Four rules with fractions

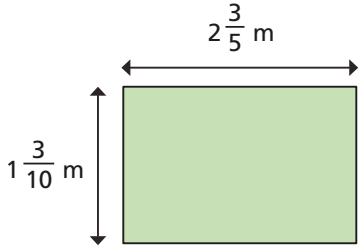
1 Work out the missing total.

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

Show all the steps in your working.

Explain your method to a partner.

2 Work out the perimeter of the rectangle.



Explain your method to your partner.

Did you work it out in the same way?

3 Complete the calculations.

a) $\left(\frac{2}{3}+\frac{2}{3}\right)\times 3$ b) $\left(\frac{2}{3}+\frac{2}{3}\right)\div 3$ c) $\frac{2}{3}+\frac{2}{3}\times 3$ d) $\frac{2}{3}+\frac{2}{3}\div 3$

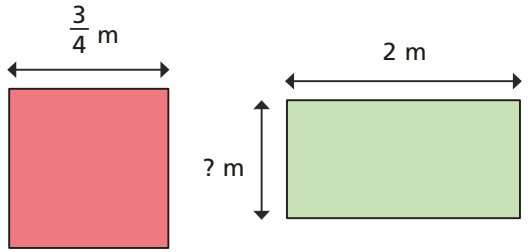
4 Jack mixes $\frac{2}{3}$ of a litre of orange juice and $\frac{3}{4}$ of a litre of apple juice.

He pours the juice into 5 glasses equally.

How much juice is in each glass?

5 The area of these two shapes are equal.

Find the height of the rectangle.



6 In a class, $\frac{2}{3}$ of the pupils are boys.

$\frac{1}{4}$ of the girls wear glasses and $\frac{1}{6}$ of the boys wear glasses.

Do more boys or girls wear glasses?

Explain your reasoning.

7 Work out the calculation.

$\left(1\frac{3}{5}-\frac{7}{10}\right)^2$

8 Use what you know about working with fractions to explain, prove or disprove the following statements.

a) Half of a half of a half is an eighth.

b) Quarter of a half plus half of a quarter is a quarter.

9

1	2	5	6	8

$\frac{\square}{\square}\times\square+\frac{\square}{\square}$

Explore the different totals you can make using each card once only.