GCSE HIGHER · REVISION MAT 3

Ratios and fractions

1 Cats : dogs = 4 : 1.

What fraction are dogs?

2 $\frac{5}{9}$ of the people are adults.

Write adults : children.

3 Tom says that if $a : b = 2 : 3$, then a is $\frac{2}{3}$ of the total.

Explain his mistake.

4 Ella reads 3 times as many pages as Fin.

Gil reads half as many as Fin.

They read 270 pages.

How many does Ella read?

5 a is 60% of b.

Show that $a : b = 3 : 5$.

6 The amount of blue paint is $\frac{3}{4}$ of the amount of white.

There are 21 litres in total.

How much is white?

7 $y = \frac{7}{3}x$

Show that $x : y = 3 : 7$.

8 A is 1.2 times as tall as B.

B is 0.9 times as tall as C.

Write A : B : C using whole numbers.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Ratios and fractions

1 $\frac{1}{5}$

2 **5 : 4**

3 ***a*** **is** $\frac{2}{5}$ **of the total (it is** $\frac{2}{3}$ **of** ***b*****).**

4 E : F : G = 6 : 2 : 1

9 parts = 270

180

5 $a = 0.6b = \frac{3}{5}b$

$a : b = 3 : 5$

6 b : w = 3 : 4

7 parts = 21

12 litres

7 $3y = 7x$

$x : y = 3 : 7$

8 A = 1.08C, B = 0.9C

108 : 90 : 100

54 : 45 : 50