GCSE HIGHER · REVISION MAT 4

Ratio problems

1 Write 12 : 18 : 30 in its simplest form.

2 A map has scale 1 : 50 000.

What distance does 6 cm on the map represent?

3 Explain why 12 sweets cannot be shared exactly in the ratio 2 : 3.

4 Kim invests £4000 and Jo invests £6000.

They share a profit of £1500 in the ratio of their investments.

How much does Jo get?

5 Show that 45 minutes : 2 hours = 3 : 8.

6 Brass is copper : zinc = 13 : 7.

There is 2.6 kg of copper and 1.5 kg of zinc.

What is the most brass that can be made?

7 $x : y = 1 : 2$

Explain why y is 100% more than x.

8 A : B = 3 : 5.

When 10 is moved from B to A, the ratio becomes 1 : 1.

Find the total.

Mr&Mrs MATHS

ANSWERS · REVISION MAT 4

Ratio problems

1 **2 : 3 : 5**

2 6 × 50 000 = 300 000 cm

3 km

3 **There are 5 parts, and 12 is not a multiple of 5.**

4 4 : 6 = 2 : 3, 5 parts

£900

5 45 : 120

3 : 8

6 Copper: 1 part = 0.2 kg

Zinc needed 1.4 kg ✓

4 kg

7 ***y* = 2*x*, so *y* is *x* plus another 100% of *x*.**

8 $3x + 10 = 5x - 10$

$x = 10$

Total = 80

Mr&Mrs MATHS