Four rules with fractions

1 Work out the missing total.
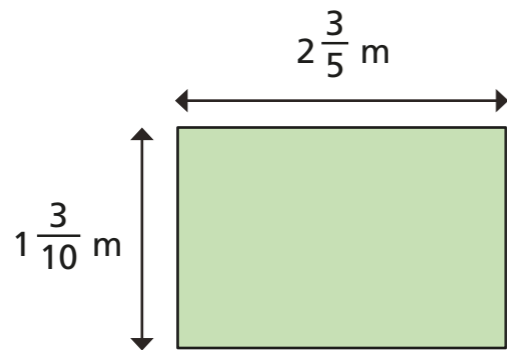
$\frac{2}{3}$	$\frac{2}{3}$	$\frac{2}{3}$	$\frac{2}{3}$	$2\frac{1}{3}$

Show all the steps in your working.

Explain your method to a partner.

2 Work out the perimeter of the rectangle.

$2\frac{3}{5}$ m

$1\frac{3}{10}$ m

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 = $
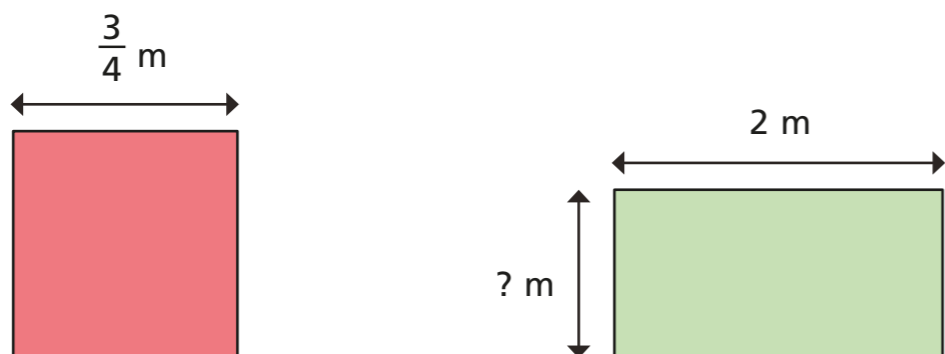
d) $\frac{2}{3} + \frac{2}{3} \div 3 = $

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.

$\frac{3}{4}$ m

2 m

? m

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.

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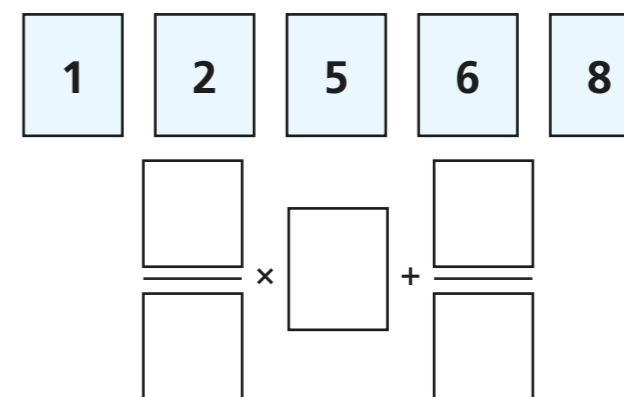_____

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 |

$$\frac{\Box}{\Box} \times \Box + \frac{\Box}{\Box}$$

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