GCSE HIGHER · REVISION MAT 3

Calculating with fractions and decimals

1 Work out

$$1\frac{2}{3} \div \frac{5}{6}$$

2 Work out

$$7.2 \div 0.4$$

3 Show that

$$-12 \div (-3) + 2 \times (-5) = -6$$

4 Ali spends $\frac{1}{4}$ of his money on food and $\frac{2}{5}$ of the rest on travel.

He has £36 left.

How much did he start with?

5 Find the mistake.

$$\frac{2}{3} + \frac{1}{4} = \frac{3}{7}$$

6 A bottle holds 1.5 litres.

A glass holds 0.18 litres.

How many glasses can be filled completely?

7 Show that

$$(1 - \frac{1}{2})(1 - \frac{1}{3})(1 - \frac{1}{4}) = \frac{1}{4}$$

8 $\frac{3}{5}$ of a class are girls.

$\frac{2}{3}$ of the girls and $\frac{1}{4}$ of the boys walk to school.

What fraction of the class walks?

Mr&Mrs MATHS

ANSWERS · REVISION MAT 3

Calculating with fractions and decimals

1 $\frac{5}{3} \times \frac{6}{5}$

2

2 $72 \div 4$

18

3 $4 + (-10)$

= –6

4 Left: $\frac{3}{5} \times \frac{3}{4} = \frac{9}{20}$

$\frac{9}{20}$ of total = £36

£80

5 Numerators and denominators were added.

$\frac{8}{12} + \frac{3}{12} = \frac{11}{12}$

6 $1.5 \div 0.18 = 8.33...$

8 glasses

7 $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4}$

$= \frac{1}{4}$

8 $\frac{3}{5} \times \frac{2}{3} = \frac{2}{5}$

$\frac{2}{5} \times \frac{1}{4} = \frac{1}{10}$

$\frac{1}{2}$

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