

Fractions, decimals and percentages – GCSE Mathematics Paper 3**1. No.1**

What is $\frac{1}{4}$ as a percentage?

Circle your answer.

[1 mark]

10%

25%

40%

75%

2. No.3

Circle the value of the digit 9 in 0.094

[1 mark] $\frac{9}{100}$ $\frac{9}{10}$ $\frac{1}{90}$ $\frac{1}{9}$

3. No.22

Laura works in a shop.

The table shows the number of hours she works on two weekends.

	Saturday	Sunday
Weekend 1	3	2
Weekend 2	$5\frac{1}{2}$	$3\frac{1}{2}$

Work out the percentage increase in her **total** hours from Weekend 1 to Weekend 2**[3 marks]**

Answer _____ %

4. No.1

Circle the smallest number.

[1 mark]

4.31

 $4.\dot{3}$

4.301

4.33

5. No.5

Laura works in a shop.

The table shows the number of hours she works on two weekends.

	Saturday	Sunday
Weekend 1	3	2
Weekend 2	$5\frac{1}{2}$	$3\frac{1}{2}$

Work out the percentage increase in her **total** hours from Weekend 1 to Weekend 2**[3 marks]**

Answer _____ %

6. No.15

A town has

a population density of 278 people per km^2

and

a population of 158 460

$$\text{population density} = \frac{\text{population}}{\text{area}}$$

The population increases to 168 720

Work out the population density after the increase.

[3 marks]

Answer _____ people per km^2

7. No.20

£2448 is invested in an account at a rate of compound interest.

One year after the investment there is £2496.96 in the account.

How much is in the account four years after the investment?

[3 marks]

Answer £ _____

8. No.30

Erik thinks of a prime number between 20 and 30

His number is $x\%$ of 125Work out **one** possible value of x .**[3 marks]**

Answer _____

9. No.2

Circle the largest number.

[1 mark] $0.\dot{5}$

0.55

0.545

 $0.5\dot{4}\dot{5}$

10. No.11

Erik thinks of a prime number between 20 and 30

His number is $x\%$ of 125

Work out **one** possible value of x .

[3 marks]

Answer _____

11. No.14

Phil sells ties.

He increases the original price of each tie by 10% to £13.20

A month later he announces a sale.



Phil says,

"The ties will be back to their original price, because each change was by 10%"

Is he correct?

Tick a box.

☐

Yes

☐

No

Show working to support your answer.

[3 marks]
