GCSE HIGHER · REVISION MAT 3

Expressing one quantity as a fraction of another

1 Write 9 as a fraction of 24.

2 Write £1.20 as a fraction of £4.

3 Explain why you must use the same units before writing one quantity as a fraction of another.

4 180 students are in Year 11.

75 study French.

What fraction do not study French?

5 Show that 450 m as a fraction of 3 km is $\frac{3}{20}$.

6 A 2.4-litre jug contains 900 ml of juice.

What fraction of the jug is empty?

7 Show that 135° is $\frac{3}{8}$ of a full turn.

8 A circle fits exactly inside a square, touching all four sides.

What fraction of the square does the circle cover?

Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Expressing one quantity as a fraction of another

1 $\frac{3}{8}$

2 $\frac{120}{400}$

$\frac{3}{10}$

3 Otherwise the numbers do not compare like with like.

4 $\frac{105}{180}$

$\frac{7}{12}$

5 $\frac{450}{3000}$

$= \frac{3}{20}$

6 $\frac{1500}{2400}$

$\frac{5}{8}$

7 $\frac{135}{360}$

$= \frac{3}{8}$

8 Radius r, square side $2r$

$\frac{\pi r^2}{4r^2}$

$\frac{\pi}{4}$

Mr&Mrs MATHS