GCSE FOUNDATION · REVISION MAT 4

Multiplicative relationships

1 Fin has 14 stickers. Gia has 42 stickers.

(a) How many times as many stickers does Gia have?

(b) Write the ratio Fin : Gia in its simplest form.

2 A is $\frac{4}{9}$ of B.

$B = 63$

Work out the value of A.

3 Sue earns £350 a week. Tim earns £500 a week.

Show that Sue earns $\frac{7}{10}$ of what Tim earns.

4 A drink is made from flour and sugar in the ratio 6 : 1.

Is this the same as saying the amount of sugar is $\frac{1}{6}$ of the amount of flour?

Explain your answer.

5 The length of a rectangle is 4 times its width.

The perimeter of the rectangle is 80 cm.

Work out the area of the rectangle.

6 Ann has 5 times as many marbles as Bob.

Cal has $\frac{2}{5}$ as many marbles as Ann.

They have 64 marbles altogether.

How many marbles does each person have?

Mr&Mrs MATHS

ANSWERS · REVISION MAT 4

Multiplicative relationships

1 (a) **3** times

(b) **1 : 3**

2 $63 \div 9 \times 4 = \mathbf{28}$

3 $\frac{350}{500} = \frac{\mathbf{7}}{\mathbf{10}}$ ✓

4 **Yes**. For every 6 parts of flour there is 1 part of sugar, so sugar = $\frac{1}{6}$ × flour.

5 Width w, length $4w$: $2(w + 4w) = 10w = 80$

$w = 8$ cm, length = 32 cm

Area = **256 cm^2**

6 Bob x, Ann $5x$, Cal $2x$

$8x = 64$, so $x = 8$

Bob **8**, Ann **40**, Cal **16**

Mr&Mrs MATHS