

Answer 2-1

Assets = Liabilities + Equity, so Assets = 16,000 + 1,500 = \$17,500

Assets = Current assets + Non-current assets,

So Non-current assets = 17,500 – 14,000 = \$3,500

Answer 2-2

<b>ABC Limited</b>	<b>Balance sheet as of 30 September 2019</b>		<b>Units:\$</b>
<b>Assets</b>		<b>Liabilities</b>	
Cash and cash equivalents	2,600	Accounts payable	550
Inventory	150	Loan	3,300
Accounts receivable	1,200	Corporation tax	1,000
	<hr/>		<hr/>
<b>Total current assets</b>	<b>3,950</b>	<b>Total current liabilities</b>	<b>4,850</b>
	<hr/>		<hr/>
Plant, property and equipment	3,300	<b>Equity</b>	
Intangible assets	400	Share capital	100
	<hr/>		
<b>Total non-current assets</b>	<b>3,700</b>	Retained earnings	2,700
	<hr/>		<hr/>
		<b>Total equity</b>	<b>2,800</b>
	<hr/>		<hr/>
<b>Total assets</b>	<b>7,650</b>	<b>Total liabilities and equity</b>	<b>7,650</b>
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Answer 3-1

- i Expense      ii Asset (as it will be repaid)      iii Expense  
iv Asset (it`s a fixed asset)      v Expense      vi Expense  
vii Asset (an intangible asset)      viii Expense

Answer 3-2

**Income statement for the year to 31 March 2018.**

<b>FGH Limited</b>	<b>Units: \$`000</b>
Sales	12,000
Cost of sales	9,800
<b>Gross profit</b>	<b>2,200</b>
<b>Operating costs</b>	
Wages and salaries	330
Rent	185
Insurance	64
Depreciation	225
Advertising	188
<b>Total operating costs</b>	<b>992</b>
<b>Operating profit</b>	<b>1,208</b>

Interest received	17
Loss on disposal of fixed asset	(88)
<b>Profit before tax</b>	<hr/> 1,137
Corporation tax	(120)
<b>Profit after tax</b>	<hr/> 1,017 <hr/>

Answer 4-1

<b>Product</b>	<b>Sales</b>	<b>Cost of sales</b>	<b>Gross profit</b>
<b>A</b>	1,000	850	150
<b>B</b>	2,200	2,100	100
<b>C</b>	580	500	80
<b>Totals</b>	3,780	3,450	330

Answer 4-2

First, the quantity remaining should be calculated.

The company handled  $40 + 50 + 30 = 120$  tons of steel during the year, so as 100 were sold, 20 remained as closing inventory.

i Using FIFO, the closing inventory must have been steel included in the final October inventory purchase, which took place at \$8.

closing inventory value (FIFO) =  $20 \times 8 = \$160$

cost of sales =  $460 + 500 + 240 - 160 = \$1,040$

ii 20 tons of steel remained in closing inventory as shown in i above.

	<b>tons</b>	<b>price per ton</b>	<b>purchase value</b>
January	40	11.5	460
June	50	10	500
October	30	8	240
<b>Totals</b>	<b>120</b>		<b>1,200</b>

Thus the average value for the year is  $1,200 \div 120 = \$10$  per ton.

closing inventory value (weighted average) =  $20 \times 10 = \$200$

cost of sales =  $100 \times 10 = \$1,000$

As the cost of sales is higher when FIFO is used, FIFO would give a lower profit for the year.

Answer 5-1

Bookkeeping is done using historic cost, which is the amount a transaction takes place at. A theoretical price like the catalogue price is not relevant. The purchase price was \$9,500.

The cost of a fixed asset also includes any amounts to prepare it for starting normal use, which includes both moving the asset to the place of use and any set-up costs. It does not include costs after use begins. (Although the raw materials were bought before use began, under the matching principle they are not costs at that time.)

Thus the initial cost of this asset is  $9,500 + 500 + 1,000 = \$11,000$ .

Answer 5-2

i The depreciation amount per year is  $(17,000 - 1,000) / 5 = \$3,200$

The asset is depreciated for 9 months in FY 2019, a full 12 months from FY 2020 to 2023, then for 3 months in FY 2024. The table below shows the figures for each fiscal year.

<b>Fiscal year</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Balance sheet (NBV at 30 Sep)	14,600	11,400	8,200	5,000	1,800	1,000
P&L - depreciation charge for FY	2,400	3,200	3,200	3,200	3,200	800

ii As of 30 September 2020, the van's written down value was \$11,400. It was used for another 9 months (October 2020 to June 2021) and so further depreciation of  $3,200 \times 9 \text{ months} / 12 \text{ months} = \$2,400$  should be subtracted from its NBV.

$$\text{NBV at disposal} = 11,400 - 2,400 = \$9,000$$

As only \$3,000 was received, there would be a loss on disposal of \$6,000.

Answer 6-1

FY 2018 retained earnings was 350 (1,200 – 800 – 50). FY2019 retained earnings was 250 (1,400 – 1,100 – 50). Therefore retained earnings decreased by 100 over FY 2019, meaning there was a loss of 100.

Answer 6-2

i Profit = 27,100 - 26,300 = \$800

ii Equity = Assets – Liabilities = net assets

There has been an increase in equity during 2020 of 147,000 – 121,000 = \$26,000. As \$5,000 of this increase was due to an increase in share capital, this must be subtracted, so FY 2020 profit was \$21,000. The \$3,000 share capital increase during FY 2019 was already included in the FY 2019 net assets figure and so should be ignored.

iii Equity at the end of FY 2018 was 12,000 – 2,000 = \$10,000.

Equity at the end of FY 2020 was 16,000 – 4,000 = \$12,000.

As share capital has not changed, retained earnings has increased by \$2,000 over these two years.

$$\text{profit/(loss) FY 2019} + \text{profit/(loss) FY 2020} = \$2,000$$

As FY 2020 was a loss of 550, then the profit for FY 2019 was \$2,550.

Answer 7-1

i An expense (repairs and maintenance) increases and an asset (the bank account) decreases.

ii An expense (interest expense) increases and an asset (the bank account) decreases.

iii An asset (a patent) increases and a liability (accounts payable) increases.

iv A liability (accounts payable) decreases and an asset (the bank account) decreases.

v Money is received and so an asset, the bank account, increases. There is now a liability to deliver goods to the customer, so a liability, which

could be called advance payments received, increases. (Note that this is an example of a liability which is not an obligation **to pay**.)

vi An expense, amortization, increases and an (intangible) asset decreases.

vii An expense (insurance) increases and an asset (the bank account) decreases.

viii A liability (corporation tax liability) decreases and an asset (the bank account) decreases.

Answer 7-2

A) i Dr Bank 10,000

Cr Share capital 10,000

ii Dr Fixed asset - equipment 1,500

Cr Bank 1,500

iii Dr Inventory 200

Cr Bank 200

iv Dr Accounts receivable 420

Cr Sales 420

(and if an inventory entry is done monthly, for example)

Dr Cost of sales 200

Cr Inventory 200

v Dr Rent 100

Cr Bank 100

vi Dr Bank 420

Cr Accounts receivable 420

vii Dr Office expenses 22

Cr Bank 22

viii Dr Inventory 280

Cr Accounts payable 280

ix Dr Wages and salaries 300

Cr Bank 300

B)  $10,000 \text{ dr} - 1,500 \text{ cr} - 200 \text{ cr} - 100 \text{ cr} = 8,200 \text{ dr}$ , a debit balance.

C)  $8,200 \text{ dr} + 420 \text{ dr} - 22 \text{ dr} - 300 \text{ dr} = 7,898 \text{ dr}$ , a debit balance.

Answer 8-1

i Dr Wages and salaries 10,000

Cr Bank 10,000

ii Dr Wages and salaries 10,000

Cr Unpaid wages and salaries 10,000 (a liability)

iii A journal relating to the wages and salaries earned in May, but paid in June.

Dr Unpaid wages and salaries

Cr Bank

iv At the end of every month, G would have a liability for that month's unpaid wages and salaries in its balance sheet. F would have no such liability.

Answer 8-2

A journal would be input dated 31 December 2019 to show the tax charge in the income statement, and a liability in the balance sheet.

Dr	Corporation tax expense	11,000	
	Cr	Corporation tax liability	11,000

Thus this is an entry to FY 2019.

In the following fiscal year, FY2020, the journal showing payment of the tax liability would be input dated 26 February 2020:

Dr	Corporation tax liability	11,000	
	Cr Bank		11,000

Answer 9-1

The real world takes precedence over the accounting records. The cash balance in the ledger should be altered to \$482 by increasing it by \$2. Miscellaneous income would be an appropriate account to use if there is no explanation as to the cause of the error. The journal would be:

Dr	Cash	2	
	Cr Miscellaneous income		2

Answer 9-2

A For Mr. Smith:

Dr Accounts receivable 1,200  
                     Cr Sales           1,200

and for Company X

Dr Accounts receivable 2,000  
                     Cr Sales           2,000

For Mr. Smith`s payment:

Dr Bank 1,200  
                     Cr Accounts receivable   1,200

and for Company X

Dr Bad debt expense   2,000  
                     Cr Accounts receivable   2,000

B Dr Bank           500  
                     Cr Bad debt expense   500

Answer 10-1

Only accounts from the profit and loss account should be put in the journal transferring income and expenses to retained earnings. The journal should be:

Dated : last day of fiscal year

Cr	Advertising		2,800
Cr	Cost of sales		12,420
Cr	Depreciation		400
Cr	Rent		7,800
Cr	Salaries		2,482
Dr	Sales	26,000	
Cr	Utilities		3,250
Dr	Retained earnings	3,152	
		<hr/>	
Totals		29,152	29,152
		<hr/>	

Transfer of loss to retained earnings

Question 10-2:

Account name : Accounts receivable				Fiscal year : 2019		
Month	Day	Other account	Description	Dr	Cr	Balance
		.....	.....			38,162
May	21	Sales	DEF Trading - credit sale	1,200		36,962
May	23	Sales	Oak Retail - credit sale	339		36,623
May	23	Bank	Gee Inc - payment		852	37,475
May	25	Sales	Jonas – cash sale	1,000		36,475
May	31	Bank	Electricity April	455		36,020
May	31	Bank	Coral Limited - payment		3,300	39,320

Answer 10-2: The two most common entries in a business's accounts receivable ledger would be:

- a) Debit entries (increases in the asset total) due to credit sales being made. Examples of this are the sales entries on 21 and 23 May
- b) Credit entries (decreases in the asset total) due to payment being received for credit sales. Examples of this are the bank entries on 23 and 31 May

There appear to be two matters requiring investigation and probably correction.

- i On 31 May, an entry relating to utilities (electricity) has been made. Utilities would normally be an account **payable**, not receivable, so it seems likely that there has been a journal error, with accounts receivable being debited instead of accounts payable.
- ii On 25 May, there is an entry to sales – which is not unusual – but the description says it is a cash sale. A cash sale never becomes an account receivable.

There are two obvious possibilities for the error, among others.

One is that it is a cash sale and the **bank account** should have been debited instead of accounts receivable.

Another possibility is that the accounting entry is correct, but the description is wrong – perhaps it should read **Jonas – credit sale**, and so only the description needs to be altered.

Answer 11-1

i        2017:  $54,130 \div 50,681 = 107\%$   
          2018:  $116,406 \div 91,574 = 127\%$   
          2019:  $111,786 \div 114,554 = 98\%$

The current ratio improved from 2017 to 2018 but worsened significantly in 2019.

ii        2017:  $(26,329+3,531+200) \div 50,681 = 59\%$   
          2018:  $(34,220+58,540+190) \div 91,574 = 101\%$   
          2019:  $(38,420+30,408+250) \div 114,554 = 60\%$

The quick ratio also improved from 2017 to 2018 but worsened significantly in 2019, and went back to the original level. It can be seen that during 2018 only there was a high level of cash in current assets, giving a greatly improved ratio for that year only.

iii       2017:  $186,112 \div 4,731 = 39.3$   
          2018:  $225,784 \div 33,385 = 6.8$   
          2019:  $228,579 \div 74,766 = 3.1$

As time goes on, partly due to profits and thus retained earnings building up, the company has a lower debt to equity ratio, so debt financing is decreasing as a proportion of the balance sheet.

iv        2017:  $(20,800 + 135,431) \div 4,731 = 33.0$   
          2018:  $(19,500 + 134,300) \div 33,385 = 4.6$   
          2019:  $(18,500 + 114,025) \div 74,766 = 1.8$

The company is becoming much less leveraged, as equity increases and as loans are repaid.

- v 2017:  $190,843 \div 186,112 = 1.0$
- 2018:  $259,259 \div 225,874 = 1.1$
- 2019:  $303,345 \div 228,579 = 1.3$

The ratio of assets to liabilities is increasing, showing a stronger balance sheet.

Answer 11-2:

- i 2018:  $28,654 \div ((190,843 + 259,259) \div 2) = 13\%$
- 2019:  $31,181 \div ((259,259 + 303,345) \div 2) = 11\%$

2018's return on assets was slightly better.

- ii 2018:  $28,654 \div ((4,731 + 33,385) \div 2) = 150\%$
- 2019:  $31,181 \div ((33,385 + 74,766) \div 2) = 58\%$

Initially, ROE was very high, but this was partly due to the very low level of equity in 2018.

- iii 2018:  $28,654 \div 383,611 = 7.5\%$
- 2019:  $31,181 \div 432,915 = 7.2\%$

The net profit margin is worsening.

- iv 2018:  $(383,611 - 169,216) \div 383,611 = 56\%$
- 2019:  $(432,915 - 219,611) \div 432,915 = 49\%$

Sales have increased, but gross profit margin has gone down.

- v 2018:  $185,741 \div 383,611 = 48\%$
- 2019:  $182,123 \div 432,915 = 42\%$

The operating expenses to sales ratio has improved.

- vi 2018:  $28,654 \div 200 = \$143$  per share
- 2019:  $31,181 \div 1,220 = \$26$  per share

Although profits are better, the profit per share has gone down greatly due to a large issue of new shares in 2019.

- vii 2018:  $169,216 \div ((22,925 + 23,425) \div 2) = 7.3$  times
- 2019:  $219,611 \div ((23,425 + 42,412) \div 2) = 6.7$  times

Although cost of sales has gone up, inventory has gone up even more, so the inventory turnover ratio has worsened.

$$\text{viii} \quad 2018: 365 \times ((22,925 + 23,425) \div 2) \div 169,216 = 50 \text{ days}$$

$$2019: 365 \times ((23,425 + 42,412) \div 2) \div 219,611 = 55 \text{ days}$$

As this is merely a different way of expressing the same thing as part vii above, the average days in inventory has lengthened, so become worse.

$$\text{ix} \quad 2018: 383,611 \div ((26,329 + 34,220) \div 2) = 12.7 \text{ times}$$

$$2019: 432,915 \div ((34,220 + 38,420) \div 2) = 11.9 \text{ times}$$

The ratio is worsening.

$$\text{x} \quad 2018: 365 \times ((26,329 + 34,220) \div 2) \div 383,611 = 28.8 \text{ days}$$

$$2019: 365 \times ((34,220 + 38,420) \div 2) \div 432,915 = 30.6 \text{ days}$$

As this is merely a different way of expressing the same thing as part vii above, the ratio has worsened as the average collection period has lengthened.

Answer 12-1

Only iii, iv and vi should be used in the decision.

i is a sunk cost and ii is just a calculation based on i.

iii and iv represent real monetary flows which would take place if the machine was disposed of.

v is also just a theoretical calculation based on the original cost of the machine.

vi represents a real potential cash flow if the machine is not disposed of and is upgraded for further use.

Answer 12-2

$$P + FC = Q (SP - VC) \text{ so}$$

$$Q = (P + FC) / (SP - VC)$$

$$= (1,000 + 500) / (12 - 10)$$

$$= 750 \text{ bottles}$$

Check the answer:  $750 \times (12-10) - 500 = \$1,000$  as required

Answer 13-1

$$\text{Factory A: } P + 1,000 = 1,000 \times (SP - 40)$$

$$\text{Factory B: } P + 5,000 = 4,000 \times (SP - 51)$$

Subtracting the first equation from the second gives:

$$4,000 = 3,000 SP - 164,000 \Rightarrow SP = 56$$

From the factory A information,  $P = 1,000 \times (56 - 40) - 1,000 = 15,000$

Check by using factory B information:

$$P = 4,000 \times (56 - 51) - 5,000 = 15,000$$

Answer 13-2

$$\text{A: } 200 = Q \times (SP - 20) \qquad \text{B: } 400 = Q \times (SP - 16)$$

$$\text{Subtracting: } 200 = 4Q \Rightarrow Q = 50$$

So  $SP = 24$ , a sales price of \$24.