



THIRD SPACE
LEARNING

GCSE Exam Questions

Percentage Change | Number

GCSE Exam Questions: Percentage Change

You may use a calculator.

- 1) (a) Last year Ellie's council tax bill was £1752. This year it has increased to £1813.32.

Calculate the percentage increase.

(3)

- (b) Ellie pays her council tax monthly. She pays the same amount each month.

Calculate the increase in Ellie's monthly payments.

(2)

(5 marks)

- 2) (a) Louis invested £3200 in a bank account.

At the end of the year, interest was added and his new balance was £3296.

Calculate the interest rate used by the bank.

(3)

- (b) Louis did not make any deposits or withdrawals during the second year.

How much interest was paid to Louis at the end of the second year?

(2)

(5 marks)

- 3) Karina owns a shop. She buys 400 tins of baked beans for £200.

Karina sells packs of 4 tins of baked beans for £3.20.

Calculate Karina's percentage profit.

(4)

GCSE Exam Questions: Percentage Change

- 4) (a) In 1900 the population of a city was 185000.

By 1950, it had increased to 207200.

Find the percentage increase.

(2)

- (b) Between 1950 and 2000 the population increased by a further 5%.

Find the total percentage increase in the city's population between 1900 and 2000

(4)

(7 marks)

GCSE Exam Questions: Percentage Change Answers

	Question	Answer	Marks
1) (a)	Last year Ellie's council tax bill was £1752. This year it has increased to £1813.32. Calculate the percentage increase.	$£1813.32 - £1752 = £61.32$ $\frac{61.32}{1752} \times 100$ 3.5%	(1) (1) (1)
1) (b)	Ellie pays her council tax monthly. She pays the same amount each month. Calculate the increase in Ellie's monthly payments.	$(1813.32 - 1750) \div 12$ £5.11	(1) (1)
2) (a)	Louis invested £3200 in a bank account. At the end of the year, interest was added and his new balance was £3296. Calculate the interest rate used by the bank.	Change: $£3296 - £3200 = £96$ $\frac{96}{3200} \times 100$ 3%	(1) (1) (1)
2) (b)	Louis did not make any deposits or withdrawals during the second year. How much interest was paid to Louis at the end of the second year?	3296×0.03 <i>oe</i> £98.88	(1) (1)
3)	Karina owns a shop. She buys 400 tins of baked beans for £200. Karina sells packs of 4 tins of baked beans for £3.20. Calculate Karina's percentage profit.	$200 \div 400 = £0.50$ each $3.2 \div 4 = £0.80$ each $\frac{80-50}{50} \times 100$ 60%	(1) (1) (1) (1)
4) (a)	In 1900 the population of a city was 185000. By 1950, it had increased to 207200. Find the percentage increase.	$\frac{207200-185000}{185000} \times 100$ 12% increase	(1) (1)
4) (b)	Between 1950 and 2000 the population increased by a further 5%. Find the total percentage increase in the city's population between 1900 and 2000.	$\frac{207200}{100} \times 105 = 217560$ $217560 - 185000 = 32560$ $\frac{32560}{185000} \times 100$ 17.6%	(1) (1) (1) (1)

Where to go next?

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