GCSE FOUNDATION · REVISION MAT 4

Simplifying ratios

1 Write each ratio in its simplest form.

(a) 48 : 72

(b) 30 : 75 : 45

2 Write 300 ml : 1.2 litres in its simplest form.

3 Oz writes 30 : 45 in its simplest form as 2 : 3.

Pat writes it as 6 : 9.

Who is right? Explain your answer.

4 Show that 3.5 : 2 can be written as 7 : 4

5 School A has 18 teachers and 360 students.

In school B, the ratio of
teachers to students is 1 : 22.

Which school has more students per teacher?

6 A bag has red and blue
counters in the ratio 4 : 7.

6 red counters are added.

The ratio is now 2 : 3.

How many counters were in the bag at the start?

1 (a) **2 : 3**

(b) **2 : 5 : 3**

2 Use the same units first.

1 : 4

3 **Oz**. 6 : 9 can still be divided by 3, so it is not in its simplest form.

ANSWERS · REVISION MAT 4

Simplifying ratios

4 Multiply both parts so there are no decimals, then simplify:

3.5 : 2 = 7 : 4 ✓

5 School A: 360 ÷ 18 = 20, so 1 : 20

School B has more students per teacher.

6 Red $4x$, blue $7x$

$3(4x + 6) = 2 \times 7x$ gives $x = 9$

Start: 36 red, 63 blue = **99**