Multiple choice questions - Ratio and proportion

Year: Year 7 · 10

Question 1 Simplify $8 : 12$.

- ◯ **A.** $2 : 3$
- ◯ **B.** $4 : 6$
- ◯ **C.** $3 : 2$
- ◯ **D.** $2 : 4$

Question 2 Share 30 in the ratio $2 : 3$. What is the larger share?

- ◯ **A.** 12
- ◯ **B.** 18
- ◯ **C.** 15
- ◯ **D.** 20

Question 3 The ratio of cats to dogs is $3 : 2$. What fraction of the animals are dogs?

- ◯ **A.** $\frac{2}{3}$
- ◯ **B.** $\frac{3}{5}$
- ◯ **C.** $\frac{2}{5}$
- ◯ **D.** $\frac{1}{2}$

Question 4 Write 50 cm to 2 m as a ratio in its simplest form.

- ◯ **A.** $50 : 2$
- ◯ **B.** $25 : 1$
- ◯ **C.** $1 : 40$
- ◯ **D.** $1 : 4$

Question 5 4 books cost £18. How much do 6 books cost?

- ◯ **A.** £27
- ◯ **B.** £24
- ◯ **C.** £22
- ◯ **D.** £30

Question 6 Which is the best buy?

- ◯ **A.** 500 g for £1.30
- ◯ **B.** 1 kg for £2.40
- ◯ **C.** 250 g for £0.65
- ◯ **D.** 2 kg for £5.00

Question 7 A map scale is $1:1000$. A path is 6 cm on the map. What is its real length?

- ◯ **A.** 6 m
- ◯ **B.** 600 m
- ◯ **C.** 60 m
- ◯ **D.** 6 km

Question 8 Two numbers are in the ratio $3:7$ and add up to 50. What is the smaller number?

- ◯ **A.** 21
- ◯ **B.** 35
- ◯ **C.** 10
- ◯ **D.** 15

Question 9 A recipe for 6 uses 3 eggs. How many eggs for 10 people?

- ◯ **A.** 5
- ◯ **B.** 4
- ◯ **C.** 6
- ◯ **D.** 3.5

Question 10 Share £120 in the ratio $1:5$. The smaller share is

- ◯ **A.** £24
- ◯ **B.** £20
- ◯ **C.** £5
- ◯ **D.** £100

Answer grid - Ratio and proportion

Year: Year 7

Question	Answer	Explanation
1	**A**	Divide both by 4.
2	**B**	One part is 6, so the shares are 12 and 18.
3	**C**	There are 5 parts and 2 are dogs.
4	**D**	2 m = 200 cm; 50 : 200 = 1 : 4.
5	**A**	One book is £4.50, so 6 cost £27.
6	**B**	Cost per kilogram: £2.60, £2.60, £2.50 and £2.40. The cheapest per kilogram is 1 kg for £2.40.
7	**C**	6 x 1000 = 6000 cm = 60 m.
8	**D**	One part is 5, so the numbers are 15 and 35.
9	**A**	One person needs 0.5 eggs; 10 people need 5.
10	**B**	One part is £20.