GCSE HIGHER · REVISION MAT 5

Proportion and equivalent ratios

1 Is 7 : 2 equivalent to 21 : 6?

2 Find x.

$9 : x = 27 : 12$

3 Explain how to check whether two ratios are equivalent.

4 A car uses 5 litres of fuel for 60 km.

How much fuel is needed for 210 km?

5 Show that $\frac{x}{5} = \frac{12}{20}$ gives $x = 3$.

6 A 4 cm by 6 cm rectangle is similar to a 10 cm by y cm rectangle.

Find y.

7 Show that $2 : 3 : 5 = 6 : 9 : 15$.

8 Find x.

$(x - 2) : (x + 3) = 2 : 7$

Mr&Mrs MATHS

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Proportion and equivalent ratios

1 Yes: multiply by 3.

2 ÷ 3

$x = 4$

3 Simplify both, or check that the fractions are equal.

4 × 3.5

17.5 litres

5 $20x = 60$

$x = 3$

6 × 2.5

$y = 15$

7 Multiply each part by 3.

8 $7(x - 2) = 2(x + 3)$

$5x = 20$

$x = 4$

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