

1.

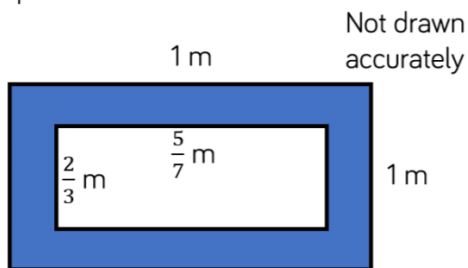
How many ways can you complete the missing digits?

$$\begin{array}{c} \text{purple spider} \\ \hline \end{array} \times \begin{array}{c} 3 \\ \hline \end{array} = \begin{array}{c} 6 \\ \hline 12 \end{array}$$

$$= \begin{array}{c} \text{green spider} \\ \hline 2 \end{array}$$

2.

Find the area of the shaded part of the shape.



3.

Alex says,



$\frac{1}{4} \times \frac{1}{2}$ is the same as $\frac{1}{2}$ of a quarter.

Do you agree?

Explain why.

4.

Complete the missing integers.

$$\frac{15}{16} \div \square = \frac{5}{16}$$

$$\frac{15}{16} \div \square = \frac{3}{16}$$

$$\frac{20}{23} \div \square = \frac{4}{23}$$

$$\frac{20}{23} \div \square = \frac{5}{23}$$

5.

Rosie walks for $\frac{3}{4}$ of an hour over 3 days.

She walks for the same amount of time each day.

How many minutes does Rosie walk each day?

6.

Alex says,



I can only divide a fraction by an integer if the numerator is a multiple of the divisor.

Do you agree?
Explain why.

7.

Calculate the missing fractions and integers.

$$\square \div 4 = \frac{7}{36}$$

$$\frac{3}{20} \div \square = \frac{3}{80}$$

$$\square \div \square = \frac{2}{5}$$

Is there more than one possibility?

8.

Jack has one quarter of a bag of sweets and Whitney has two thirds of a bag of sweets. They combined their sweets and shared them equally between themselves and Rosie.
What fraction of the sweets does each child receive?

9.

Add two sets of brackets to make the following calculation correct:

$$\frac{1}{2} + \frac{1}{4} \times 8 + \frac{1}{6} \div 3 = 6\frac{1}{18}$$

Explain where the brackets go and why.
Did you find any difficulties?

10.

Match each calculation to the correct answer.

$$\left(\frac{2}{3} + \frac{2}{9}\right) \div 4$$

$$\frac{5}{9}$$

$$\frac{2}{3} - \frac{1}{3} \div 3$$

$$\frac{2}{9}$$

$$\frac{1}{3} \times 2 - \left(1\frac{1}{9} \div 2\right)$$

$$\frac{1}{9}$$

11.

Two fashion designers receive $\frac{3}{8}$ of 208 metres of material.

One of them says:

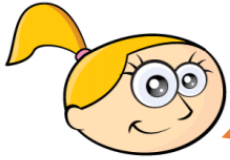


We each receive 26 m

Is she correct?
Explain your reasoning.

12.

Eva lit a candle while she had a bath.
After her bath, $\frac{2}{5}$ of the candle was left.
It measured 13 cm.
Eva says:

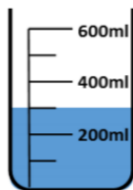


Before my bath
the candle
measured 33 cm

Is she correct?
Explain your reasoning.

13.

Rosie and Jack are making juice.
They use $\frac{6}{7}$ of the water in a jug and are
left with this amount of water:



To work out how much
we had originally, we
should divide 300 by 6
then multiply by 7



No, we know that
300ml is $\frac{1}{7}$ so we need
to multiply it by 7

Who is correct?
Explain your reasoning.