Note: Higher level questions are marked with an asterisk*

3. Buggy and Bertie Ltd

a)

		Buggy Ltd	**Bertie Ltd**
(i)	Return on capital employed	23.8%	34.1%
(ii)	Gross profit margin	25%	20%
(iii)	Operating profit margin	12.5%	12.5%
(iv)	Acid test ratio	6 : 1	2.25 : 1
(v)	Inventory days	91 days	67 days
(vi)	Trade receivables days	114 days	61 days
(vii)	Trade payables days	30 days	38 days

Note: Until now, trade payable days have been calculated using purchases. However, for this example, the purchases figure is not available and the cost of sales figure is used as an alternative.

b)

(i) Bertie Ltd is the most profitable both in actual terms (£15,000 operating profit compared to £10,000 for Buggy Ltd), and also in relation to the shareholders' capital employed. Bertie Ltd has managed to achieve a return of £34.10 for every £100 invested, compared to £23.80 per £100 generated by Buggy Ltd.

(ii) Gross profit margin

Buggy Ltd had made a greater margin up on goods sold, possibly causing the overall lower volume of sales achieved by Buggy Ltd.

(iii) Operating profit margin

Although the gross profit margin was higher for Buggy Ltd, both businesses have the same NP margin. Bertie Ltd, although incurring a much higher depreciation charge, managed to incur far fewer 'other expenses', possibly due to better cost control.

(v) Acid test ratio

Buggy Ltd's acid test ratio of 6:1 is far greater than one would normally expect to see. Certainly, neither Buggy nor Bertie appears to have any liquidity problems but these ratios imply that too much money is tied up in inventory and trade receivables.

(vi) Inventory holding period

On average, Buggy Ltd holds goods in inventory for 3 months and Bertie Ltd holds goods in inventory for 2 months. Buggy should try to reduce its inventory in order to release funds back into the business and to reduce the costs associated with holding inventory. (E.g. warehouse rent, heating or the risk of inventory becoming damaged or obsolete.)

(vii) Trade receivable collection period

Bertie Ltd allows customers 2 months credit, on average, where Buggy Ltd allows nearly 4-months credit. Given that they are two similar types of retail stores, it would appear that

Buggy has a very poor system of credit control and has far too much money tied up in trade receivables.

(viii) Trade payable payment period

Both Buggy and Bertie take just over a month to pay their suppliers, with Bertie managing to take 8 days longer on average.

It is worth noting that the trade payable payment period is substantially shorter than the trade receivable collection period, which is far from ideal.

4. Acid test ratio

a. TRUE: The acid test ratio is a measure of the very short-term liquidity of a business as it removes inventory from inclusion in the ratio calculation. Inventory takes longer to turn into cash and hence is the least liquid current asset.
b. FALSE: The acid test ratio will always be less than the current ratio as inventories will be removed from the numerator of the ratio.
c. TRUE: The higher the acid test ratio the better the liquidity of the business as the business will have higher levels of cash and trade receivables compared to trade payables. However, it is possible for a high acid test ratio to arise as a result of a business having surplus funds in its bank account.

5. Greatworth Ltd

a) Possible reasons why the gross profit margin made by Greatworth Ltd has decreased from 2022 to 2023 are that the costs of the goods purchased have increased but the business has been unable to pass on this increase to its customers. Alternatively, that competitive conditions have led to a reduction in the selling price whilst purchasing costs remained the same.

b) There are several explanations as to why Greatworth Ltd has paid its trade payables 4 days more quickly in 2023 than in 2022. Perhaps they paid earlier in order to receive a discount, or perhaps they were more efficient in their processing.

c) Greatworth Ltd could have collected its debts more quickly in 2023 than in 2022 by being more efficient with its debt collection processes. The company may have followed up its customers more quickly, they may have offered discounts for early payment, or they may have employed a debt collection agency.

***6. Ager Ltd**

					2023	**2022**
a)	i)	Current ratio	219 / 140	=	1.56 : 1	1.6 : 1
	ii)	Acid test ratio	121 / 140	=	0.86 : 1	1.2 : 1
	iii)	Trade receivable days	(112 / 804) x 365	=	51 days	42 days
	iv)	Trade payable days	(71 / 612) x 365	=	42 days	43 days
	v)	Inventory days	(98 / 596) x 365	=	60 days	50 days

b) **The current ratio** has hardly altered from 2022 showing that the liquidity of the company is unchanged but the decrease in the **acid test ratio** shows a fall in the company's very short-term liquidity.

The trade receivable days figure has increased from 42 to 51 days showing that, on average, trade receivables are taking 9 days longer to pay in 2023 than they did in 2022. This may be due to poorer credit control.

The trade payable days figure has remained virtually the same but it now shows a situation where suppliers are being paid 9 days more quickly than the customers pay Ager Ltd.

The average period for which goods are held in inventory has increased by 10 days from 2022 to 2023. This is generally not a good sign as money tied up in inventory may be employed more productively elsewhere in the business. Also, the higher the inventory level, the greater the risk of obsolescence or damage and the higher the storage costs.

c) The company's working capital management could be improved by:

- reducing the level of inventory held
- collecting in trade receivables more quickly by improving credit control.

7. TC Ltd

a) False: On average, TC Ltd's trade receivables are taking less time to pay in 2023 than 2022.

b) True: The inventory days have increased by six days.

c) Trade receivable days might decrease if the company was better at collecting their debts by chasing up overdue amounts, or the company could have offered a discount for prompt payment, encouraging customers to settle their debts earlier. Inventory days might increase if the company is having difficulty selling their inventory.