GCSE Exam Questions

Percentage Increase & Decrease | Number

GCSE Exam Questions: Percentage Increase & Decrease

1) Vicky earns £22,000 per annum.

She decreases her hours by 20% and her salary is also reduced by 20%.

What is her new salary?

(2 marks)

2) (a) In 2018 the average annual gas bill for UK households was £593.
In 2019 this increased by 2.8%.

Find the average annual gas bill for UK households in 2019.

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(2)

(b) The average annual electricity bill for UK households rose
from £640 in 2018 to £679 in 2019.

Find the percentage increase.

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(2)
(4 marks)

3) Fiona wants to buy a new sofa. She can buy the sofa from one of two shops.

Sofa Warehouse	The Furniture Store
£1200 including VAT	£980 not including VAT

VAT is charged at 20%.
At which shop would Fiona pay less for the sofa?
You must show your work.

(3 marks)

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GCSE Exam Questions: Percentage Increase & Decrease

4) **(a)** A shop bought 50 pairs of trainers for £575, retailing them at £21 per pair.

The shop sold 40 pairs of trainers at full price.

The rest were sold in a sale where they were 20% off.

Calculate the total profit made by the shop after all of the pairs of trainers were sold.

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(5)

(b) What percentage profit did the shop make on the trainers?

Give your answer to 1.d.p.

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(1)

(6 marks)

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GCSE Exam Questions: Percentage Increase & Decrease Answers

	Question	Answer	Marks
1)	Vicky earns £22,000 per annum. She decreases her hours by 20% and her salary is also reduced by 20%. What is her new salary?	20% of £22000 = £4400 £22000 - £4400 = £17600	**(1)** **(1)**
2) (a)	In 2018 the average annual gas bill for UK households was £593. In 2019 this increased by 2.8%. Find the average annual gas bill for UK households in 2019.	2.8% of £593 = £16.60 £593 + £16.60 = £609.60	**(1)** **(1)**
2) (b)	The average annual electricity bill for UK households rose from £640 in 2018 to £679 in 2019. Find the percentage increase.	£679 - £640 = £39 $\dfrac{£39}{£640} \times 100 = 6.09\%$	**(1)** **(1)**
3)	Fiona wants to buy a new sofa. She can buy the sofa from one of two shops. 	Sofa Warehouse	The Furniture Store
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£1200 including VAT	£980 not including VAT | VAT is charged at 20%. At which shop would Fiona pay less for the sofa? You must show your work.	20% of £980 = £196 £980 + £196 = £1176 The furniture store	**(1)** **(1)** **(1)**
4) (a)	A shop bought 50 pairs of trainers for £575, retailing them at £21 per pair. The shop sold 40 pairs of trainers at full price. The rest were sold in a sale where they were 20% off. Calculate the total profit made by the shop after all of the pairs of trainers were sold.	$40 \times £21 = £840$ 20% of £21 = £4.20 £21 - £4.20 = £16.80 $£16.80 \times 10 = £168$ £840 + £168 = £1008 £1008 - £575 = £433	**(1)** **(1)** **(1)** **(1)** **(1)**
4) (b)	What percentage profit did the shop make on the trainers? Give your answer to 1dp.	$\dfrac{433}{575} \times 100 = 75.3\%$	**(1)**

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