			<hr/> 141 152
Expenses			
Administrative expenses		24 448	
Secretarial salaries		18 276	
Warehouse operatives salaries		36 370	
Interest charges		1 402	
Warehouse lighting, heating etc		10 228	
Warehouse rental		25 000	
Depreciation of warehouse fittings		1 280	
Depreciation of fork lift trucks		5 599	
Depreciation of delivery vehicles		6 115	
Profit on sale of fork lift truck		(1 055)	
		<hr/>	127 663
Net profit			<hr/> 13 489
			<hr/>

Qasim: balance sheet at 31 December 20X9

	£	£
Fixed assets		
Warehouse fittings at cost	12 800	
Less: depreciation (£7 680 + 1 280)	8 960	
	<hr/>	3 840
Fork lift trucks at cost (£26 200 + 18 250 – 13 100)	31 350	
Less: depreciation (£17 910 – 8 955 + 5 599)	(14 554)	
	<hr/>	16 796
Delivery vehicles at cost	48 804	
Less: depreciation (£28 420 + 6 115)	(34 535)	
	<hr/>	14 269
		<hr/>
		34 905
Current assets		
Stock	54 352	
Debtors	68 150	
	<hr/>	122 502
Current liabilities		
Creditors	62 594	

Bank overdraft	15 491	
	<hr/>	
	78 085	
	<hr/>	
Net current assets		44 417
		<hr/>
		79 322
		<hr/>
Long-term liabilities: long-term loan		(25 000)
		<hr/>
		54 322
		<hr/>
Capital at 1 January 20X9		61 833
Profit for the year		13 489
Drawings		(21 000)
		<hr/>
		54 322
		<hr/>