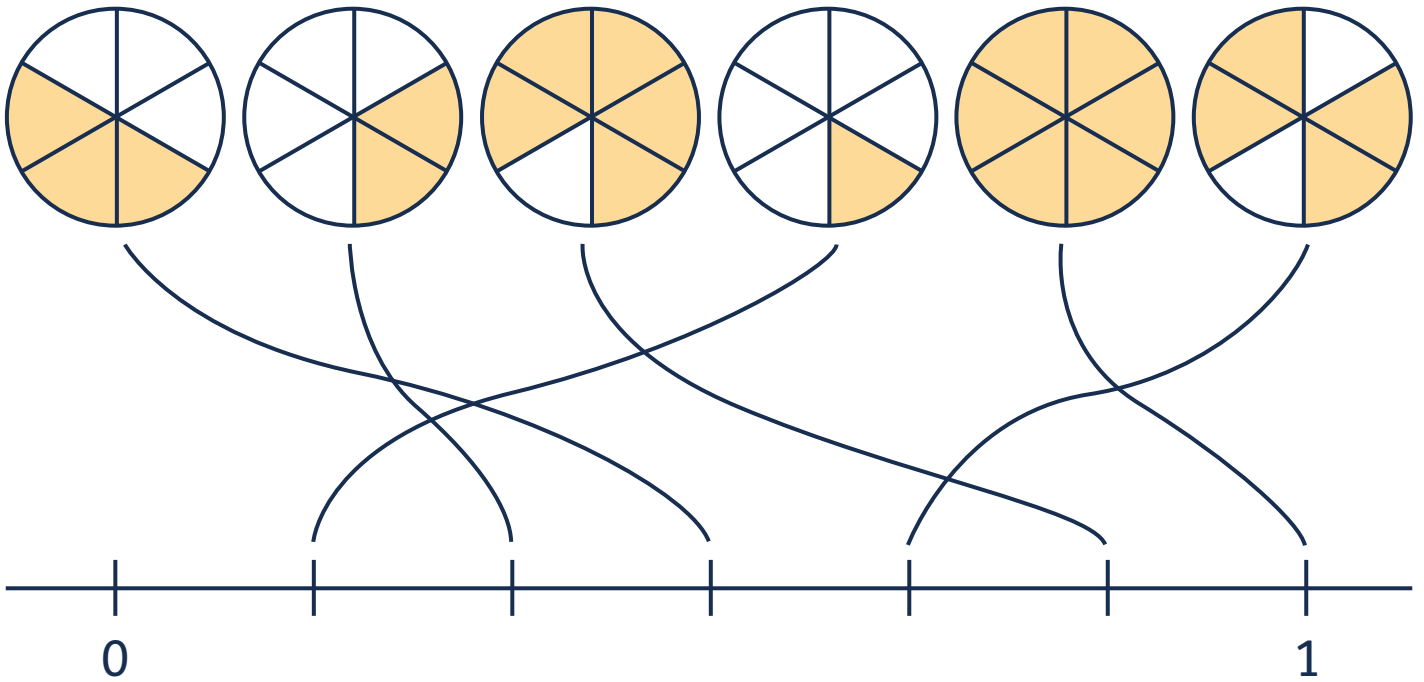


# Fractions

Answer sheet

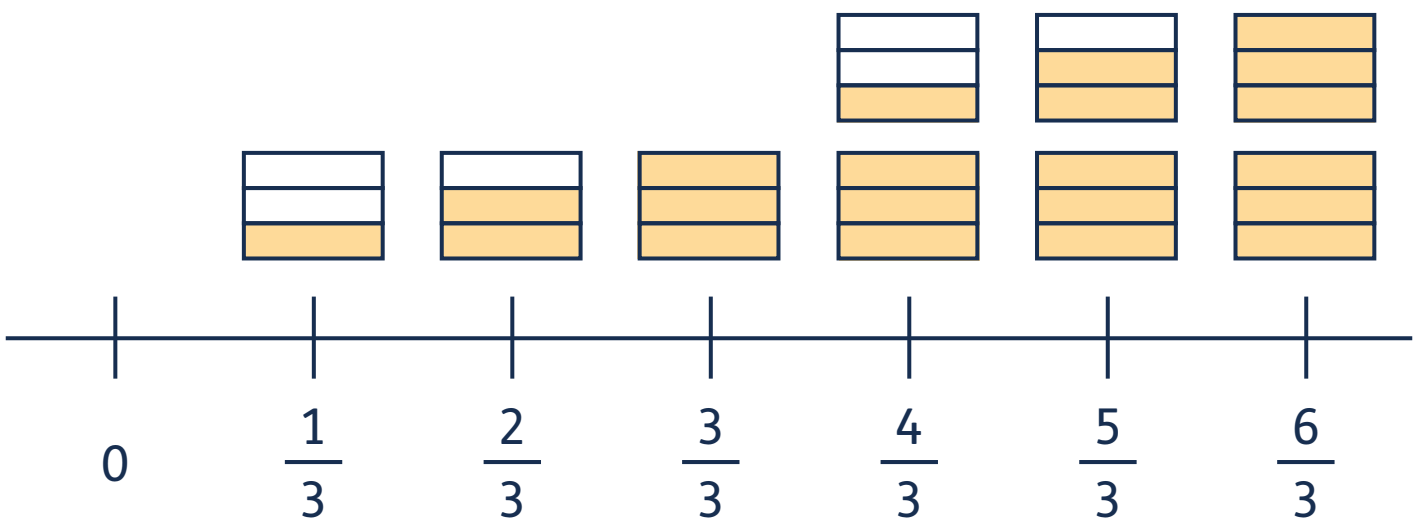
## Question 1

Can you position these shapes on the number line?



## Question 2

Can you shade these shapes on this number line?

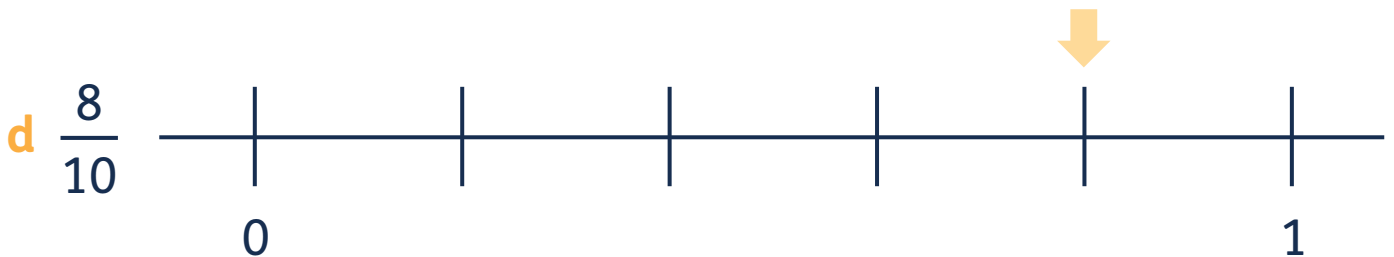
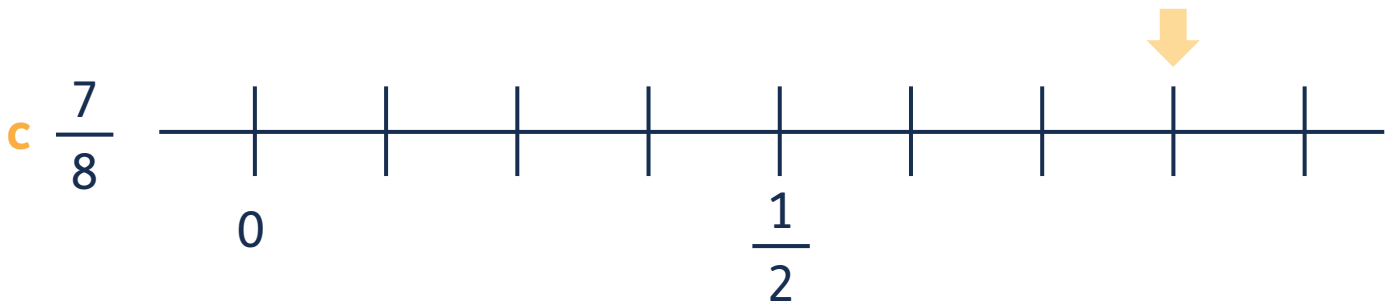
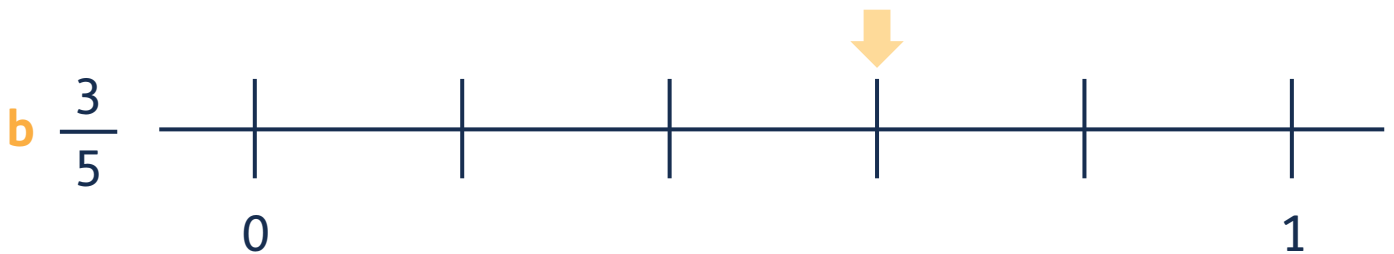


# Fractions

Answer sheet

## Question 3

Draw an arrow to show where these fractions should be placed on the number lines. The first one has been done for you.

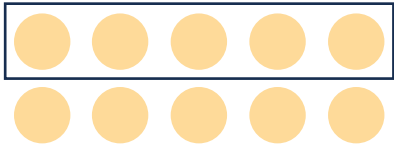


# Fractions

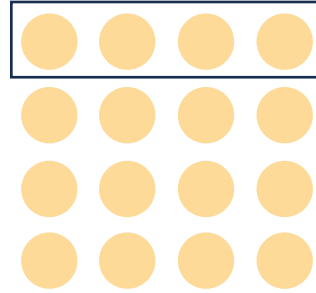
Answer sheet

## Question 4

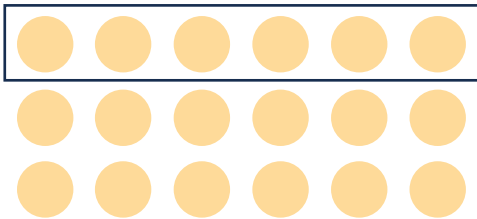
a Circle  $\frac{1}{2}$  of the counters



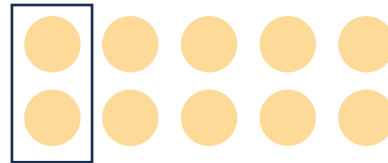
b Circle  $\frac{1}{4}$  of the counters



c Circle  $\frac{1}{3}$  of the counters



d Circle  $\frac{1}{5}$  of the counters



## Question 5

Can you complete these calculations? Use the working out space to draw some arrays to help you answer these questions.

a What is  $\frac{1}{3}$  of 18?

b What is  $\frac{1}{4}$  of 36?

c What is  $\frac{1}{2}$  of 24?

d What is  $\frac{1}{5}$  of 15?

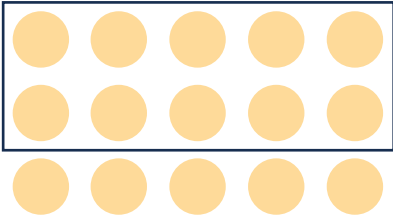


# Fractions

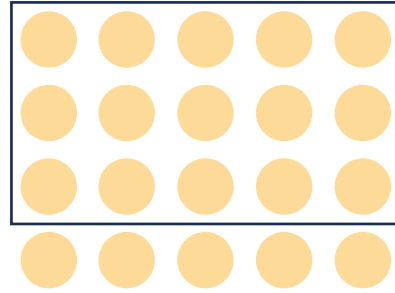
Answer sheet

## Question 6

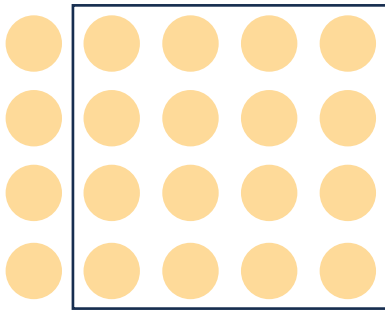
a Circle  $\frac{2}{3}$  of the counters



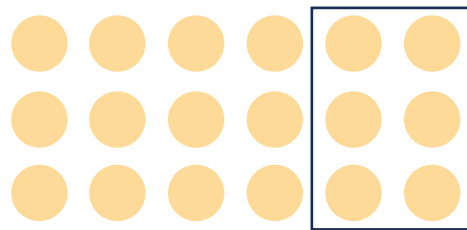
b Circle  $\frac{3}{4}$  of the counters



c Circle  $\frac{4}{5}$  of the counters



d Circle  $\frac{2}{6}$  of the counters



## Question 7

Can you complete these calculations?

a  $\frac{2}{3}$  of 21 =

b  $\frac{3}{4}$  of 40 =

c  of 36 = 27

d  $\frac{2}{3}$  of 24 = 16

e  $\frac{2}{5}$  of  = 12

f  $\frac{2}{3}$  of  = 8



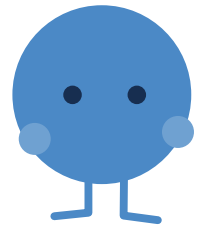
# Fractions

Answer sheet

## Question 8

Can you solve these word problems?

A pet shop has sold 35 fish today. 20 were goldfish, the rest were clownfish. What fraction of the sales were clownfish?

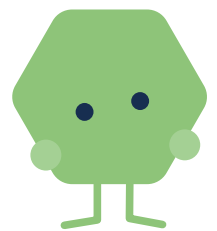


If  $\frac{20}{35}$  of the fish were goldfish, then  $\frac{15}{35}$  were clownfish

$$\frac{15}{35} = \frac{3}{7}$$

$\frac{3}{7}$  of the fish were clownfish

At lunch, the school canteen sold 18 cheese sandwiches and 6 egg sandwiches. What fraction of the total sales were cheese sandwiches?



In total, the canteen sold  $18 + 6 = 24$  sandwiches.

$$\frac{18}{24} = \frac{3}{4}$$

$\frac{3}{4}$  of the total were cheese sandwiches.



# Fractions

Answer sheet

## Question 1

Calculate these fraction additions:

$$\text{a } \frac{7}{10} + \frac{5}{10} = \boxed{1} \frac{\boxed{2}}{\boxed{10}}$$

$$\text{b } \frac{4}{8} + \frac{3}{8} = \frac{\boxed{7}}{\boxed{8}}$$

$$\text{c } \frac{\boxed{1}}{\boxed{2}} + \frac{2}{2} = 1 \frac{1}{2}$$

$$\text{d } \frac{4}{5} + \frac{\boxed{3}}{\boxed{5}} = 1 \frac{2}{5}$$

$$\text{e } \frac{3}{6} + \frac{4}{6} = \boxed{1} \frac{\boxed{1}}{\boxed{6}}$$

$$\text{f } \frac{1}{3} + \frac{1}{3} = \frac{\boxed{2}}{\boxed{3}}$$

$$\text{g } \frac{5}{7} + \frac{4}{7} = \boxed{1} \frac{\boxed{2}}{\boxed{7}}$$

$$\text{h } \frac{\boxed{3}}{\boxed{4}} + \frac{2}{4} = 1 \frac{1}{4}$$



# Fractions

Answer sheet

## Question 2

Calculate these fraction subtractions:

$$\mathbf{a} \quad 3 - \frac{5}{10} = \boxed{2} \frac{\boxed{5}}{\boxed{10}}$$

$$\mathbf{b} \quad 7 - \frac{\boxed{3}}{\boxed{8}} = 6 \frac{5}{8}$$

$$\mathbf{c} \quad \frac{2}{3} - \frac{1}{3} = \frac{\boxed{1}}{\boxed{3}}$$

$$\mathbf{d} \quad 15 - \frac{\boxed{4}}{\boxed{5}} = 14 \frac{1}{5}$$

$$\mathbf{e} \quad 6 - \frac{4}{6} = \boxed{5} \frac{\boxed{2}}{\boxed{6}}$$

$$\mathbf{f} \quad \boxed{1} - \frac{2}{12} = \frac{10}{12}$$

$$\mathbf{g} \quad \frac{6}{7} - \frac{4}{7} = \frac{\boxed{2}}{\boxed{7}}$$

$$\mathbf{h} \quad \boxed{5} - \frac{8}{9} = 4 \frac{1}{9}$$

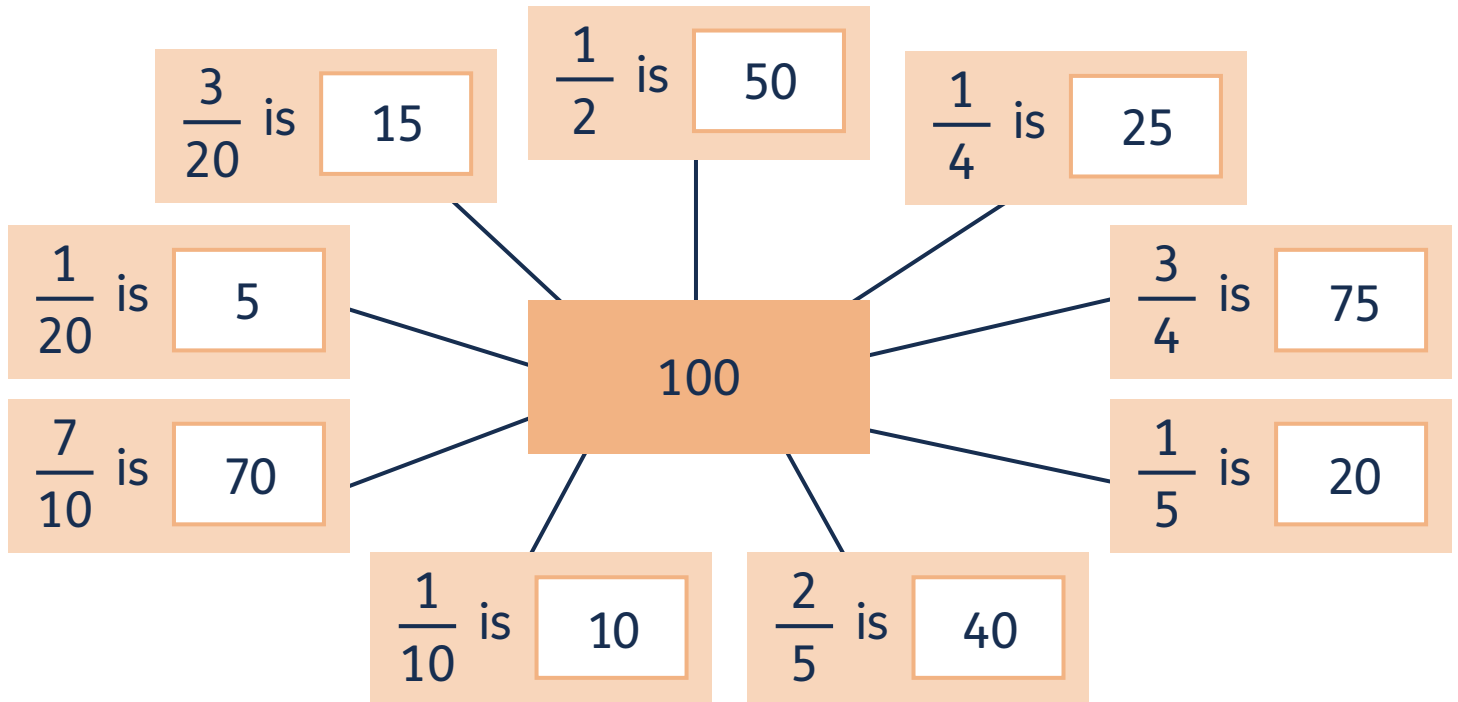


# Fractions

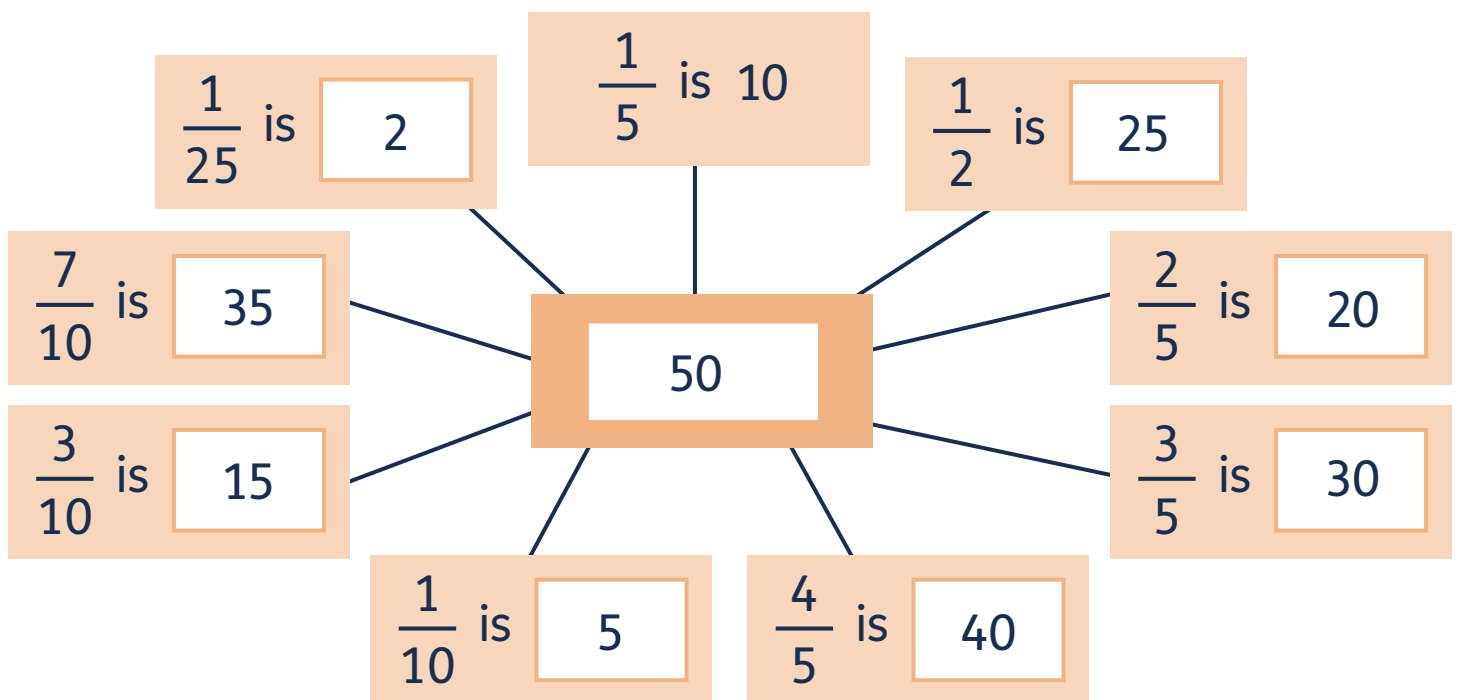
Answer sheet

## Question 3

Divide 100 into the given fractions.



## Question 4

If  $\frac{1}{5}$  is 10, work out the other amounts.



# Fractions

Answer sheet

## Question 5

Find the following amounts

a  $\frac{2}{3}$  of 27 =

b  $\frac{3}{5}$  of 50 =

c  $\frac{5}{6}$  of 36 =

d  $\frac{6}{7}$  of 14 =

e  $\frac{7}{9}$  of 27 =

f  $\frac{7}{10}$  of 90 =

g  $\frac{2}{3}$  of 21 =

h  $\frac{4}{5}$  of 20 =

i  $\frac{5}{6}$  of 18 =

j  $\frac{6}{7}$  of 28 =

k  $\frac{5}{9}$  of 27 =

l  $\frac{3}{10}$  of 30 =



# Fractions

Answer sheet

## Question 6

Kimmy and Jonathan have a bake sale at school.

Kimmy made 30 cakes.  $\frac{1}{3}$  are strawberry flavour,  $\frac{1}{2}$  are vanilla and the rest are chocolate.

Jonathan made 50 cookies,  $\frac{2}{5}$  have Smarties,  $\frac{4}{10}$  are toffee and the rest are plain.

**a** How many strawberry cakes are there?

10

**b** How many plain cookies are there?

10

**c** As a fraction, how many chocolate cakes are there?

1

---

6

**d** Marissa came to the bake sale and wanted to buy all the Smartie cookies and strawberry cakes to share with her class. How many cookies and cakes did she buy altogether?

30

**e** If there are 25 children in the class, what fraction of what she bought would be left over? Can you show this in the simplest fraction?

1

---

6



# Fractions

Answer sheet

## Question 1

Work out these multiplication questions. You can use the space below to help.

$$\mathbf{a} \quad 2 \times \frac{8}{9} = \frac{\boxed{16}}{\boxed{9}} = \boxed{1} \frac{\boxed{7}}{\boxed{9}}$$

$$\mathbf{b} \quad 8 \times \frac{4}{5} = \frac{\boxed{32}}{\boxed{5}} = \boxed{6} \frac{\boxed{2}}{\boxed{5}}$$

$$\mathbf{c} \quad 6 \times \frac{5}{7} = \frac{\boxed{30}}{\boxed{7}} = \boxed{4} \frac{\boxed{2}}{\boxed{7}}$$

$$\mathbf{d} \quad 5 \times \frac{2}{4} = \frac{\boxed{10}}{\boxed{4}} = \boxed{2} \frac{\boxed{2}}{\boxed{4}}$$

$$\mathbf{e} \quad \frac{1}{4} \times 7 = \frac{\boxed{7}}{\boxed{4}} = \boxed{1} \frac{\boxed{3}}{\boxed{4}}$$

$$\mathbf{f} \quad \frac{2}{7} \times 9 = \frac{\boxed{18}}{\boxed{7}} = \boxed{2} \frac{\boxed{4}}{\boxed{7}}$$

$$\mathbf{g} \quad \frac{3}{5} \times 3 = \frac{\boxed{9}}{\boxed{5}} = \boxed{1} \frac{\boxed{4}}{\boxed{5}}$$

$$\mathbf{h} \quad \frac{3}{5} \times 4 = \frac{\boxed{12}}{\boxed{5}} = \boxed{2} \frac{\boxed{2}}{\boxed{5}}$$



# Fractions

Answer sheet

## Question 2

Work out these multiplication questions:

$$\mathbf{a} \quad \frac{9}{7} \times 3 = \boxed{3} \frac{\boxed{6}}{\boxed{7}}$$

$$\mathbf{b} \quad \frac{17}{3} \times \boxed{4} = 22 \frac{2}{3}$$

$$\mathbf{c} \quad \frac{5}{3} \times 7 = \boxed{11} \frac{\boxed{2}}{\boxed{3}}$$

$$\mathbf{d} \quad \frac{6}{5} \times 2 = \boxed{2} \frac{\boxed{2}}{\boxed{5}}$$

$$\mathbf{e} \quad \frac{9}{4} \times 1 = \boxed{2} \frac{\boxed{1}}{\boxed{4}}$$

$$\mathbf{f} \quad \frac{11}{7} \times 6 = \boxed{9} \frac{\boxed{3}}{\boxed{7}}$$

$$\mathbf{g} \quad \frac{13}{12} \times 3 = \boxed{3} \frac{\boxed{3}}{\boxed{12}}$$

$$\mathbf{h} \quad \frac{7}{6} \times 7 = \boxed{8} \frac{\boxed{1}}{\boxed{6}}$$

$$\mathbf{i} \quad \frac{\boxed{18}}{\boxed{10}} \times 11 = 19 \frac{8}{10}$$

$$\mathbf{j} \quad \frac{12}{5} \times \boxed{8} = 19 \frac{1}{5}$$

$$\mathbf{k} \quad \frac{5}{3} \times 17 = \boxed{28} \frac{\boxed{1}}{\boxed{3}}$$

$$\mathbf{l} \quad \frac{4}{3} \times 8 = \boxed{10} \frac{\boxed{2}}{\boxed{3}}$$



# Fractions

## Answer sheet

### Question 3

Can you solve these mixed number calculations? Use the space below to help.

$$\mathbf{a} \quad 2 \frac{7}{8} \times 4 = \boxed{11} \frac{\boxed{4}}{\boxed{8}}$$

$$\mathbf{b} \quad 3 \frac{7}{16} \times \boxed{2} = 6 \frac{14}{16}$$

$$\mathbf{c} \quad 3 \frac{2}{5} \times 3 = \boxed{10} \frac{\boxed{1}}{\boxed{5}}$$

$$\mathbf{d} \quad \boxed{5} \frac{\boxed{3}}{\boxed{4}} \times 2 = 11 \frac{2}{4}$$

$$\mathbf{e} \quad 3 \frac{4}{8} \times \boxed{7} = 24 \frac{4}{8}$$

$$\mathbf{f} \quad 6 \frac{1}{2} \times 3 = \boxed{19} \frac{\boxed{1}}{\boxed{2}}$$



# Fractions

Answer sheet

## Question 4

Can you solve these word problems?

Use the working out space below to help.

- a** A trifle recipe requires  $2\frac{1}{5}$  cups of sugar. A chocolate cake recipe requires twice as much sugar. How many cups of sugar go into the cake?

$$\begin{array}{r} \boxed{22} \\ \hline \boxed{5} \end{array} \text{ cups}$$

- b** A man runs  $2\frac{1}{4}$  kilometres. The next day he runs three times this distance. How far did he run on the second day?

$$\begin{array}{r} \boxed{27} \\ \hline \boxed{4} \end{array} \text{ kilometres}$$

- c** Ava used  $6\frac{3}{5}$  boxes of nails to build a cupboard. How many boxes will Ava need to build 4 cupboards?

$$\begin{array}{r} \boxed{26} \quad \boxed{2} \\ \hline \boxed{5} \end{array} \text{ boxes}$$

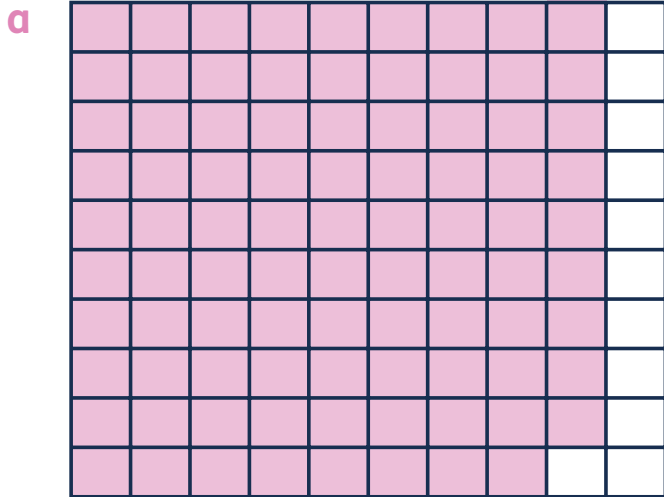


# Fractions, decimals and percentages

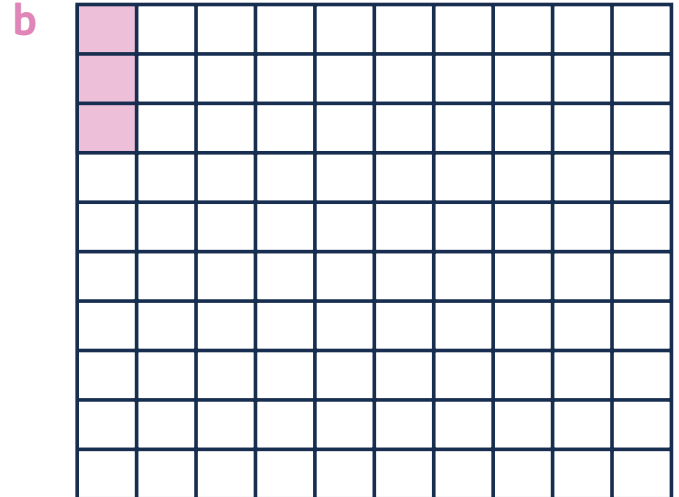
Answer sheet

## Question 1

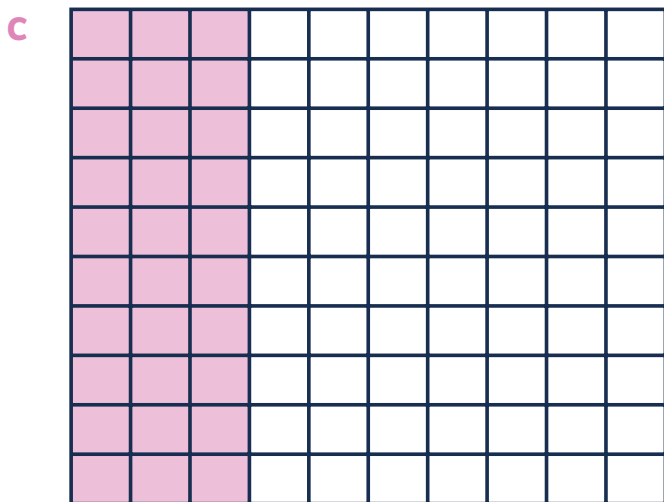
Can you write these fractions as a percentage?



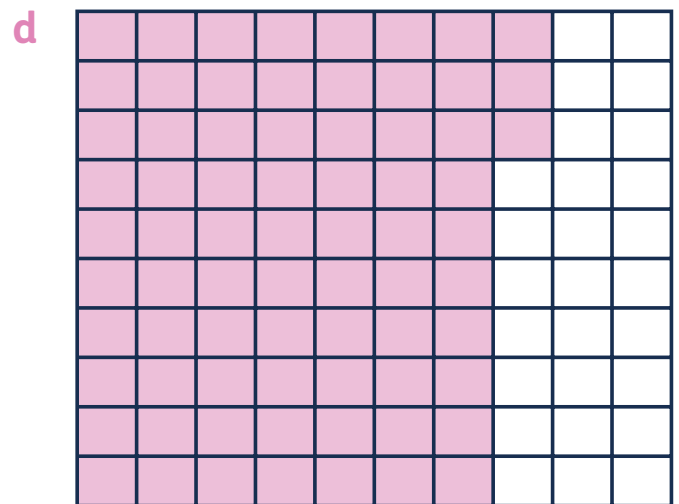
$$\frac{89}{100} = 89 \text{ out of } 100 = 89\%$$



$$\frac{3}{100} = 3 \text{ out of } 100 = 3\%$$



$$\frac{30}{100} = 30 \text{ out of } 100 = 30\%$$

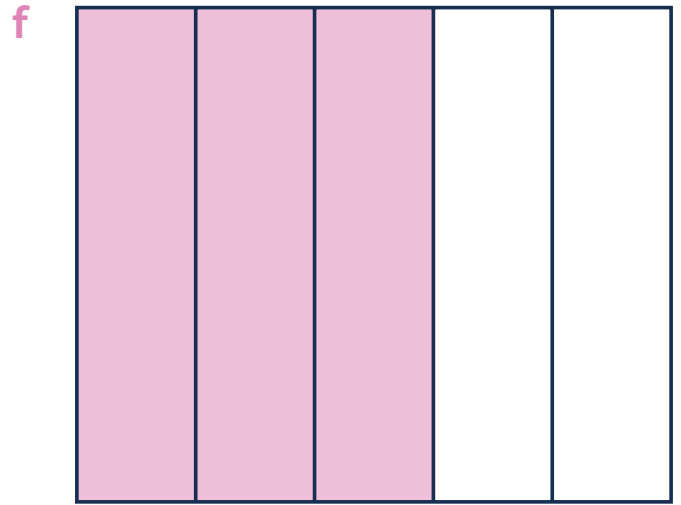
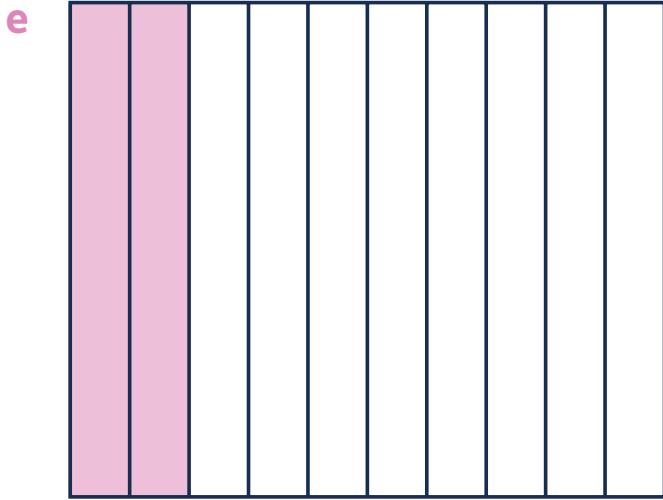


$$\frac{73}{100} = 73 \text{ out of } 100 = 73\%$$



# Fractions, decimals and percentages

Answer sheet



$$\frac{3}{10} = \frac{30}{100} = 30 \text{ out of } 100 = 30\%$$

$$\frac{3}{5} = \frac{60}{100} = 60 \text{ out of } 100 = 60\%$$

## Question 2

Can you complete these calculations?

**a**  $\frac{6}{100} = 6\%$

**b**  $\frac{7}{10} = \frac{70}{100} = 70\%$

**c**  $\frac{1}{10} = \frac{10}{100} = 10\%$

**d**  $\frac{3}{4} = \frac{75}{100} = 75\%$

**e**  $\frac{2}{5} = \frac{40}{100} = 40\%$

**f**  $\frac{1}{2} = \frac{50}{100} = 50\%$

**g**  $\frac{43}{50} = \frac{86}{100} = 86\%$

**h**  $\frac{1}{5} = \frac{20}{100} = 20\%$

**i**  $\frac{2}{25} = \frac{8}{100} = 8\%$



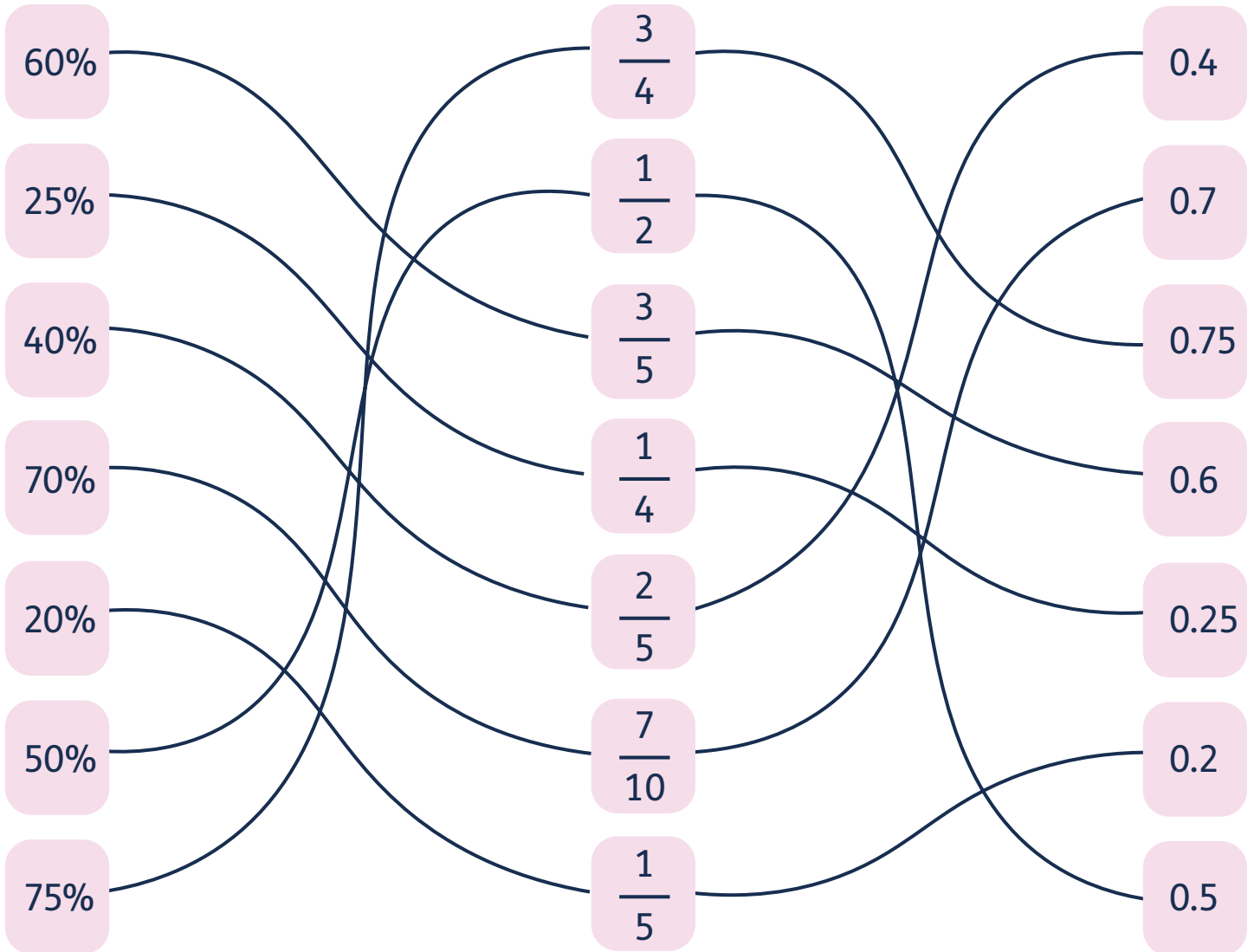


# Fractions, decimals and percentages

Answer sheet

## Question 3

Can you match the equivalent fractions, decimals and percentages?



## Question 4

Can you complete these number sentences?

$$\text{a } 0.64 = \frac{64}{100} = 64\% \quad \text{b } 0.3 = \frac{30}{100} = 30\% \quad \text{c } 0.9 = \frac{90}{100} = 90\%$$

$$\text{d } 0.37 = \frac{37}{100} = 37\% \quad \text{e } 0.97 = \frac{97}{100} = 97\% \quad \text{f } 0.07 = \frac{7}{100} = 7\%$$



# Fractions, decimals and percentages

Answer sheet

## Question 5

Can you order these fractions, decimals and percentages?

a  $0.83$        $\frac{4}{5}$        $81\%$

$$0.83 > 81\% > \frac{4}{5}$$

b  $\frac{3}{4}$        $0.7$        $72\%$

$$0.7 < 72\% < \frac{3}{4}$$

c  $24\%$        $0.26$        $\frac{1}{4}$

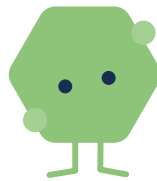
$$24\% < \frac{1}{4} < 0.26$$

d  $6\%$        $\frac{2}{25}$        $0.6$

$$0.6 > \frac{2}{25} > 6\%$$

## Question 6

Can you help solve this problem?



$$\text{Maths} = 25\%, \text{English} = \frac{2}{5}, \text{History} = ?$$

$$\text{English} = \frac{2}{5} = 40\%$$

$$\text{History} = 100\% - 40\% - 25\% = 35\%$$

$$\text{English (40\%)} > \text{History (35\%)} > \text{Maths (25\%)}$$

In a survey, 25% of children said Maths was their favourite subject.  $\frac{2}{5}$  said English was their favourite subject. All the other children said History was their favourite subject.

Can you order the subjects from most popular to least popular?



# Fractions, decimals and percentages

Answer sheet

## Question 7

Can you find these percentages of amounts?

a 50% of 40 =     b 25% of 320 =     c 10% of 150 =

d 10% of 26 =     e 20% of 26 =

## Question 8

Calculate the missing percentages of the number in the middle.

