FOUNDATION & HIGHER

SAME AT BOTH TIERS

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

R4: Ratio notation

Use ratio notation and simplify ratios

20 marks · 25 minutes · Non-calculator

1) Simplify

(a) 12 : 18

.....

(1)

(b) 45 : 30 : 15

.....

(1)

[Question 1: 2 marks]

2) Simplify 1.5 : 4

.....

[Question 2: 1 marks]

3) Write the ratio 40 cm : 2 m in its simplest form.

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[Question 3: 2 marks]

4) Write $\frac{2}{3} : \frac{1}{4}$ as a ratio of whole numbers in its simplest form.

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[Question 4: 2 marks]

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5) Write

(a) $4 : 5$ in the form $1 : n$

.....

(1)

(b) $9 : 2$ in the form $n : 1$

.....

(1)

[Question 5: 2 marks]

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6) Write the ratio 750 g : 1.5 kg in its simplest form.

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[Question 6: 2 marks]

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7) Simplify $3x : 12x$

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[Question 7: 1 marks]

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8) A club has 24 boys and 36 girls. Write the ratio of boys to girls in its simplest form.

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[Question 8: 1 marks]

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9) Write the ratio 50p : £2.50 in its simplest form.

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[Question 9: 2 marks]

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10) Write the ratio 1 hour 15 minutes : 45 minutes in its simplest form.

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[Question 10: 2 marks]

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11) Write 5 : 8 in the form 1 : n

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[Question 11: 1 marks]

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12) Are the ratios 6 : 15 and 10 : 25 equivalent? Show how you decide.

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[Question 12: 2 marks]

End of paper – 20 marks in total

Answers and brief mark scheme

Q	Answer	Method / notes
1	(a) 2 : 3 (b) 3 : 2 : 1	B1 each.
2	3 : 8	B1.
3	1 : 5	Same units, 40 : 200 (M1); A1.
4	8 : 3	Multiply by 12: 8 : 3 (M1); A1.
5	(a) 1 : 1.25 (b) 4.5 : 1	B1 each.
6	1 : 2	750 : 1500 (M1); A1.
7	1 : 4	B1.
8	2 : 3	B1.
9	1 : 5	50 : 250 (M1); A1.
10	5 : 3	75 : 45 (M1); A1.
11	1 : 1.6	B1.
12	Yes	Both simplify to 2 : 5 (M1); yes (A1).