1 Flour : sugar = 3 : 1.

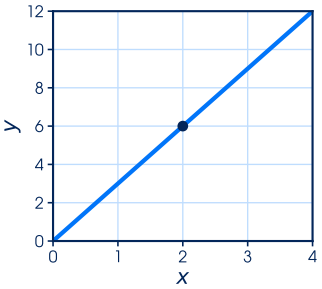
Write the amount of sugar as a fraction of the flour.

2 $x : y = 2 : 5$

Write y in terms of x.

3 The line shows pairs of values of x and y in the same ratio.

Write down $x : y$.



4 Red : white paint = 2 : 5.

How much white is needed for 3.5 litres of red?

GCSE HIGHER · REVISION MAT 1

Ratio, fractions and linear functions

5 Show that (4, 10) and (6, 15) both satisfy $x : y = 2 : 5$.

6 The cost of cheese is proportional to its mass.

250 g costs £3.

Write $C = km$ (m in g) and find the cost of 400 g.

7 Explain why every point on the line $y = kx$ has the same ratio $x : y$.

8 $y : x = 3 : 4$ and $y - x = -5$.

Find x and y.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 1

Ratio, fractions and linear functions

1 $\frac{1}{3}$

2 $2y = 5x$

$y = 2.5x$

3 Through (2, 6)

1 : 3

4 $W = 2.5R$

8.75 litres

5 $4 : 10 = 2 : 5$

$6 : 15 = 2 : 5$

6 $k = \frac{3}{250} = 0.012$

$C = 0.012m$

£4.80

7 $\frac{y}{x} = k$ **for every point, so $x : y = 1 : k$.**

8 $y = 0.75x$

$-0.25x = -5$

$x = 20$, $y = 15$

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