

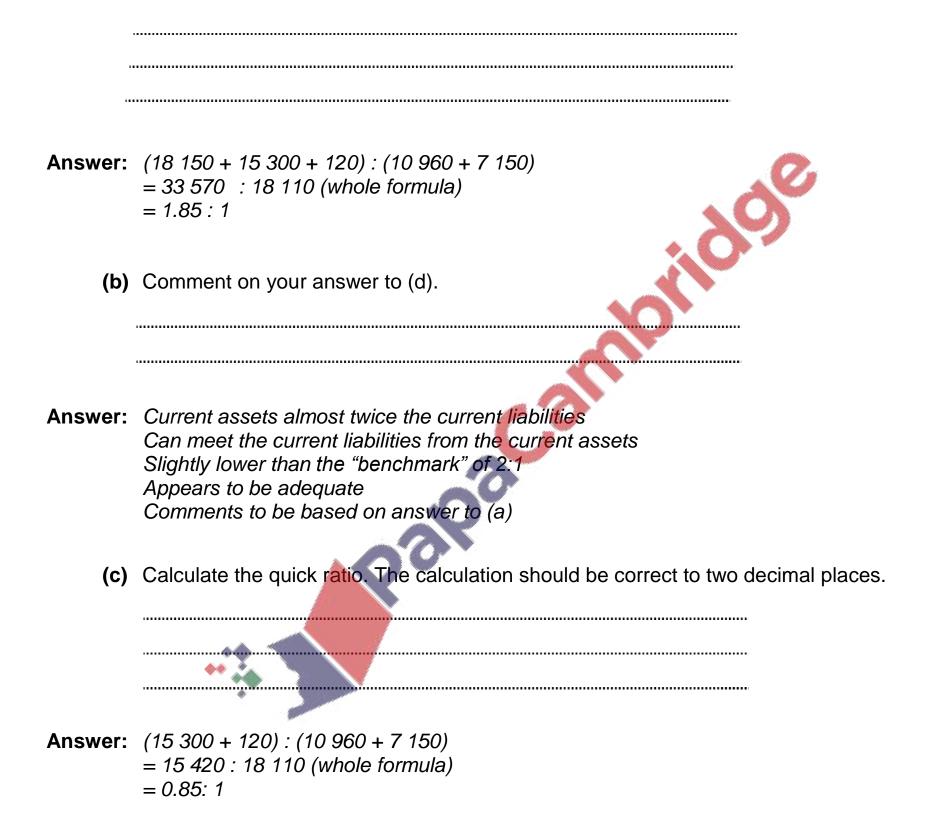
IGCSE Accounting Ratios

1 Joda Limited provided the following information at 31 January 2015.

	\$
Inventory	18 150
Bank overdraft	7 150
Trade receivables	15 300
Trade payables	10 960
Petty cash	120

REQUIRED

(a) Calculate the current ratio. The calculation should be correct to two decimal places.



(d) Suggest one reason why the quick ratio is lower than it was in the previous financial years.

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Answer: Increase in bank overdraft/change from debit to credit bank balance Purchase of non-current assets

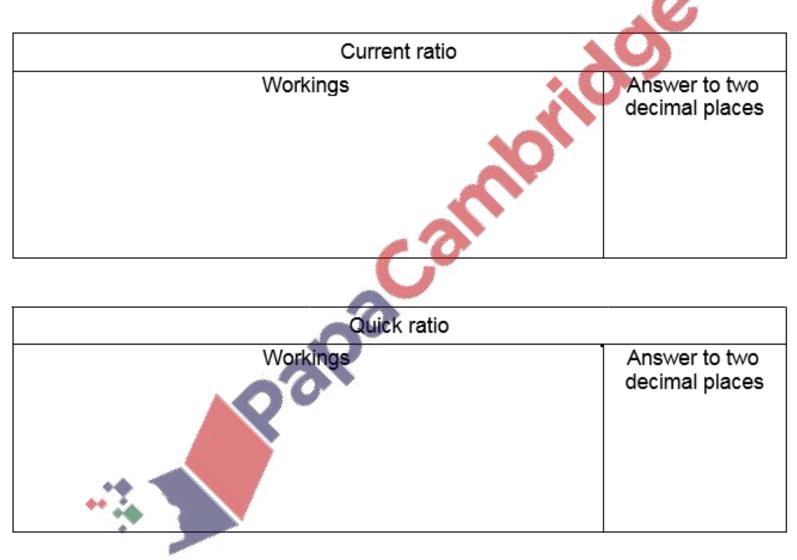
Repayment of long-term loan Increase in inventory Increase in dividends paid

2 Kelbrook Limited provided the following information at 30 September 2015.

	\$
Non-current assets at book value	102 200
Bank overdraft	6 100
Inventory	5 100
Trade receivables	8 500
Trade payables	4 300
Other payables	1 400

REQUIRED

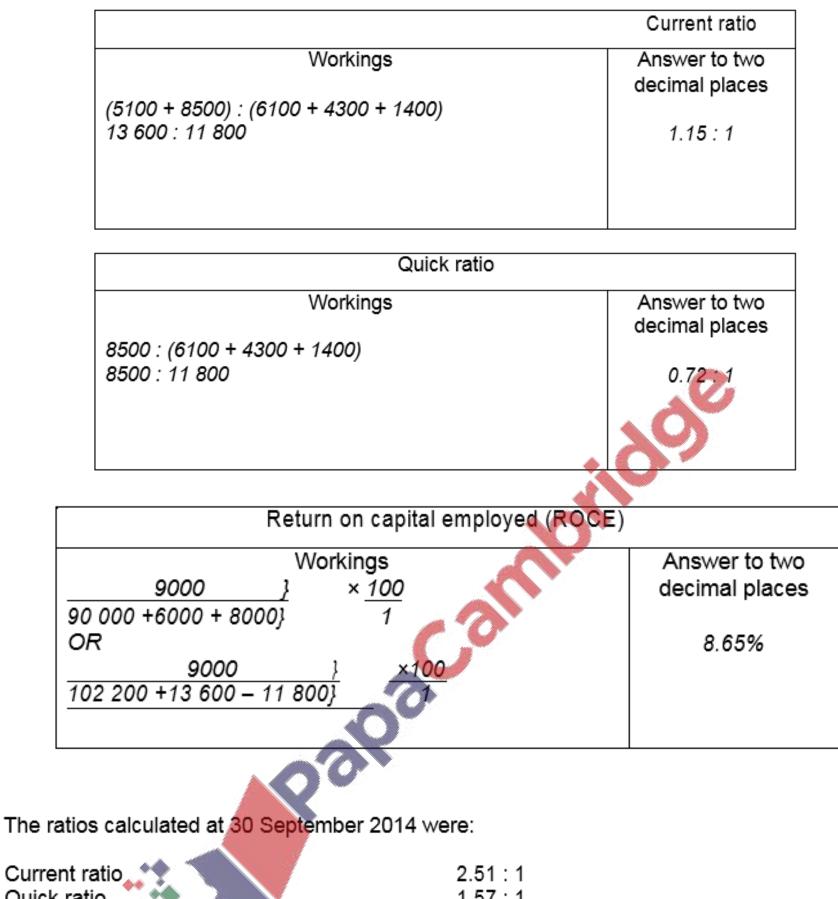
(a) Complete the following table.



Return on capital employed (ROCE)		



Answer:



Quick ratio	1.57:1
Return on capital employed (ROCE)	12.55%

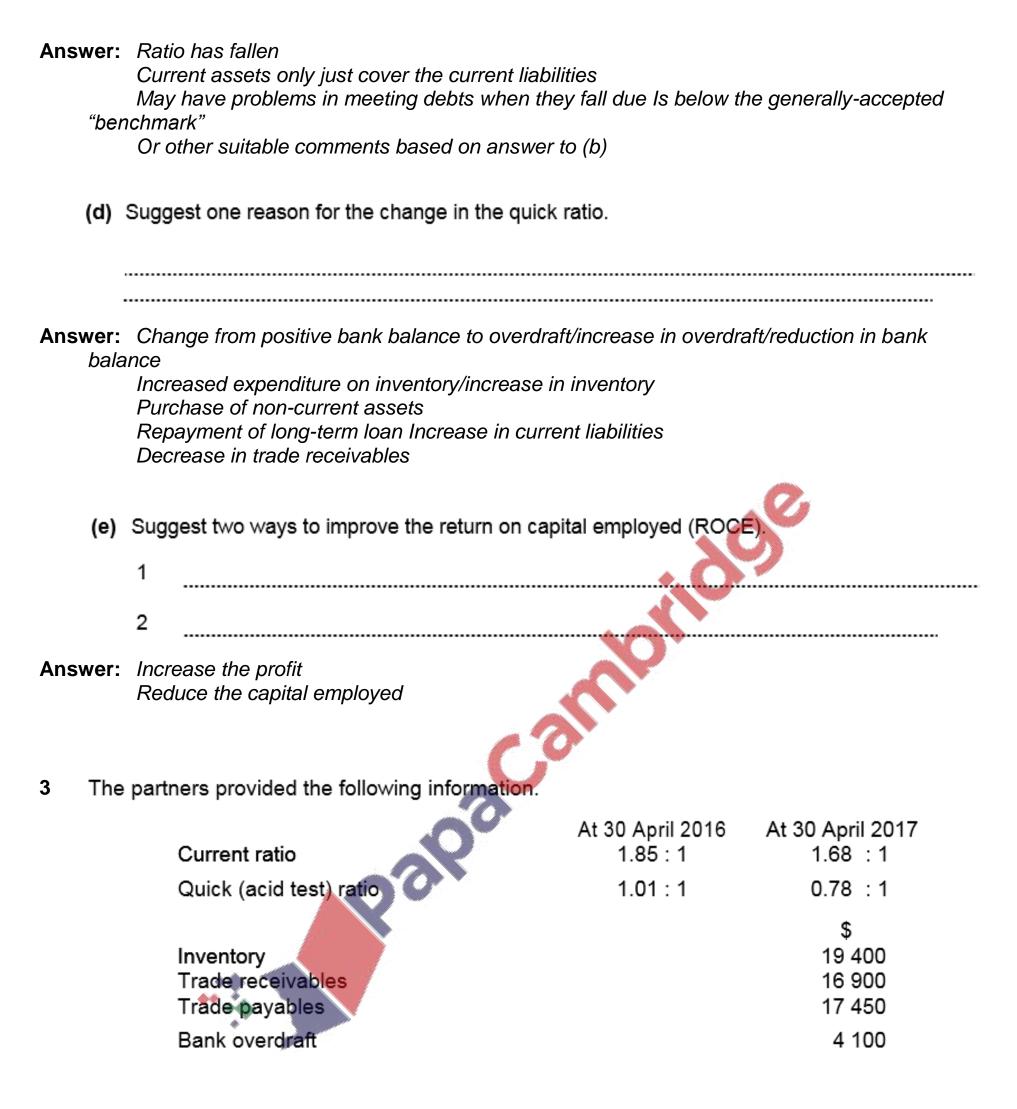
REQUIRED

(c) Comment on the change in the current ratio.

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REQUIRED

(a) Explain why the partners calculated the quick (acid test) ratio as well as the current ratio.

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Answer: Inventory is not included in the calculation of the quick ratio. Either The quick ratio shows whether the business would have any surplus liquid funds if all the current liabilities were paid immediately from the liquid assets.

OR Shows the ability of the business to pay immediate / current liabilities from immediate/ liquid assets.

(b) Suggest two reasons for the change in the current ratio.

Answer: Change from positive bank balance to overdraft Increased level of inventory Purchases of non-current assets Repayment of long-term loan Increase in current liabilities/increase in trade payables/increase in bank overdraft Decrease in trade receivables Increase in drawings

The partners later discovered that no entry had been made for a cheque received from a credit customer for \$1800.

REQUIRED

(c) Calculate the current ratio after this transaction had been recorded in the accounting records. The calculation should be correct to two decimal places.

Answer:	(19 400 + 15 100) : (17 350 + 2300 + 100)

34 500 : 19 750 1.75 : 1

(d) Suggest two possible problems the partners may encounter if the working capital is inadequate.

1 2 Answer: Cannot meet debts when they fall due Cannot take advantage of cash discounts Cannot take advantage of business opportunities as they arise May have difficulty in obtaining further supplies on credit/cannot replace inventory Cannot meet day-to-day expenses May not be able to take cash drawings Suggest two ways in which the partners could increase the working capital. (e) 1 2 Answer: Introduce more cash as capital/admit another partner Reduce drawings Obtain long-term loan Sell surplus non-current assets Increase profit Shiromi's financial year ends on 30 April. She provided the following information. At 30 April 2016 At 30 April 2017

1.49:1

0.92:1

All purchases are made on credit terms and all sales are made for cash.

REQUIRED

Current ratio

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Suggest two reasons for the change in the current ratio. (a)

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Answer: Decrease in inventory Decrease in bank/cash balance or increase in overdraft Increase in trade payables Increase in short term loans Increase in other payables Decrease in other receivables Purchase of non-current assets Increase in drawings Repayment of long term liabilities

(b) Suggest two problems Shiromi may encounter because her working capital is inadequate.

1	
2	

Answer: May not be able to pay debts when they fall due May not be able to take advantage of cash discounts May not be able to take advantage of business opportunities as they arise May have difficulty in obtaining further supplies May not be able to take drawings May not have sufficient funds to pay for day to day expenses

5 The accountant calculated the following ratios for Vinita's business on 31 December 2016.

Current ratio	3.62 : 1
Quick ratio	0.59 : 1

REQUIRED



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Answer: The current assets are more than three times the current liabilities/it is much higher than the "benchmark" of 2 : 1

The current liabilities can easily be paid from the current assets Funds are not being used very effectively

(b) Explain why the quick ratio is a better measure of liquidity than the current ratio.

Answer: Inventory is excluded from the calculation of the quick ratio. Inventory is not regarded as a liquid asset. The ratio shows whether the business would have surplus liquid funds if the current liabilities were paid immediately from the liquid assets.

(c) Suggest two actions Vinita could take to increase her quick ratio.

1

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Answer: Introduce more cash as capital Obtain long term loans Sell surplus non-current assets Reduce drawings Reduce inventory level

6 Tyler had the following assets and liabilities on 31 July 2017.

	\$
trade payables	2900
other payables	900
non-current assets	8200
inventory	3000
trade receivables	2200
other receivables	400
bank overdraft	600

Tyler was concerned about his working capital position.

REQUIRED

(a) State how working capital is calculated.

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Answer: Current assets minus current liabilities

(b) Calculate (to two decimal places) the current ratio on 31 July 2017.

Answer: 5600 : 4400 = 1.27 : 1

(c) Name one other ratio which would help Tyler to assess his liquidity position.

Answer: Quick ratio/acid test/liquid ratio Trade receivables collection period Trade payables payment period (Rate of) inventory turnover

(d) Explain two reasons why Tyler is right to be concerned about his working capital position.

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Answer: He may not be able to meet liabilities as they fall due. He may not be able to pay day to day running expenses. He may not be able to take advantage of discounts. He has a lot of cash tied up in inventory.

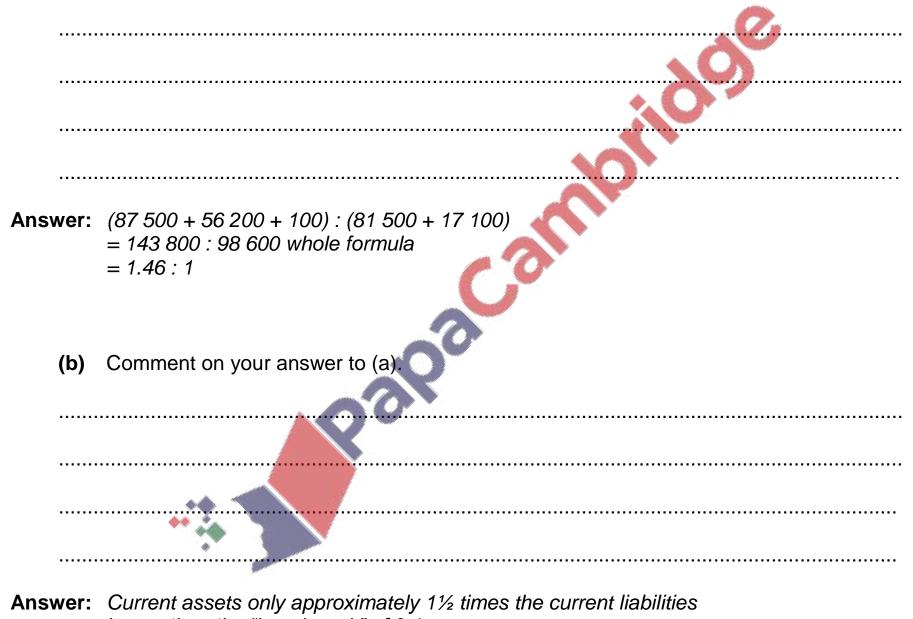
Inventory makes up more than half of his current assets. His trade payables are greater than his trade receivables. He has a bank overdraft.

7 Hanif's financial year ends on 31 July. He provided the following information on 31 July 2017.

	\$
Inventory	87 500
Trade payables	81 500
Trade receivables	56 200
Petty cash	100
Bank overdraft	17 100

REQUIRED

(a) Calculate the current ratio. The calculation should be correct to two decimal places.



Lower than the "benchmark" of 2:1

Can meet the current liabilities from the current assets

Do not have a lot of surplus current assets available after paying current liabilities

Seems to be a little inadequate (depending on the type of business)

(c) Calculate the quick ratio. The calculation should be correct to two decimal places.

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Answer: (56 200 + 100) : (81 500 + 17 100) = 56 300 : 98 600 whole formula = 0.57 : 1

(d) Suggest two reasons why the quick ratio is lower than it was at the end of the previous financial year.

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2	
Answer:	Increased expenditure on inventory Increase in bank overdraft/change from positive bank balance to overdraft Purchase of non-current assets Repayment of long-term loan Increase in current liabilities/increase in trade payables Decrease in trade receivables Decrease in cash Increase in drawings
(e) 1	Suggest two problems Hanif may encounter if his working capital is inadequate.
2	

Answer: Unable to pay debts when they fall due Unable to take advantage of cash discounts Unable to take advantage of business opportunities when they arise

May have difficulty in obtaining further supplies May not be able to take drawings

(f) Complete the table by placing a tick (\Box) in the correct column to show how **each** of the following transactions would affect the current ratio and the quick ratio.

The first one has been completed as an example.

	current ratio			quick ratio		
	increase	decrease	no effect	increase	decrease	no effect
introduce \$20 000	✓					
additional capital	v			v		
obtain short-term bank loan \$10 000						
sell half the inventory at cost price					R	
r:					0	

Answer:

	ะเ	current ratio			quick ratio		
			no			no	
	increase	decrease	effect	increase	decrease	effect	
introduce \$20 000 additional capital	læ	C C	0	l∰			
obtain short- term bank loan of \$10 000	60	8	lø			l®	
sell half the inventory at cost price			le	€®			
**							

8 Nikita's brother, Sunil, provided the following information about his business at 31 January 2018.

	Ψ
Non-current assets	89 350
Inventory	6 800
Trade receivables	12 500
Bank	1 010 debit
Trade payables	15 200
Long-term loan	8 000

REQUIRED

State what is measured by the current ratio. (a) **Answer:** It measures the excess of current assets over current liabilities /measures liquidity. It measures the margin of safety between current assets and current liabilities. (b) Calculate the current ratio for Sunil's business at 31 January 2018. The calculation should be correct to two decimal places. **Answer:** (6800 + 12500 + 1010) / 15200 = 1.34:1(c) Suggest two reasons why Nikita cannot compare her current ratio with that of Sunil. 1 2 Answer: different accounting policies different size of business different type of business different locations different capital structures different type of goods sold non-monetary items other reasonable answer

(d) Suggest two ways in which Nikita might improve her working capital position.

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- Answer: Introduce additional capital Sell surplus non-current assets Reduce cash drawings Obtain long-term loan
- 9 The financial year of CD Limited ends on 30 April. The following information was provided on 30 April 2018.

	\$		\$
Non-current assets (book value)	227 000	Ordinary share capital	Ŷ
Inventory	29 000	(300 000 shares of \$0.50)	150 000
Trade receivables	22 000	General reserve 1 May 2017	30 000
Bank	11 000	Retained earnings 1 May 2017	6 000
Bank	11 000	Profit for the year ended	
		30 April 2018	13 000
		5% Debentures (repayable 2025)	50 000

Trade and other payables 40 000

The current ratio of CD Limited on 30 April 2018 was 1.55 : 1.

The company is anxious to increase this ratio and several proposals are being considered.

REQUIRED

(a) State the formula for the calculation of the current ratio.

Answer: Current assets : current liabilities

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(b) Complete the table by placing a tick (\Box) in the correct column to indicate the effect on the current ratio of each proposal.

The first one has been completed as an example. See next page.

	Increase	Decrease	No effect
Sell surplus non-current assets for	✓		
cash			
Sell goods on cash terms only			
Obtain a further long-term loan			
Buy additional non-current assets on credit rather than paying immediately			
Persuade trade receivables to pay half of their debts immediately in return for 3% cash discount			
Pay trade payables after 2 months instead of after 1 month		20	

:09

Answer:

	Increase	Decrease	No effect
Sell surplus non-current assets for cash	10		
Sell goods on cash terms only			l®
Obtain a further long-term loan	16		
Buy additional non-current assets on credit rather than paying immediately		lø	
Persuade trade receivables to pay half of their debts immediately in return for 3% cash discount		lø	
Pay trade payables after 2 months instead of after 1 month			lø



She invested \$12 800 as capital. Her father gave her a loan of \$7200, repayable on 1 October 2018. Interest of 5% per annum was to be paid on the loan at the end of each month.

The credit side of Aretta's cash book for April 2018 was as follows.

April 1Shop fixtures and fittings
Credit suppliers\$April 30Shop fixtures and fittings
Credit suppliers9 500
15 000
15 000
3 600April 30Operating expenses980

Wages	1 900
Drawings	1 500

Additional information

1 All purchases were made on credit terms and all sales were made for cash.

2 Aretta's gross profit margin was 25%.

3 No record was made of cash sales.

4 Aretta decided to depreciate the shop fixtures and fittings at 12% per annum using the straight line (equal instalment) method.

5 On 30 April 2018 inventory was valued at \$4080 and \$810 was owed to credit suppliers.

On 30 April 2018 Aretta was concerned that her quick (acid test) ratio was very low. She considered six proposals to improve the ratio.

REQUIRED

(a) State the formula for the calculation of the quick (acid test) ratio.

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Answer: Current assets – inventory : current liabilities

(b) Complete the following table by placing a tick (3) in the correct column to indicate the effect of each proposal on Aretta's quick (acid test) ratio.

The first one has been completed as an example. See next page.



		effect on quick ratio		
	proposal	increase	decrease	no effect
1	purchase a motor vehicle on credit		3	
2	pay credit suppliers early to receive cash discount			
3	obtain a bank overdraft and repay the loan immediately			
4	arrange for the loan to be extended to 2 years			
5	sell on credit terms rather than on cash terms			
6	reduce inventory by selling half at cost price		A.	

Answer:

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	proposal	effe	ct on quick r	atio
		increase	decrease	no effect
1	purchase a motor vehicle on credit		lo	
2	pay credit suppliers early to receive cash discount	lø		
3	obtain a bank overdraft and repay the loan immediately			l®
4	arrange for the loan to be extended to 2 years	lø		
5	sell on credit terms rather than on cash terms			l®
6	reduce inventory by selling half at cost price	lø		

(c) State which proposal would affect the quick (acid test) ratio but not affect the current ratio. Explain the reason for your answer.

Proposal number	
Reason	
	•
	•

Answer: Proposal number 6

Current Ratio

Total of current assets remains unchanged OR inventory decreases and cash/bank increases by same amount

Quick (acid test) Ratio

Total of current assets excluding inventory increases OR Inventory is excluded from the calculation but cash/bank increases

11 Annie is a wholesaler of ladies' clothing, selling to retail stores on credit terms. She provided the following information at the end of her second year of trading on 31 December 2015.

	\$
Revenue	40 000
Cost of sales	30 500
Profit for the year	3 800
Inventory 1 January 2015	3 600
Inventory 31 December 2015	4 800
Capital employed 1 January 2015	92 000
Trade receivables at 31 December 2015	4 350

Annie decided to compare her results with those of her two brothers, Mark and Tony, who formed a partnership six years ago to operate a wholesale food business.

REQUIRED

(a) Complete the table on the opposite page to show the ratios for Annie's business for the year ended 31 December 2015.

You may use the space below for your workings. See next page.

Workings				
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Ratio	Annie	Mark and Tony		
Percentage of gross profit to revenue	23.75%	16.50%		
Percentage of profit for the year to revenue	9.50%	11.35%		
Rate of inventory turnover (to two decimal places)	times	20.15 times		
Percentage of profit for the year to opening capital employed (ROCE) (to two decimal places)	%	10.35%		
Trade receivables collection period				

Trade receivables collection period		
(rounded up to the next whole day)	days	34 days

Answer:

Ratio	Annie	
Rate of inventory turnover to two decimal places	7.26 times	
Percentage of profit for the year to capital employed (ROCE) (to two decimal places)	4.13%	
Trade receivables collection period (rounded up to the next whole day)	40 days	

Calculations to show the breakdown of marks:

Rate of inventory turnover

30 500 (3 600 + 4 800) ÷ 2

whole formula = 7.26 times

Percentage	e of profit for the	year to ca	pital employ	/ed
	100			

 $\frac{3800}{92000} \times \frac{100}{1} = 4.13\%$

Trade receivables collection period

 $\frac{4\ 350}{40\ 000} \times \frac{365}{1}$ whole formula = 39.69 = 40 days

(b) Explain one reason for the difference between the percentages of gross profit to revenue of Annie and her brothers.

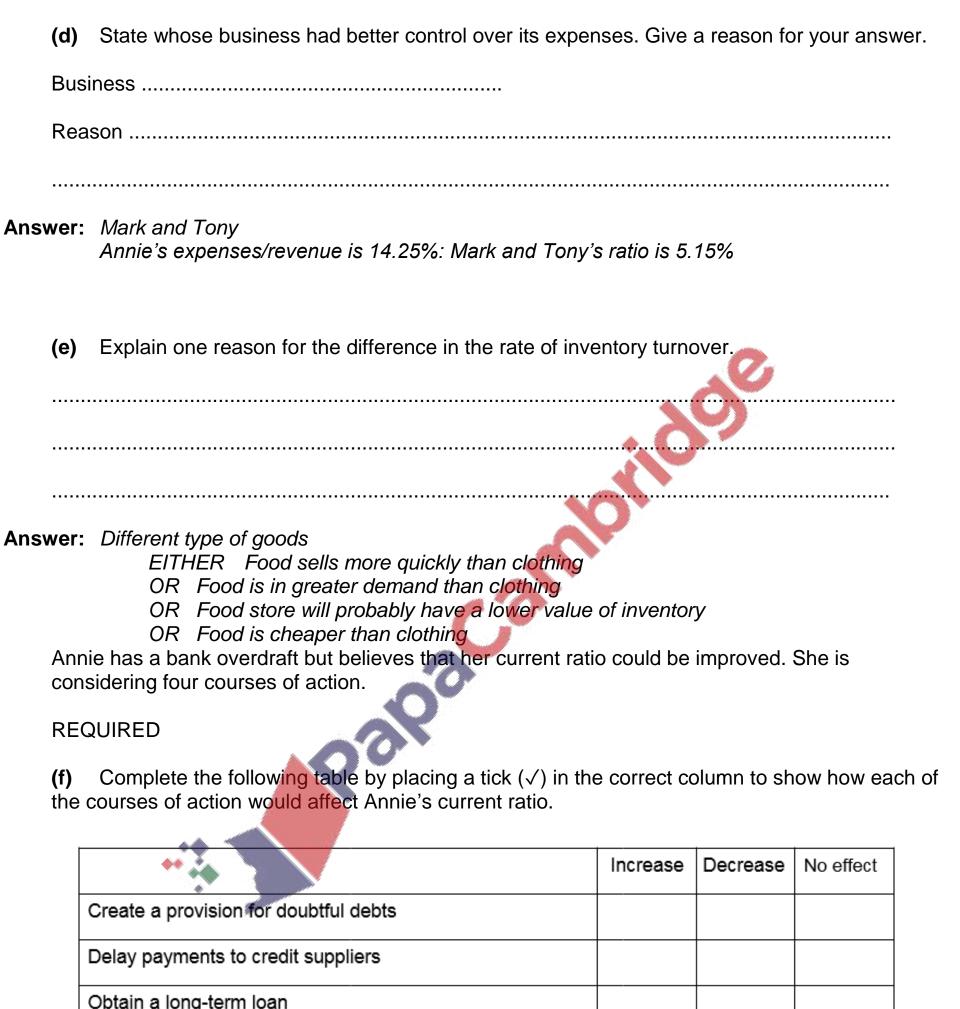
Answer: Different type of goods EITHER Food has a lower gross profit margin than clothing OR The food store is cutting prices to sell more goods

(c) Comment on the possible effects of Annie increasing the selling price of her goods.

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Answer: Total revenue from sales may increase so profit may increase Customers may look for cheaper suppliers, so profits may actually fall



Obtain permission from the bank to increase the overdraft		

Answer:

	Increase	Decrease	No effect
Create a provision for doubtful debts		~	
Delay payments to credit suppliers			~
Obtain a long term loan	~		
Obtain permission from the bank to increase the overdraft			~

12 Which statements are true about the current ratio?

- It can be higher than the quick ratio. 1
- 2 It can be lower than the quick ratio.
- It differs from the quick ratio because of bank overdraft. 3
- It differs from the quick ratio because of inventories of goods. en. 4
- 1 and 3 Α
- в 1 and 4
- С 2 and 3
- 2 and 4 D

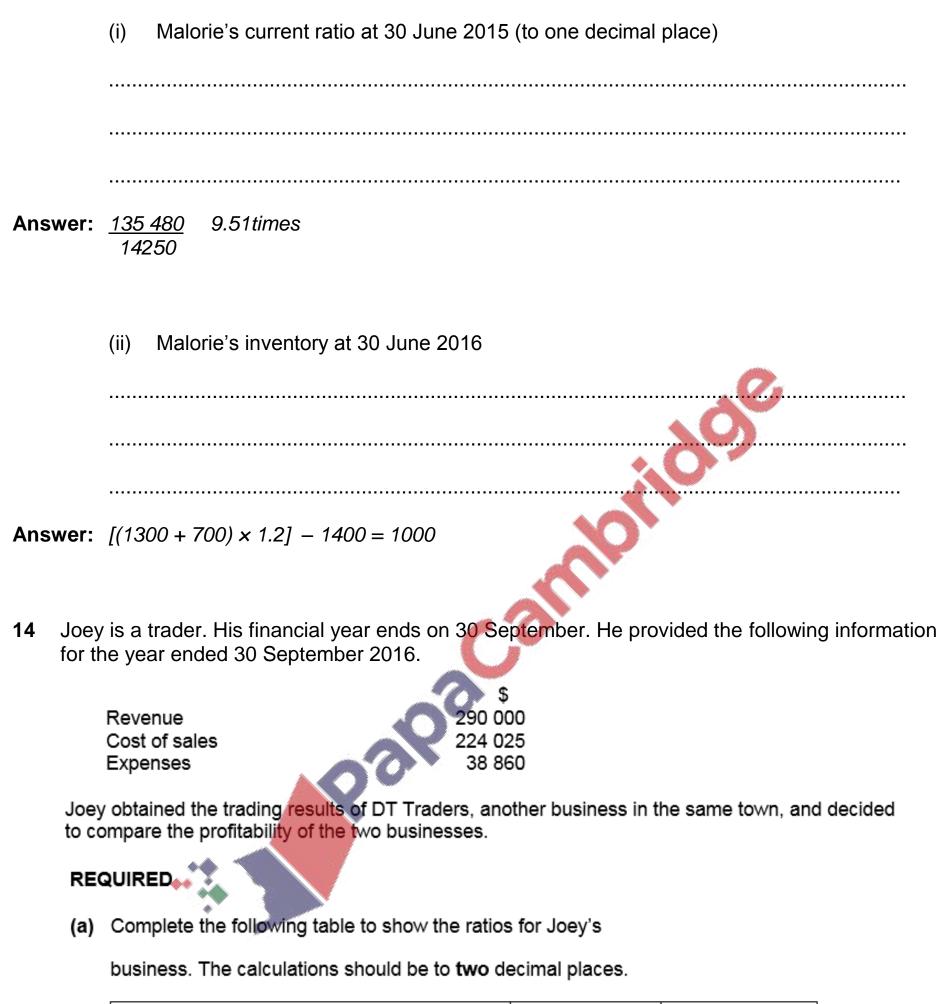
Answer: B. 1 and 4

Malorie provided the following information. 13

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	30 June 2015		30 June 2016	
	\$		\$	
Bank	400	debit	1300	credit
Trade receivables	850		1400	
Trade payables	750		700	
Inventory	550		?	
Current ratio	?		1.2 : 1	

REQUIRED

Calculate:



Ratio	Joey	DT Traders
Percentage of gross profit to revenue (gross profit margin) Percentage of profit for the year to revenue (net profit margin)	%	18.50% 10.25%

You may use the space below for your workings.

