

Paper 2 prep - NUMBER

1. Here is a list of eight numbers.

5 6 12 20 25 26 28 33

(a) From the list, write down

(i) a square number,

.....

(ii) a number that is a multiple of 7,

.....

(iii) **two** numbers that are factors of 40,

..... and

(iv) **two** numbers with a sum of 59.

..... and

(4)

(b) Tony says that “6 is a cube number because $2^3 = 6$ ”.
Tony is wrong. Explain why.

.....

(1)

(Total 5 marks)

2. (a) Write down all the prime numbers between 40 and 50.

.....

(2)

(Total 3 marks)

(b) Write down the cube of 10.

.....

(1)

3. Explain why $\sqrt{90}$ is less than 10.

.....

.....

.....

.....

(Total 1 mark)

4. Write 140 as the product of its prime factors.

.....

(Total 2 marks)

5. Express 108 as a product of its prime factors.

.....

(Total 3 marks)

6. Work out an estimate for the value of $\frac{7.8 \times 5.3}{10.3}$

.....

(Total 2 marks)

7. Work out an estimate for the value of $\frac{637}{3.2 \times 9.8}$

.....

(Total 2 marks)

8. (a) Write 11% as a fraction.

..... (1)

(b) Write 0.25 as a percentage.

.....% (1)

(c) Write 8% as a decimal.

..... (1)

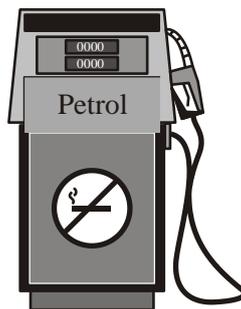
(d) Work out 40% of 200.

..... (2)
(Total 5 marks)

9. Richard paid 56p for 7 pencils.
The cost of each pencil was the same.
Work out the cost of 4 of these pencils.

..... p
(Total 2 marks)

10. The cost of 20 litres of petrol is £18
Work out the cost of 1 litre of petrol.



.....
(Total 3 marks)

11. Hugh went on holiday to Italy.

While on holiday, he went shopping.
He bought a belt and a hat.
The belt cost 25 euros.
The hat cost 14 euros.

The exchange rate was £1 = 1.56 euros.

Work out the total cost of the belt and the hat.
Give the total cost in pounds.

£
(Total 3 marks)

12. This is a list of ingredients for making a pear & almond crumble for 4 people.

Ingredients for 4 people. 80 g plain flour 60 g ground almonds 90 g soft brown sugar 60 g butter 4 ripe pears

Work out the amount of each ingredient needed to make a pear & almond crumble for 10 people.

..... g plain flour
..... g ground almonds
..... g soft brown sugar
..... g butter
..... ripe pears

(Total 3 marks)

13. Jack and Jill share £18 in the ratio 1:5

Work out how much each person gets.

Jack £

Jill £

(Total 2 marks)

14. A Table Tennis Club has 150 members.
96 of the members are adults and the rest are children.

(a) What percentage of the club's members are adults?

.....%

(2)

To enter a cup competition in which all members play, each child member pays £4 and each adult member pays £8.

(b) Work out this ratio:

the total amount paid by the children : the total amount paid by the adults.

Give your answer in its simplest form.

.....

(3)

Here are the ages in years of the members who won their matches in the cup competition yesterday.

8	17	10	16	24	29	36	25	38	42
53	44	49	53	29	21	11	38	9	29

(c) In the space below draw a stem and leaf diagram to show these ages.

(3)
(Total 8 marks)

15. Rosa prepares the ingredients for pizzas.



She uses cheese, topping and dough in the ratio 2 : 3 : 5
Rose uses 70 grams of dough.

Work out the number of grams of cheese and the number of grams of topping Rosa uses.

Cheese g

Topping g

(Total 3 marks)