Unit fractions

1 Complete the sentences for each shape.
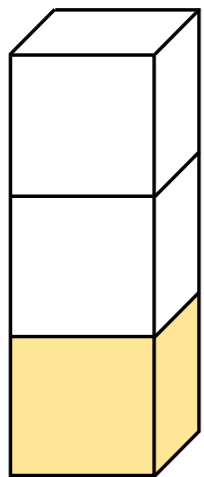
a)
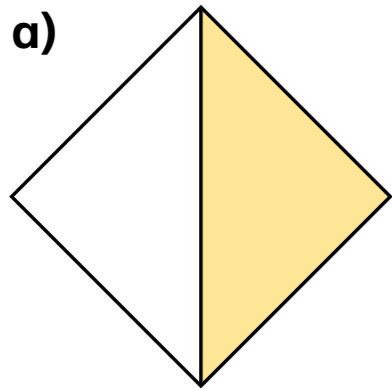
There are ☐ **2** equal parts.

There is ☐ **1** part shaded.

$\frac{1}{2}$ is shaded.

b)
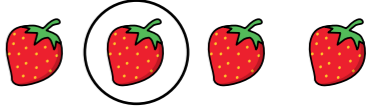
There are ☐ **3** equal parts.

There is ☐ **1** part shaded.

$\frac{1}{3}$ is shaded.

2 There are ☐ **4** equal parts. 🍓 🍓 🍓 🍓

There is ☐ **1** part circled.
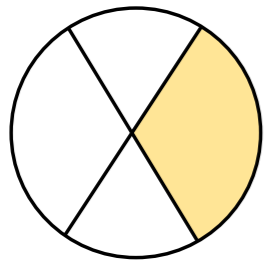
$\frac{1}{4}$ is circled.

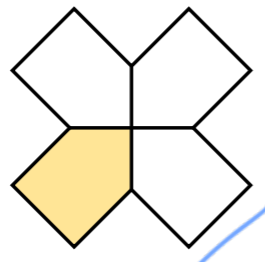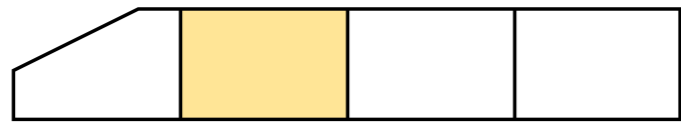**3** Tick the shape that has $\frac{1}{2}$ shaded.

☑ ☐ ☐
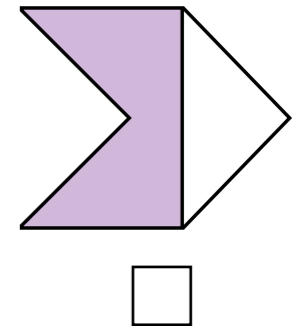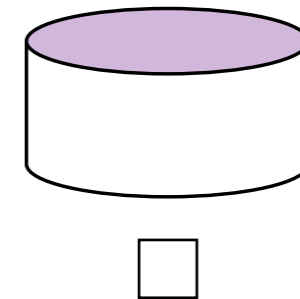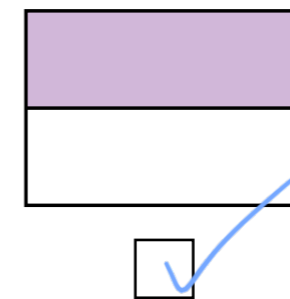
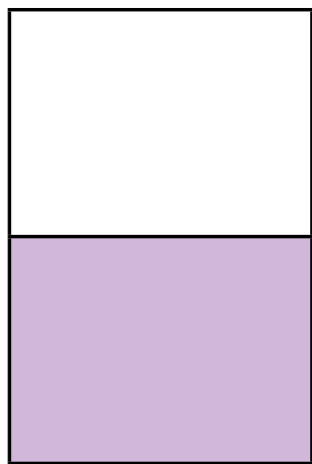**4** Tick the shape that has $\frac{1}{3}$ shaded.

☐ ☐

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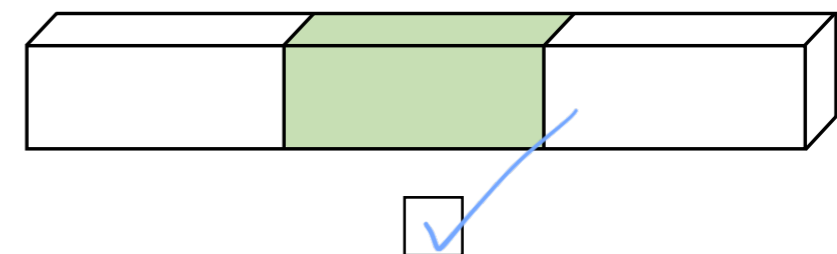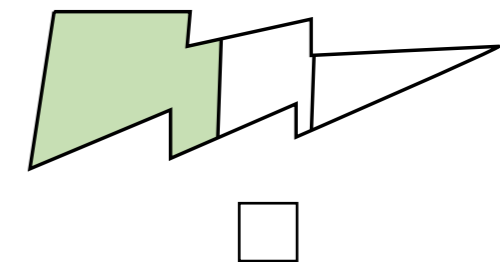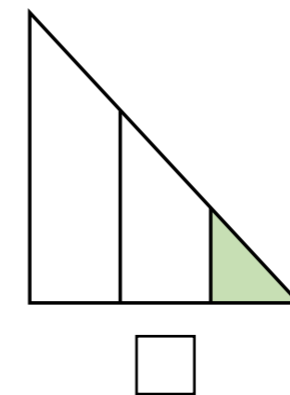
5 Tick the shapes that have $\frac{1}{4}$ shaded.

☐   ☑

☐

6 What fraction of each shape is shaded?

$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$

What is the same about the fractions?

What is different about them?

7 Here are some fractions.

$\frac{1}{2}$ ✓ $\frac{2}{3}$ $\frac{3}{4}$ $\frac{1}{4}$ ✓ $\frac{1}{3}$ ✓

Tick all the unit fractions.

Compare answers with a partner.

Can you think of any more unit fractions?

8 Match the objects to the unit fractions.

$\frac{1}{2}$

$\frac{1}{3}$

$\frac{1}{4}$

$\frac{1}{5}$
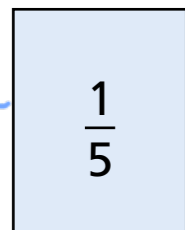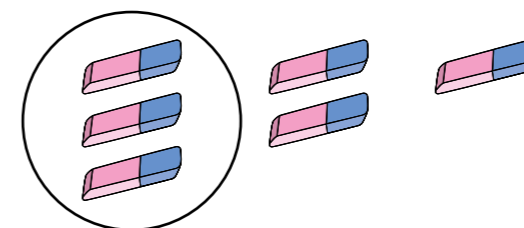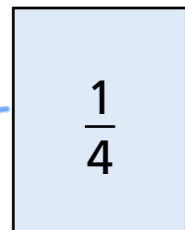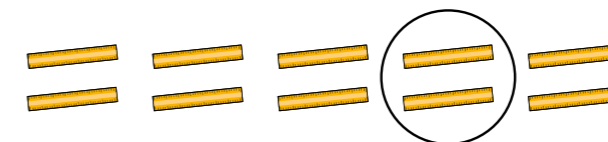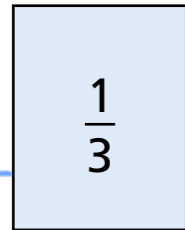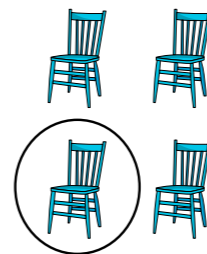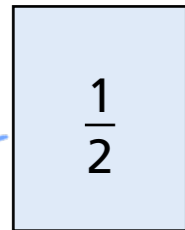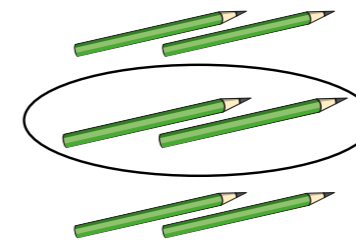
Non-unit fractions

1 Complete the sentences.
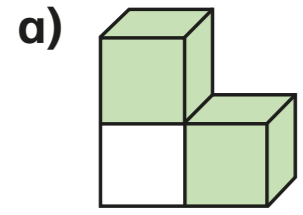
a)
There are 3 equal parts.

There are 2 parts shaded.

$\frac{2}{3}$ is shaded.

b)
There are 4 equal parts.
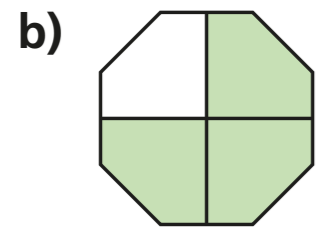
There are 3 parts shaded.

$\frac{3}{4}$ is shaded.
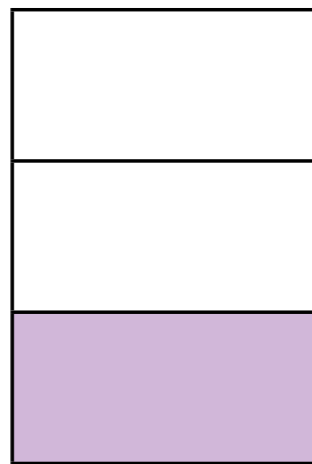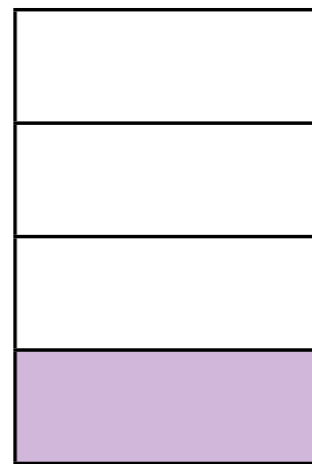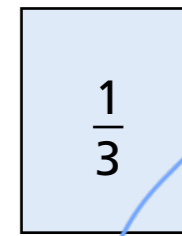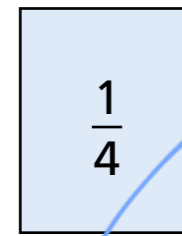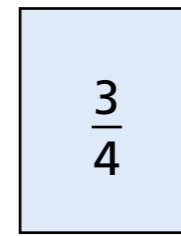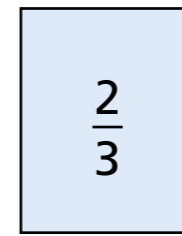
c)
There are 3 equal parts.

There are 3 parts shaded.

$\frac{3}{3}$ is shaded.

2 What fraction of each shape is shaded?

a)

$\frac{1}{3}$

$\frac{2}{3}$

$\frac{3}{3}$

b)

$\frac{1}{4}$

$\frac{2}{4}$

$\frac{3}{4}$

$\frac{4}{4}$
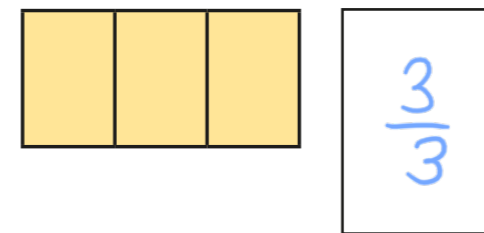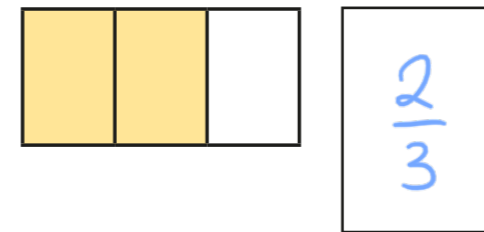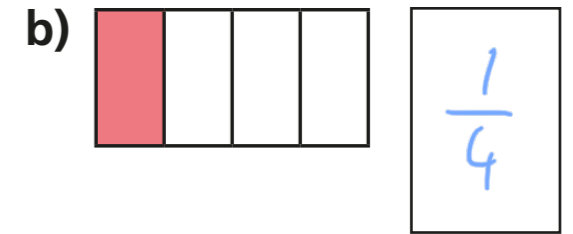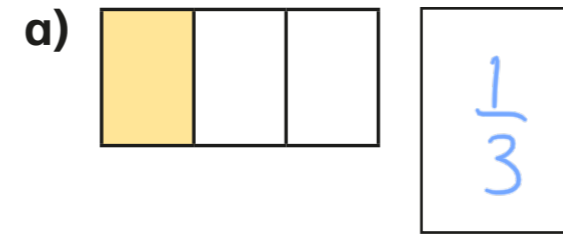
3 Colour $\frac{2}{3}$ of each shape.
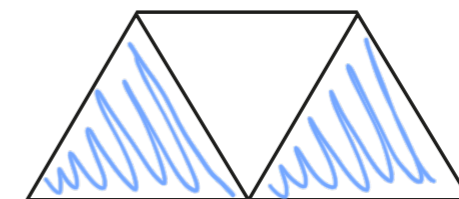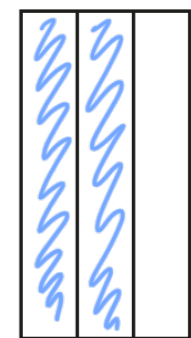
4 Colour $\frac{3}{4}$ of each shape.
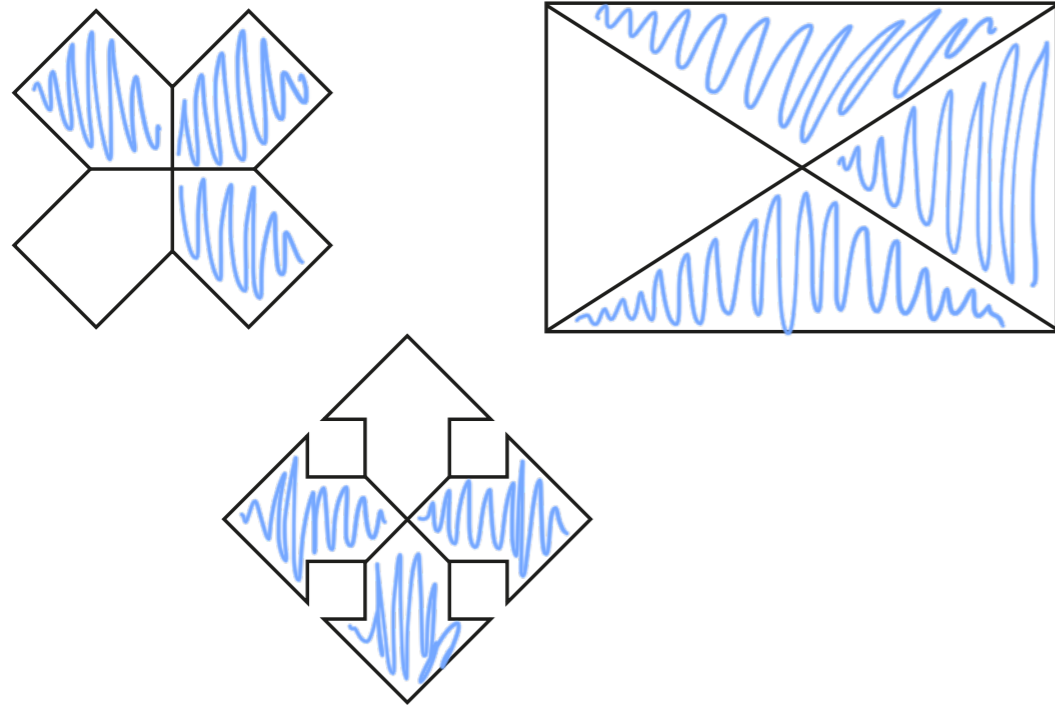
5 A shape has 3 equal parts.

a) What fraction is shaded if there are 2 parts shaded?

$\frac{2}{3}$ is shaded.

b) What fraction is shaded if there are 3 parts shaded?

$\frac{3}{3}$ is shaded.

6 Write the fractions in the table.

$\frac{1}{3}$ $\frac{3}{4}$ $\frac{1}{2}$ $\frac{1}{4}$ $\frac{2}{3}$
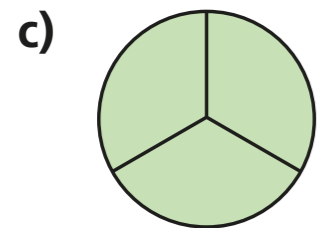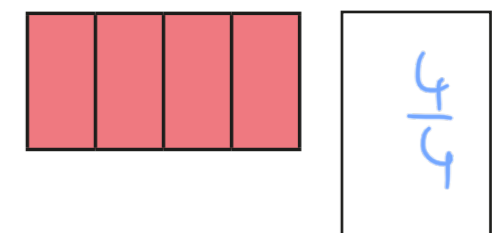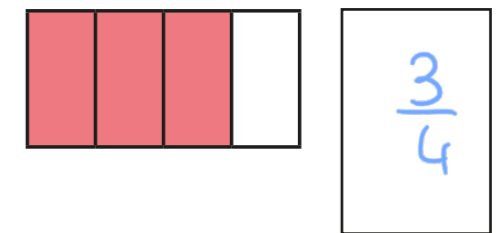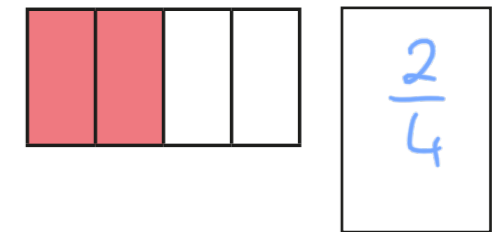
Unit fractions	Non-unit fractions
$\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{4}$	$\frac{3}{4}$ $\frac{2}{3}$

7 Fill in the boxes to give a unit fraction and a non-unit fraction.

unit fraction $\frac{1}{5}$ non-unit fraction $\frac{2}{5}$

Work with a partner.

Find other examples of unit fractions and non-unit fractions.

Write five examples of each.

e.g.
unit fractions: $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{6}$ $\frac{1}{7}$

non-unit fractions: $\frac{2}{7}$ $\frac{3}{11}$ $\frac{4}{100}$ $\frac{5}{17}$ $\frac{6}{99}$

Find a half

1 Here are 6 counters.

a) Share the counters into 2 equal groups.

Group 1	Group 2
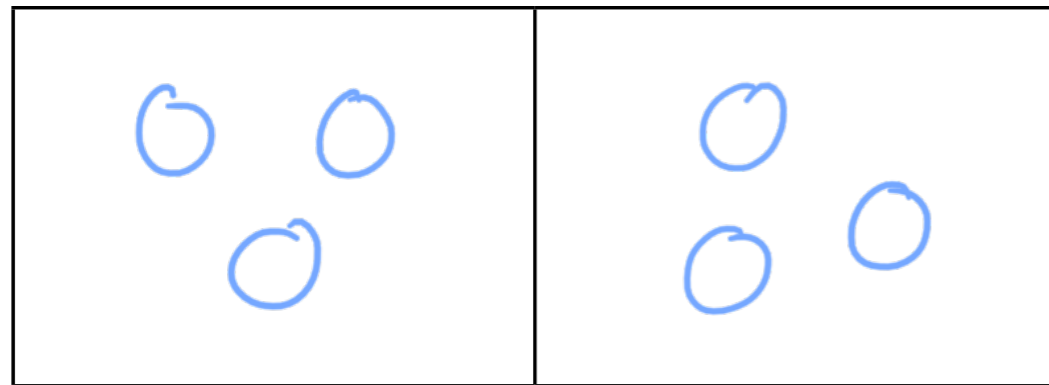
b) Complete the sentences.

There are 6 counters.

The counters are shared equally between

2 groups.

There are 3 counters in each group.

$\frac{1}{2}$ of 6 is equal to 3

2 Use counters.

a) Can you share 10 counters into 2 equal groups? _Yes_

b) Can you share 11 counters into 2 equal groups? _No_

Talk about it with a partner.

3 Mo and Eva have 12 tennis balls.

Share the tennis balls equally between Mo and Eva.

Mo	Eva

4 Find $\frac{1}{2}$ of each number.

Use the arrays to help you.

a)

$\frac{1}{2}$ of 10 = **5**

b)

$\frac{1}{2}$ of 16 = **8**

c)

$\frac{1}{2}$ of 20 = **10**

5 Ron has run 20 m.

Start **Finish**
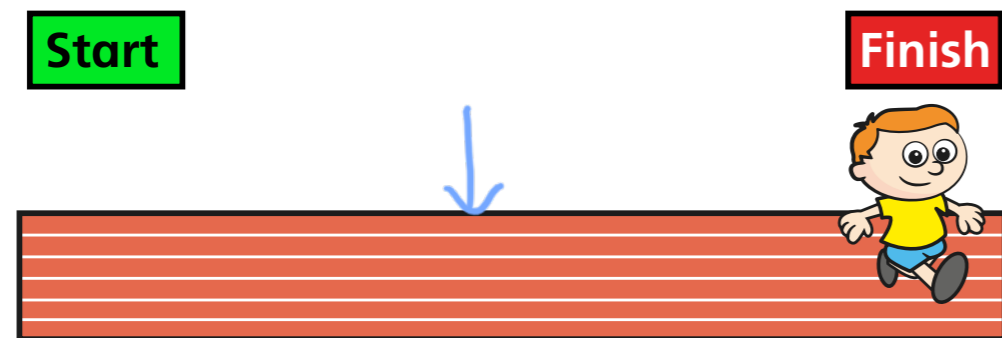
Rosie has run half that distance.

a) Draw an arrow on the running track to show where Rosie is.

a) How far has Rosie run? **10** m

6 Here are half of Annie's sweets.
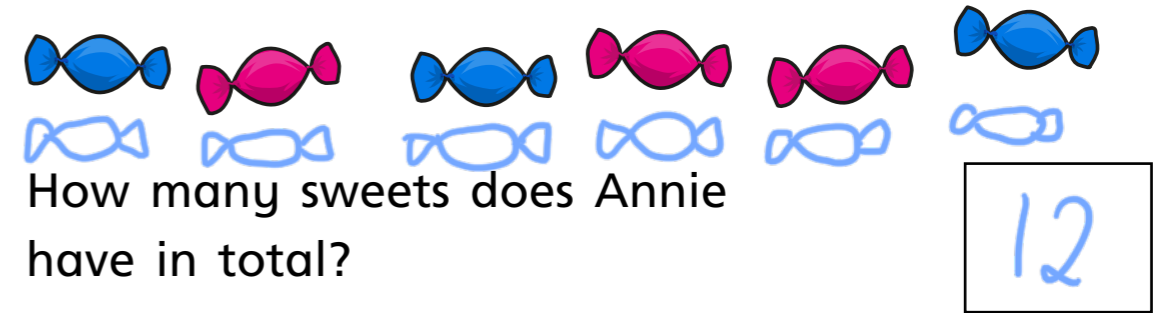
How many sweets does Annie have in total? **12**

Compare answers with a partner.

7 Colour $\frac{1}{2}$ of each shape.

Use the shapes to help you complete the number sentences.

a)

$\frac{1}{2}$ of **24** = **12**

b)

$\frac{1}{2}$ of **18** = **9**

8 Complete the number sentences.
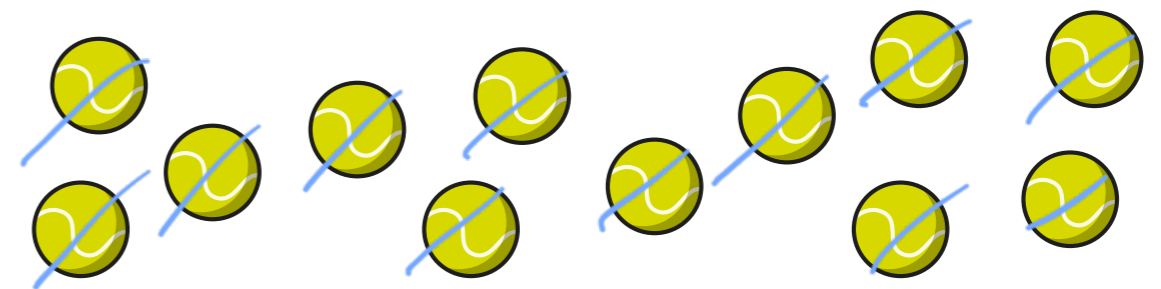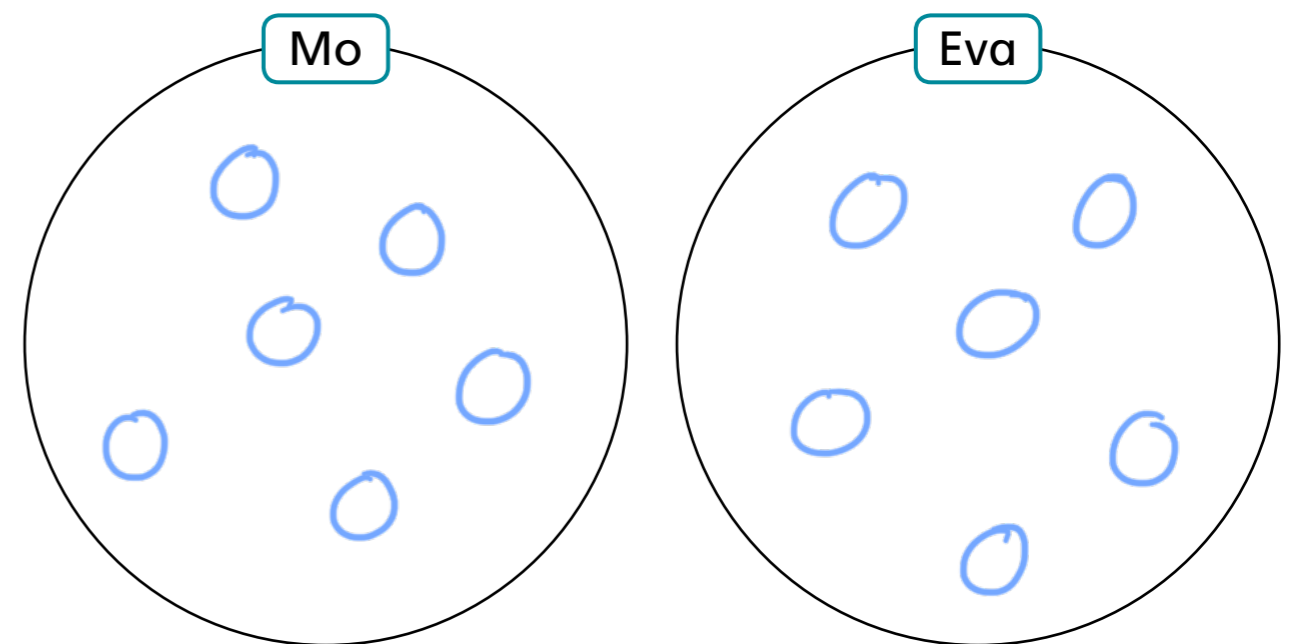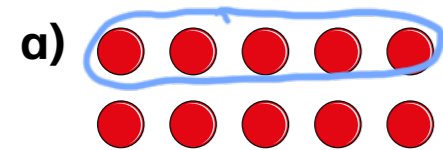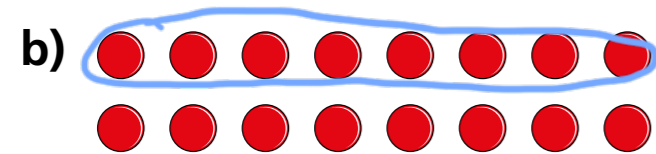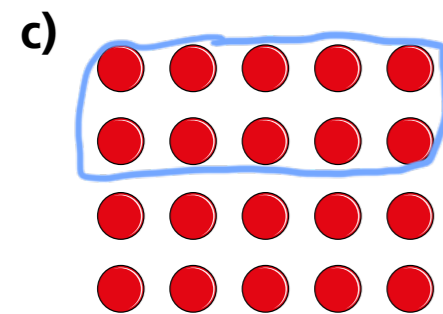
$\frac{1}{2}$ of **20** = 10

$\frac{1}{2}$ of **14** = 7

Find a quarter

1 Here are 8 counters.
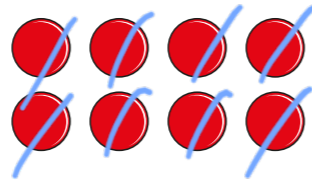
a) Share the counters equally into 4 groups.

b) Complete the sentences.

8 counters are shared equally
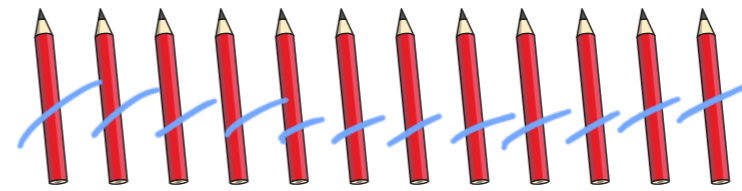
between **4** groups.

There are **2** counters in each group.

c) What is $\frac{1}{4}$ of 8? **2**
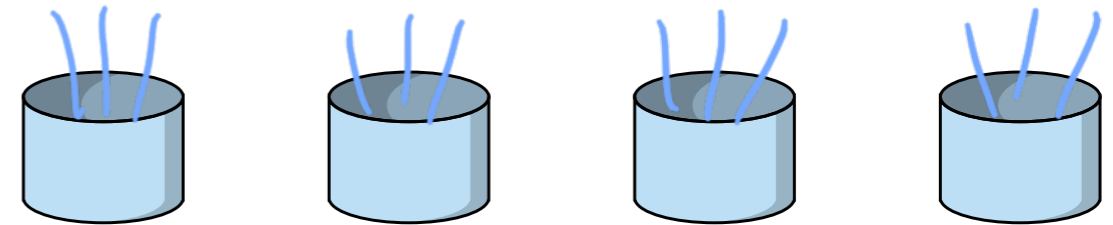
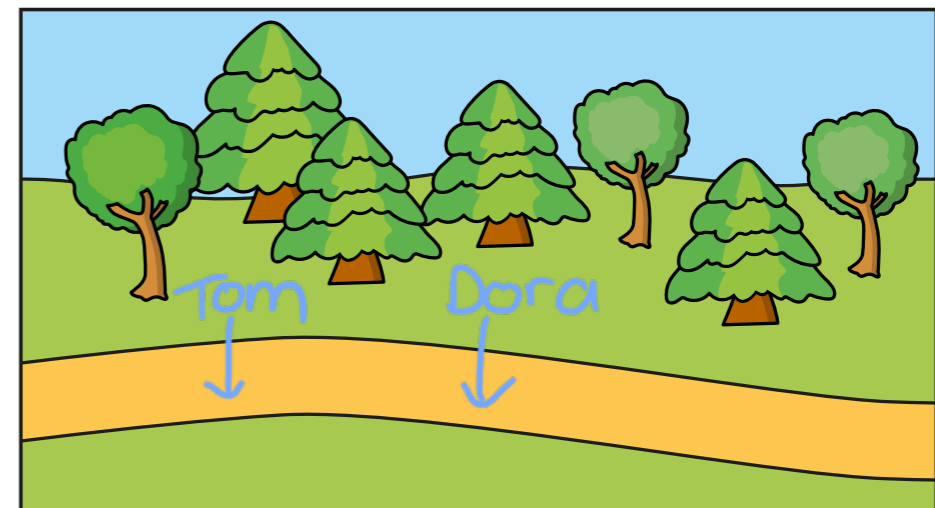How did you work this out?

2 There are 12 pencils.

a) Share them equally between 4 pencil pots.

b) What is $\frac{1}{4}$ of 12? **3**

3 Tom and Dora are walking along a path.
By midday Dora has walked halfway.
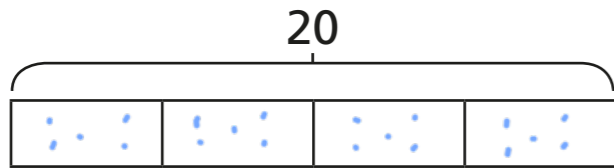Tom has walked a quarter of the way.

a) Draw an arrow to show where Dora is.

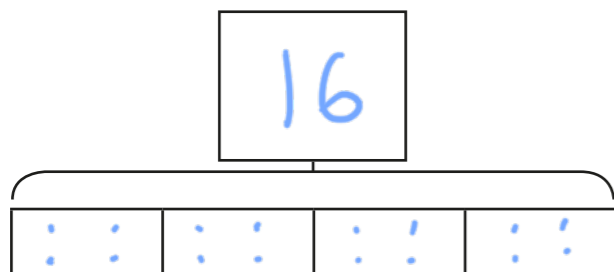b) Draw an arrow to show where Tom is.

4 Use the bar models to help you work out a quarter.
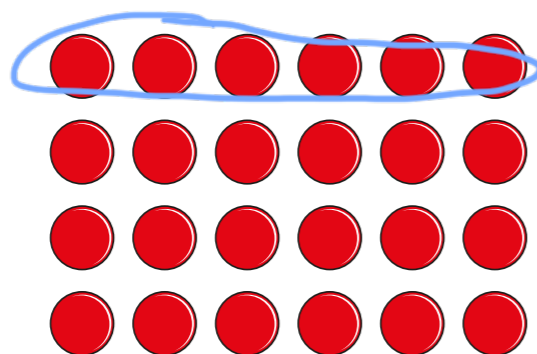
a) Work out $\frac{1}{4}$ of 20

20

$\frac{1}{4}$ of 20 = 5

b) Work out $\frac{1}{4}$ of 16

16
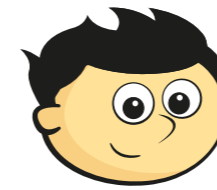
$\frac{1}{4}$ of 16 = 4

5 Show that $\frac{1}{4}$ of 24 is 6

6
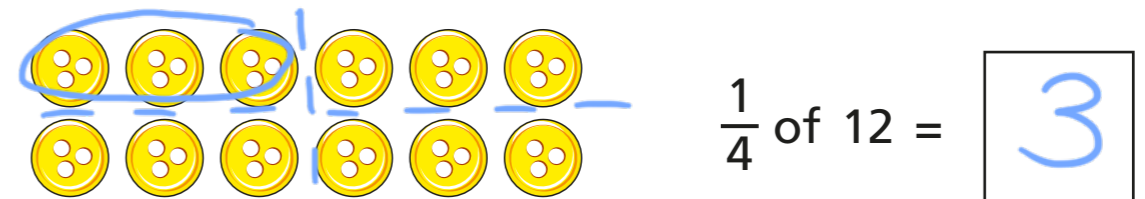
I can find a quarter by halving a number and halving again.
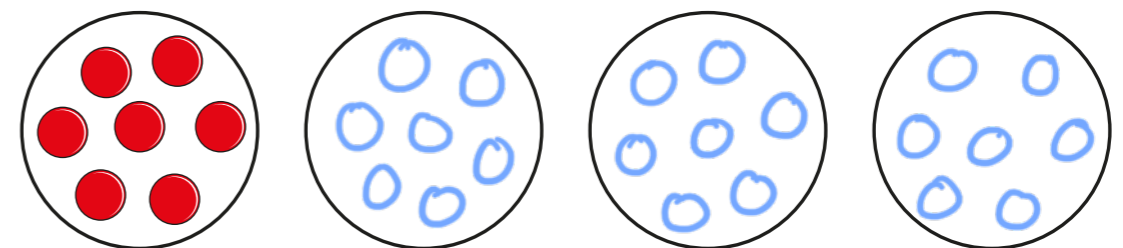
Use this method to find $\frac{1}{4}$ of 12

$\frac{1}{4}$ of 12 = 3

7 Complete the table.

Number	$\frac{1}{2}$ of Number	$\frac{1}{4}$ of Number
8	4	2
20	10	5
24	12	6

8 $\frac{1}{4}$ of a number is 7

What is the number?

The number is 28