Multiple choice questions - Ratio, proportion and percentages

Year: Year 6 · 10

Question 1 Simplify 18 : 24.

- ◯ **A.** 6 : 8
- ◯ **B.** 3 : 4
- ◯ **C.** 9 : 12
- ◯ **D.** 2 : 3

Question 2 Share 60 in the ratio 1 : 5. What are the shares?

- ◯ **A.** 10 and 50
- ◯ **B.** 12 and 48
- ◯ **C.** 30 and 30
- ◯ **D.** 20 and 40

Question 3 4 : 9 = 20 : ?

- ◯ **A.** 25
- ◯ **B.** 36
- ◯ **C.** 45
- ◯ **D.** 40

Question 4 What is 25% of 120?

- ◯ **A.** 25
- ◯ **B.** 30
- ◯ **C.** 40
- ◯ **D.** 60

Question 5 On a map 1 cm = 2 km. How far is 4.5 cm?

- ◯ **A.** 6.5 km
- ◯ **B.** 9 km
- ◯ **C.** 2.25 km
- ◯ **D.** 8 km

Question 6 8 apples cost £2.40. How much do 5 apples cost?

- ◯ **A.** £1.20
- ◯ **B.** £1.50
- ◯ **C.** £1.80

- ◯ **D.** £1.25

Question 7 The ratio of boys to girls is 2 : 3. There are 20 pupils. How many girls?

- ◯ **A.** 8
- ◯ **B.** 10
- ◯ **C.** 12
- ◯ **D.** 15

Question 8 What is 30% of 150?

- ◯ **A.** 30
- ◯ **B.** 45
- ◯ **C.** 50
- ◯ **D.** 15

Question 9 A 2 cm line is enlarged by a scale factor of 3. How long is it now?

- ◯ **A.** 5 cm
- ◯ **B.** 6 cm
- ◯ **C.** 8 cm
- ◯ **D.** 1.5 cm

Question 10 What percentage is 12 out of 48?

- ◯ **A.** 12%
- ◯ **B.** 20%
- ◯ **C.** 25%
- ◯ **D.** 50%

Answer grid - Ratio, proportion and percentages

Year: Year 6

Question	Answer	Explanation
1	**B**	Divide both by 6: 3 : 4.
2	**A**	6 parts. 60 ÷ 6 = 10. So 10 and 50.
3	**C**	The multiplier is 5. 9 x 5 = 45.
4	**B**	10% = 12, 20% = 24, 5% = 6, so 25% = 30.
5	**B**	4.5 x 2 = 9 km.
6	**B**	One apple costs 30p. 5 x 30p = £1.50.
7	**C**	5 parts, 4 pupils each. Girls: 3 x 4 = 12.
8	**B**	10% = 15, so 30% = 45.
9	**B**	2 x 3 = 6 cm.
10	**C**	12/48 = 1/4 = 25%.