GCSE HIGHER · REVISION MAT 3

Ratio, fractions and linear functions

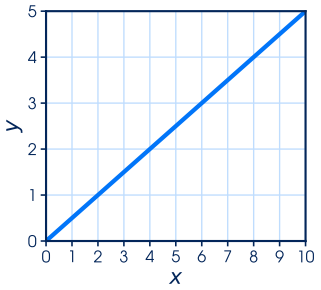
1 Boys : girls = 4 : 5.

Write the number of boys as a fraction of the number of girls.

2 $x : y = 5 : 2$

Write y in terms of x.

3 Use the graph to find y when $x = 8$.



4 Rice : water = 3 cups : 4.5 cups.

How much water is needed for 5 cups of rice?

5 Show that (3, 7.5) lies on $y = 2.5x$.

Write down the ratio $x : y$.

6 40 litres of petrol cost £58.

Write $C = kL$ and find the cost of 25 litres.

7 Two quantities are in the ratio $a : b = 3 : 4$.

Show that $4a = 3b$.

8 $p : q = 2 : 3$ and $q : r = 4 : 5$

Write r in terms of p.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

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1 $\frac{4}{5}$

2 $y = 0.4x$

3 Gradient 0.5

$y = 4$

4 W = 1.5R

7.5 cups

5 2.5 × 3 = 7.5 ✓

2 : 5

6 $k = 1.45$

£36.25

7 $\frac{a}{b} = \frac{3}{4}$

Cross-multiply: $4a = 3b$

8 $p : q : r = 8 : 12 : 15$

$r = \frac{15}{8}p$