GCSE FOUNDATION · REVISION MAT 2

Proportion and equal ratios

1 Find the missing numbers.

(a) 2 : 7 = 10 : ☐

(b) 6 : ☐ = 9 : 15

2 Squash and water are mixed in the ratio 1 : 4.

Tom uses 220 ml of water.

How much squash does he need?

3 Are the ratios 10 : 15 and 12 : 20 equivalent?
Explain your answer.

4 A photo is 15 cm wide and 10 cm tall.

It is enlarged so that the width is 24 cm.

Show that the new height is 16 cm.

5 Blue and white paint
are mixed in the ratio 3 : 4.

Kim has 2.4 litres of blue
and 2.8 litres of white paint.

What is the greatest amount
of mixed paint she can make?

6 A recipe for 10 cookies uses
200 g of flour and 150 g of butter.

Zak has 900 g of flour and 600 g of butter.

What is the greatest number
of cookies he can make?

Mr&Mrs MATHS

ANSWERS · REVISION MAT 2

Proportion and equal ratios

1 (a) **35**

(b) **10**

2 220 ÷ 4 × 1 = **55 ml**

3 10 : 15 = 2 : 3

12 : 20 = 3 : 5

No, they do not simplify to the same ratio.

4 Scale factor = 24 ÷ 15 = 1.6

10 × 1.6 = 16 cm ✓

5 Blue: 2.4 ÷ 3 = 0.8 per part

White: 2.8 ÷ 4 = 0.7 per part

White runs out first: 1 part = 0.7 litres

Total = 7 × 0.7 = **4.9 litres**

6 Flour allows 900 ÷ 200 × 10 = 45

Butter allows 600 ÷ 150 × 10 = 40

40 cookies