FOUNDATION & HIGHER

SAME AT BOTH TIERS

Name ..... Class .....

N11: Fractions and ratio

Use fractions in ratio problems

20 marks · 25 minutes · Non-calculator

1) The ratio of boys to girls in a club is 3 : 5. What fraction of the club are girls?

.....

[Question 1: 1 marks]

2) A bag has red and blue counters in the ratio 2 : 7. There are 36 counters. How many are red?

.....

[Question 2: 2 marks]

3) $\frac{3}{5}$ of a class are girls. Write the ratio of girls to boys.

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[Question 3: 1 marks]

4) Share £72 in the ratio 5 : 3

..... £..... and £

[Question 4: 2 marks]

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5) A is $\frac{2}{3}$ of B. Write the ratio A : B.

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[Question 5: 1 marks]

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6) The ratio of cats to dogs at a rescue centre is 4 : 9. There are 52 animals altogether. How many are dogs?

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[Question 6: 2 marks]

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7) In a tin of paint mix, $\frac{2}{7}$ is white paint and the rest is blue.

(a) Write the ratio of white to blue.

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(1)

(b) There are 35 litres of mix. How much is blue?

..... litres

(2)

[Question 7: 3 marks]

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8) $x : y = 3 : 4$ and $y : z = 2 : 5$

(a) Find $x : y : z$.

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(2)

(b) What fraction of $x + y + z$ is z?

.....

(1)

[Question 8: 3 marks]

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9) In a bag, $\frac{1}{4}$ of the sweets are red, $\frac{1}{3}$ are blue and the rest are green. Find the ratio red : blue : green.

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[Question 9: 2 marks]

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10) Two numbers are in the ratio 5 : 2. Their difference is 21. Find their total.

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[Question 10: 2 marks]

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11) $A : B = 7 : 3$. Write A as a fraction of B.

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[Question 11: 1 marks]

End of paper – 20 marks in total

Answers and brief mark scheme

Q	Answer	Method / notes
1	$\frac{5}{8}$	B1.
2	8	$\frac{2}{9} \times 36$ (M1); A1.
3	3 : 2	B1.
4	£45 and £27	72 ÷ 8 = 9 (M1); A1.
5	2 : 3	B1.
6	36	52 ÷ 13 = 4 (M1); A1.
7	(a) 2 : 5 (b) 25	(a) B1. (b) $\frac{5}{7} \times 35$ (M1); A1.
8	(a) 3 : 4 : 10 (b) $\frac{10}{17}$	(a) 6 : 8 : 20 or equivalent (M1); A1. (b) B1.
9	3 : 4 : 5	Green = $\frac{5}{12}$ (M1); A1.
10	49	21 ÷ 3 = 7 (M1); A1.
11	$\frac{7}{3}$	B1.