NUMBER

Adding and subtracting fractions

1 **a** How many sixths are there in $2\frac{5}{6}$? _____

b How many sixths are there in $1\frac{2}{3}$? _____

2 **a** Convert $\frac{15}{4}$ to a mixed number. _____

b Convert $2\frac{6}{7}$ to a top-heavy fraction. _____

3 Work out the following.

a $\frac{1}{3} + \frac{2}{5}$ _____

b $\frac{3}{5} - \frac{1}{4}$ _____

c $\frac{3}{8} + \frac{3}{5}$ _____

d $\frac{7}{8} - \frac{2}{3}$ _____

4 Work out the following.

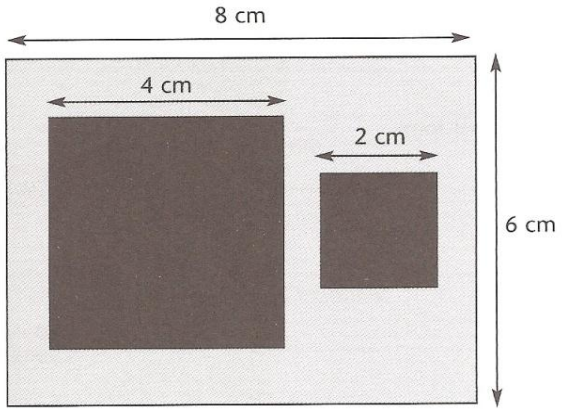
a $2\frac{1}{4} + 3\frac{1}{5}$ _____

b $3\frac{2}{5} + 1\frac{1}{8}$ _____

c $4\frac{1}{5} - 3\frac{3}{4}$ _____

d $2\frac{3}{4} - 1\frac{1}{3}$ _____

5 The diagram shows a grey rectangle that is 8 cm by 6 cm. Two black squares, one 4 cm by 4 cm and the other 2 cm by 2 cm, are drawn inside it.



a What fraction of the rectangle is shaded black?

_____

b What fraction of the rectangle is shaded grey?

_____

6 Work out the following.

a $\left(\frac{2}{5}\right)^2$ _____

b $\sqrt{\frac{4}{49}}$ _____

c $\sqrt{\frac{4}{9}} \times \left(\frac{3}{5}\right)^2$ _____

NUMBER

Multiplying and dividing fractions

1 What is $\frac{3}{4} \times \frac{1}{6}$ in its simplest form?

_____

2 Work out $\frac{1}{8} \div \frac{5}{6}$. Give the answer in its simplest form.

_____

3 How many $\frac{1}{5}$ are in $2\frac{2}{5}$?

_____

4 **a** Convert $\frac{21}{5}$ to a mixed number. _____

b Convert $3\frac{1}{6}$ to a top-heavy fraction. _____

5 Work out the following.

a $\frac{1}{9} \times \frac{3}{5}$ _____

b $\frac{3}{10} \div \frac{6}{25}$ _____

c $\frac{3}{5} \times \frac{10}{21}$ _____

d $\frac{4}{9} \div \frac{2}{3}$ _____

6 Work out the following.

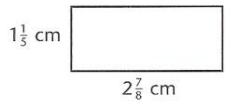
a $2\frac{1}{4} \times 1\frac{1}{5}$ _____

b $2\frac{3}{4} \div 4\frac{1}{8}$ _____

c $3\frac{2}{3} \times 2\frac{1}{4}$ _____

d $1\frac{7}{8} \div 2\frac{1}{12}$ _____

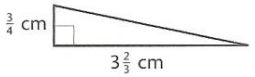
7 Work out the area of this rectangle.



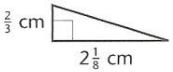
_____ cm²

8 Work out the areas of these triangles.

a _____ cm²



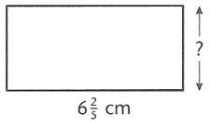
b _____ cm²



9 How many $2\frac{1}{5}$ metre strips of tape can be cut from a roll of tape that is 66 metres long?

_____

10 This rectangle has an area of 8 cm².
Work out the width.



_____ cm