



Answer Sheet

Paper Name: Maths-Ratio and Proportion

Paper ID: CUSTOM-MA-C60B4E0AB3

Full Name:



**YOU MUST ANSWER ON THIS SHEET. TAKE A PICTURE USING THE EXAM HAPPY APP
AFTERWARDS TO MARK YOUR WORK.**

How to answer:



A



B



C



D



E

How not to answer:



A



B



C



D



E

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1					
	A	B	C	D	E
2					
	A	B	C	D	E
3					
	A	B	C	D	E
4					
	A	B	C	D	E
5					
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	A	B	C	D	E
19					
	A	B	C	D	E
20					
	A	B	C	D	E

- 1.** The ratio of the perimeter of two triangles is 4:7.
If the perimeter of the smaller triangle is 20 cm.

What is the perimeter of the larger triangle?

A 28 cm **B** 35 cm **C** 56 cm **D** 40 cm **E** 45 cm

- 2.** 3 cm on a map represents 240 m in reality.

What should be the scale of the map in its simplest form?

A 1 : 4,000 **B** 1 : 6,500 **C** 1 : 8,000 **D** 1 : 9,200 **E** 1 : 7,200

- 3.** The number of people who voted for the Red party in an election was 2,400.
The number of people who voted for the Orange party in an election was 4,200.

What is the ratio of Red party voters to Orange party voters in its simplest form?

A 3 : 7 **B** 4 : 7 **C** 7 : 4 **D** 8 : 14 **E** 42 : 24

- 4.** Simplify the ratio 1.5 : 2.5.

A 1 : 2 **B** 2 : 5 **C** 15 : 35 **D** 5 : 25 **E** 3 : 5

- 5.** 60% of a number is 36.

What is 150% of the same number?

A 85 **B** 100 **C** 90 **D** 95 **E** 105

- 6.** Carlos puts numbers 2 to 25 (inclusive) into the following sorting table.

	Odd	Even
Prime	A	B
Composite	C	D

How many numbers are there in A, B, and C in total?

- A** 13 **B** 10 **C** 6 **D** 2 **E** 18

- 7.** A pastry is made using flour and butter in a ratio of 4 : 3.
To make one piece of pastry 140 grams of flour is used.

How much butter would be needed to make 12 pastries?

- A** 720 g
B 105 g
C 1,440 g
D 1,260 g
E 560 g

- 8.** Ellie reads for 3 hours every day. At this rate, she can finish two books in a week. Her target is to read 22 books.

How many hours must she read to meet her target?

- A** 220 **B** 210 **C** 212 **D** 231 **E** 562

9. Simplify the ratio 1.25 kg : 600 g : 800 g to its simplest form.

A 25 : 12 : 16

B 30 : 13 : 16

C 5 : 3 : 4

D 2 : 3 : 4

E 25 : 3 : 4

10. It takes Gina and her sister 2 hours to mow their 10 m² garden.

If the family are all equally quick at mowing, how long would it take to mow their garden if their mum and dad help them?

A 4 hours

B 1.5 hours

C 80 mins

D 30 mins

E 1 hour

11. The following quantities of milk, sugar, and flour are required to make one pancake:



Milk

50 ml



Sugar

6 g



Flour

100 g

How many pancakes can be made with 1 litre of milk, 120 grams of sugar, and 1.8 kg of flour?

A 22

B 20

C 18

D 34

E 15

- 12.** A factory produces fidget spinners for children. A batch contains 500 fidget spinners and a small percentage of the products are faulty. If 0.4% of every batch is faulty, how many faulty products are produced after 5 batches?

A 10 **B** 2 **C** 4 **D** 20 **E** 8

- 13.** A parking fine is £120 but is reduced by 35% if paid within 14 days. How much is the reduced rate?

A £42 **B** £30 **C** £66 **D** £78 **E** £90

- 14.** Kiran and Maya go shopping at a grocery store. Kiran buys 2 croissants and 3 apple tarts for £2.90. Maya buys 1 croissant and 1 apple tart for £1.25.

How much does an apple tart cost?

A £0.40 **B** £0.75 **C** £0.50 **D** £0.85 **E** £0.45

- 15.** A recipe to make Bakewell tarts requires jam, butter and sugar in the ratio 4 : 4 : 3. If these ingredients weigh 330 g in total, then how much sugar is needed?

A 110 g **B** 90 g **C** 220 g **D** 180 g **E** 99 g

- 16.** Fuel costs £1.15 per litre. If a journey of 110 miles uses 22 litres, what is the cost per mile for that journey?

A £2.30 **B** £5.25 **C** £0.52 **D** £0.58 **E** £0.23

- 17.** Tom is allowed to play Minecraft for 30 minutes for every hour of homework he does. How long must he have done homework for if he was allowed to play 2 hours of Minecraft?

A 2 hours **B** 8 hours **C** 3 hours **D** 2.5 hours **E** 4 hours

- 18.** Slate costs £32.99 per 10 kg and concrete costs £24.49 per 100 kg. For his home renovations, Daniel requires 500 kg of slate and 2 tonnes of concrete.

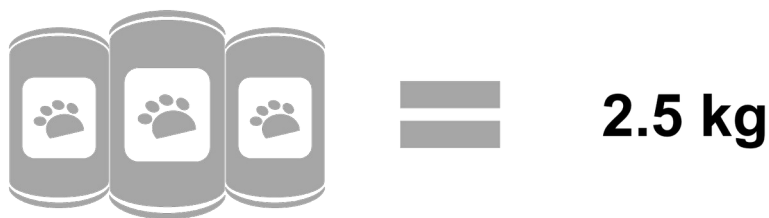
How much money is needed to buy the required slate and concrete?

A £6720.95 **B** £2039.30 **C** £1848.48 **D** £2139.30 **E** £1698.48

- 19.** After winning a £5,000 lottery, Jamie received £4,250 in total after tax. How much was the tax?

A 12.5 % **B** 15.0 % **C** 17.5 % **D** 20.0 % **E** 22.5 %

- 20.** Three tins of dog food weighs 2.5 kg. 10% of the weight of dog food is made up of the metal tin.



If Hillary opens 40 tins to feed the dogs at the shelter, how much dog food does she pour out?

A 100 kg **B** 900 kg **C** 30 kg **D** 90 kg **E** 18 kg