

Ratio & Proportion: Medium Practice Paper 7

Q1. A map has a scale of 1 : 20 000. A path measures 3.5 cm on the map. What is its real length in metres?

- A. 350 m B. 70 m C. 7 000 m D. 700 m E. 70 000 m

Q2. Mix A is made from 3 parts squash to 7 parts water. Mix B is made from 2 parts squash to 5 parts water. Which mix tastes stronger of squash?

- A. Mix B
B. Mix A
C. They taste the same
D. Mix B, because it has fewer parts
E. It cannot be decided

Q3. The table shows the same recipe written out for two batch sizes. What number is missing?

Ingredient	8 scones	20 scones
Flour	400 g	1 000 g
Butter	150 g	?

- A. 450 g B. 300 g C. 350 g D. 400 g E. 375 g

Q4. Five identical bricks weigh 12.5 kg altogether. What do 8 of these bricks weigh?

- A. 25 kg B. 18 kg C. 22.5 kg D. 17.5 kg E. 20 kg

Q5. Three cleaners take 90 minutes to clean an office. How long would 5 cleaners take, working at the same rate?

- A. 45 minutes
- B. 60 minutes
- C. 150 minutes
- D. 54 minutes
- E. 30 minutes

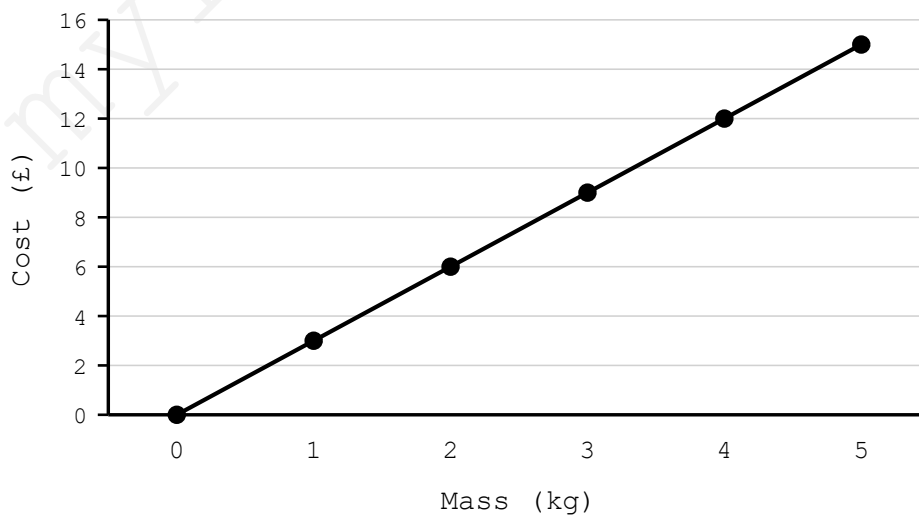
Q6. A charity box holds £1 coins, 50p coins and 20p coins in the ratio 1 : 2 : 4. There are 35 coins altogether. What is the total value of the coins?

- A. £10.50
- B. £17.50
- C. £12.00
- D. £21.00
- E. £14.00

Q7. Two similar photographs have widths of 8 cm and 20 cm. The smaller photograph is 6 cm tall. How tall is the larger one?

- A. 12 cm
- B. 18 cm
- C. 15 cm
- D. 14 cm
- E. 16 cm

Q8. The graph shows the cost of apples. How much would 3.5 kg cost?



- A. £9.00
- B. £10.50
- C. £12.00
- D. £11.00
- E. £10.00

Q9. A photograph 6 cm by 4 cm is enlarged so that its longer side becomes 15 cm. How long is the shorter side of the enlargement?

- A. 12 cm B. 10 cm C. 9 cm D. 13 cm E. 8 cm

Q10. £240 is shared in the ratio 1 : 2 : 5. How much less does the smallest share receive than the largest share?

- A. £60 B. £90 C. £150 D. £120 E. £30

Q11. A car uses 45 litres of fuel to travel 540 km. How far can it travel on 30 litres?

- A. 360 km B. 375 km C. 340 km D. 400 km E. 320 km

Q12. The table shows the price of the same camera in three countries. Using the exchange rates given, where is the camera cheapest?

Country	Price	Rate for £1
France	69 euros	1.15 euros
America	65 dollars	1.30 dollars
Japan	9 900 yen	180 yen

- A. Japan
B. France
C. America
D. France and Japan are equal
E. They all cost the same

Q13. A rectangle is divided into 12 equal squares and 3 of them are shaded. What is the ratio of shaded squares to unshaded squares?

- A. 3 : 1 B. 1 : 4 C. 1 : 3 D. 1 : 12 E. 3 : 4

Q14. Two cars travel the same distance. One takes 3 hours and the other takes 4 hours. What is the ratio of their speeds?

- A. 4 : 3 B. 3 : 4 C. 1 : 1 D. 12 : 1 E. 7 : 12

Q15. A recipe for 6 people uses 240 g of flour. Which calculation gives the flour needed for 9 people?

- A. $240 \div 6 \times 9$
B. $240 \times 6 \div 9$
C. $240 \times 9 \times 6$
D. $240 \div 9 \times 6$
E. $240 + 9 - 6$