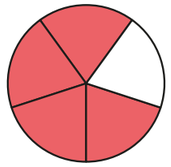
Divide a fraction by an integer

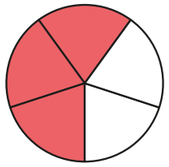
1 Use the diagrams to help complete the calculations.

a)



$\frac{4}{5} \div 4 =$ ☐

b)



$\frac{3}{5} \div 3 =$ ☐

c)



$\frac{6}{7} \div 2 =$ ☐

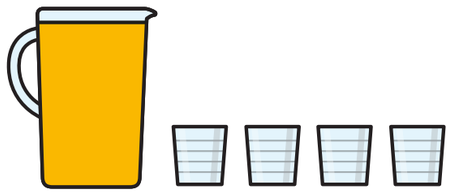
d)



$\frac{6}{7} \div 3 =$ ☐

2 Huan shares $\frac{8}{10}$ of a litre of juice equally between 4 glasses.

How much juice is there in each glass?



☐ litres

3 Complete the divisions.

a)

☐ $= \frac{4}{5} \div 2$

☐ $= \frac{4}{10} \div 4$

☐ $= \frac{4}{20} \div 4$

☐ $= \frac{2}{10} \div 2$

b)

$\frac{12}{25} \div$ ☐ $= \frac{4}{25}$

$\frac{12}{25} \div$ ☐ $= \frac{3}{25}$

$\frac{12}{25} \div$ ☐ $= \frac{2}{25}$

$\frac{\square}{25} \div 6 = \frac{4}{25}$

4 Each set of scales is balanced.

a) Work out the mass of one book.



☐ kg

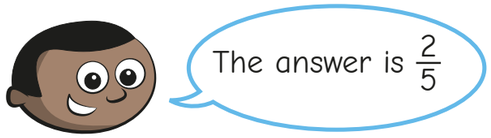
b) Work out the mass of one cup.



☐ kg

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5 Mo works out $\frac{10}{25} \div 5$



a) What mistake has Mo made?

b) Draw diagrams to show why Mo is wrong.

Talk about your answer with a partner.

6 Complete the calculations. Give your answers in their simplest form.

a) $\frac{4}{10} \div 2 = \frac{\square}{10} = \frac{\square}{5}$

b) $\frac{10}{15} \div 2 = \frac{\square}{15} = \square$

c) $\frac{20}{45} \div 4 = \square = \square$

d) $\frac{18}{45} \div 2 = \square = \square$

e) $\frac{24}{56} \div 3 = \square = \square$

f) $\square = \square = \frac{21}{56} \div 3$

7 **a)** Complete the calculation.

$$\frac{6}{8} \div \square = \frac{1}{4}$$

b) Find the missing numbers to make this division correct.

$$\frac{24}{\square} \div \square = \frac{1}{20}$$

8 ♥ is a whole number.

● is a fraction.

$$\frac{10}{♥} \div 2 = \frac{1}{2} \times ●$$

a) Find values for ♥ and ●.

♥ = $\square$ ● = $\square$

b) What do you notice? Explain using diagrams or words.

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