

Quantitative Skills Calculation Questions

Using percentages

1a. Business A sells 85,000 products a year. 30% of them are sold in the first three months. How many products are sold in the first three months. You are advised to show your workings. [2]

1b. Business B had 2400 employees. It had to make 5% of them redundant. How many people were made redundant? You are advised to show your workings. [2]

1c. Business C holds 7500 units in stock. The business' warehouse was flooded, and it lost 17% of its stock. How much stock was destroyed? You are advised to show your workings. [2]

Calculating percentage increases

2a. Business A has sales of £55,000. Their sales increase by 26% the following year. What is the new sales level? You are advised to show your workings. [2]

2b. Business B employs 187 workers, to meet increased demand they need to increase their workforce by 13%. How many workers do they need in total? [2]

2c. Business C made £345,560 profit last year. This year their profits increased by 8%. How much profit did they make? [2]

Calculating percentage decreases

3a. Business A has sales of £96,000. Their sales decrease by 22% the following year. What is the new sales level? You are advised to show your workings. [2]

3b. Business B served 1,920 customers last week. This week they served 37% less customers. How many customers did they serve? You are advised to show your workings. [2]

3c. Business B served 1,920 customers last week. This week they served 37% less customers. How many customers did they serve? You are advised to show your workings. [2]

Calculating percentages

4a. Business A has sales of £55,000. The total sales in the market are £345,000. Calculate to, 2 decimal places, the percentage of Business A's sales compared to the total sales in the market. You are advised to show your workings. [2]

.....%.

4b. Business B employed 246 workers. 23 of the workers left for different reasons. Calculate, to 2 decimal places, the percentage of workers that left compared with the total number of people employed by Business B? You are advised to show your workings. [2]

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4c. Business C normally get approximately 128 products a year returned by customers who are not happy with the product. The business makes and sells 6800 products a year. Calculate, to 2 decimal places, the percentage of products that usually get returned a year. You are advised to show your workings. [2]

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Calculating percentage changes

5a. Business A had sales of £45,000, this increased to £67,000. Calculate the percentage increase in sales. You are advised to show your workings. [2]

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5b. In Year 1 Business B had 87 stores around the country. By the end of Year 2 they had, 112. Calculate the percentage change in the number of stores. You are advised to show your workings. [2]

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5c. Business C made £165,000 last year. This year they only made £132,000. What was the percentage change in their profit? You are advised to show your workings. [2]

.....%.

Calculating averages

6a. Business A had £34,000 of sales in Year 1, £46,000 in Year 2 and £54,000 in Year 3. What is the average annual sales? You are advised to show your workings. [2]

£.....

6b. Business B has made profit of £55,000, £112,000 and £86,000 over the last three years. What is the average yearly profit it has made? You are advised to show your workings. [2]

£.....

6c. Business C's market share has varied over the past four years as shown below:

- Year 1 – 34%
- Year 2 – 38%
- Year 3 – 56%
- Year 4 – 43%

What is the average market share that Business C has had? You are advised to show your workings. [2]

.....%