GCSE HIGHER · REVISION MAT 5

Ratio, fractions and linear functions

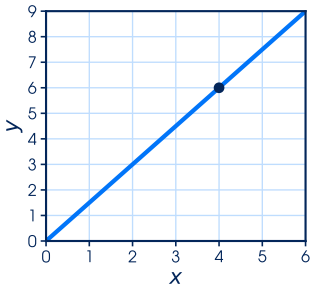
1 Cars : vans = 5 : 2.

What fraction of the vehicles are vans?

2 $u : v = 7 : 4$

Write u in terms of v.

3 Write y in terms of x for this line.



4 Cement : sand : gravel = 1 : 2 : 3.

Write the gravel G in terms of the sand S.

Find G when S = 40 kg.

5 $a : b = 5 : 3$

Show that $a = \frac{5}{3}b$.

6 A recipe uses 120 g of sugar for 300 g of flour.

Write $S = kF$ and find the sugar for 750 g of flour.

7 Show that (2, 5), (4, 10) and (10, 25) are all in the ratio 2 : 5.

8 $x : y = 3 : 5$ and $2x + y = 44$.

Find x and y.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 5

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1 $\frac{2}{7}$

2 $u = 1.75v$

3 Through (4, 6)

$y = 1.5x$

4 G = 1.5S

60 kg

5 $3a = 5b$

$a = \frac{5}{3}b$

6 $k = 0.4$

300 g

7 $y = 2.5x$ for each

All in ratio 2 : 5

8 $y = \frac{5}{3}x$

$2x + \frac{5}{3}x = 44 \Rightarrow \frac{11}{3}x = 44$

$x = 12$, $y = 20$

Mr&Mrs MATHS