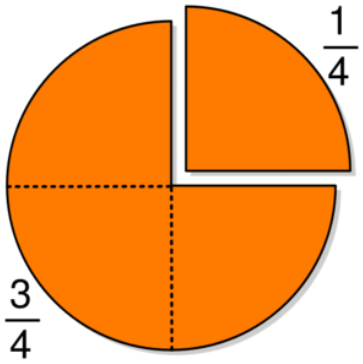
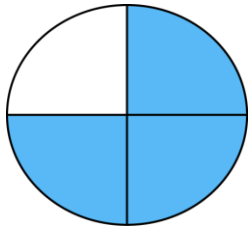
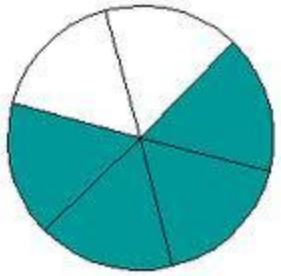


4/3



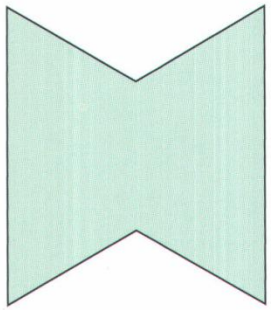
Exploring Fractions

1/5

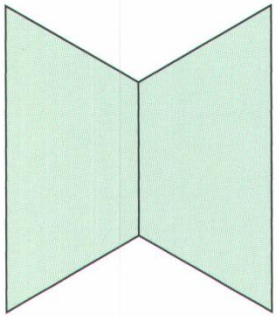


Exploring Equal Parts

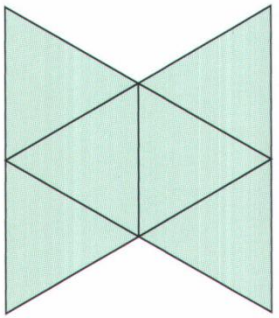
➤ This figure is **1 whole**.



Here are some ways to divide the figure into equal parts.
You can name equal parts with **fractions**.



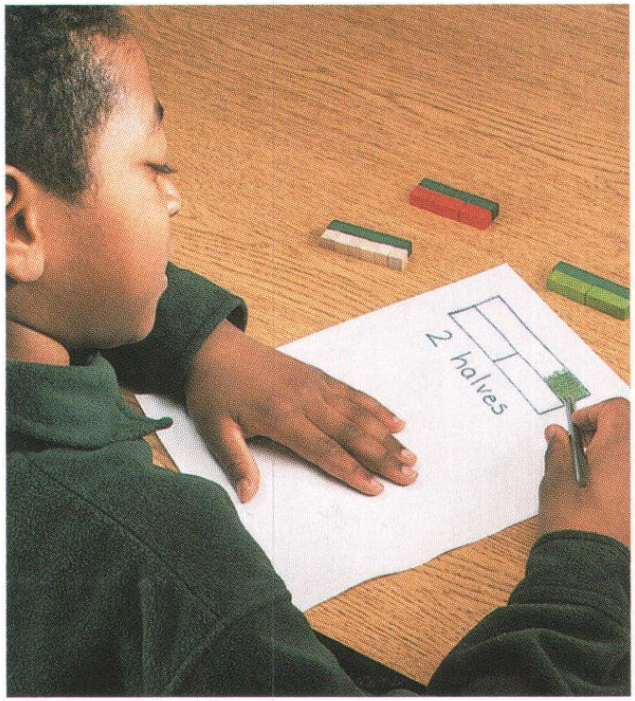
two equal parts
2 halves

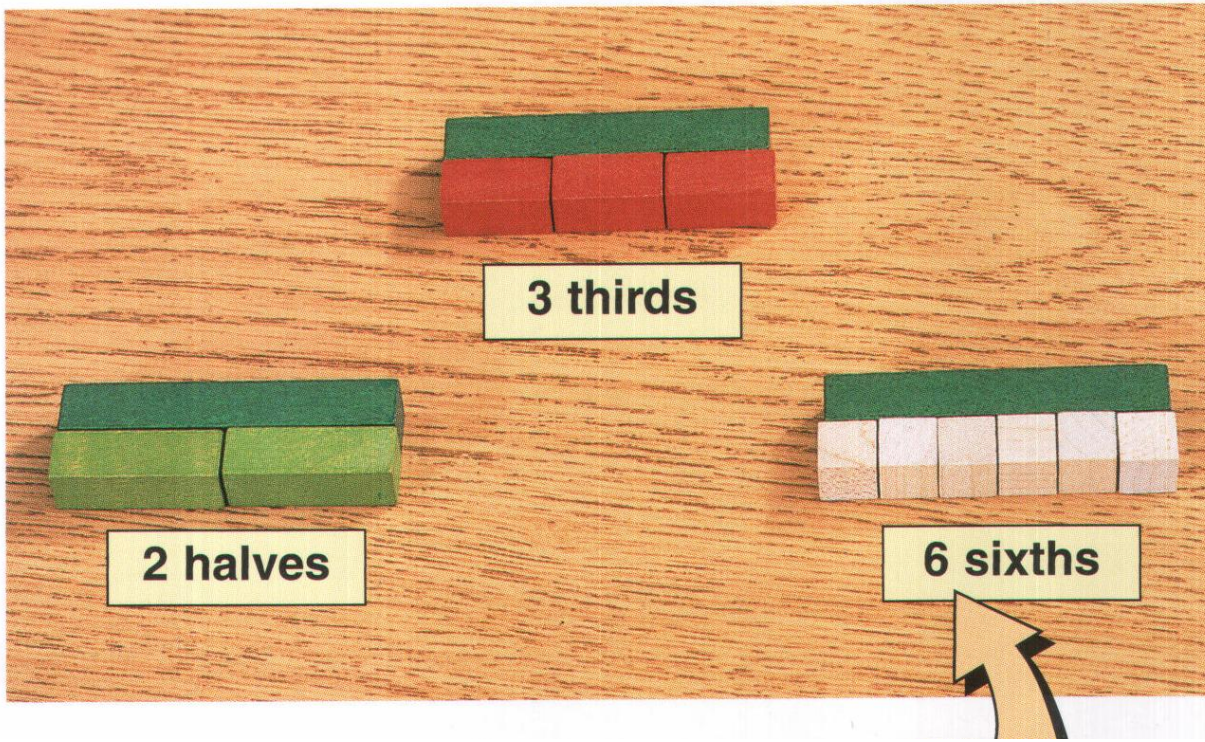


six equal parts
6 sixths

Exploring Fractions of a Length

➤ Here is how Carey showed fractions of the dark green rod.

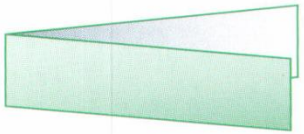


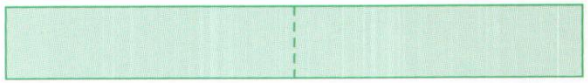


Fractions of a length

➤ You can fold a strip of paper to show fractions.

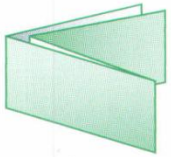
- Fold from end to end to show halves.

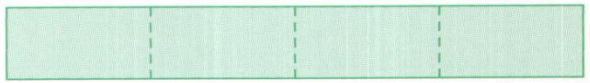




2 halves make 1 whole.

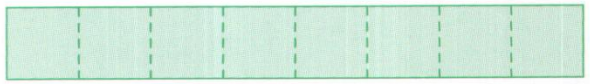
- Fold in half again to show fourths or quarters.





4 fourths make 1 whole.

- Fold in half again to show eighths.



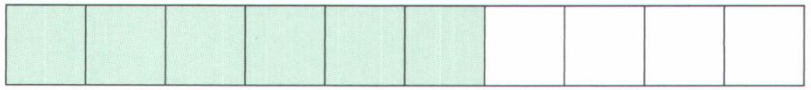
8 eighths make 1 whole.

Once you divide the length into equal parts, you can count the parts.

4. What fraction of each strip is shaded?
What fraction is not shaded?

a)

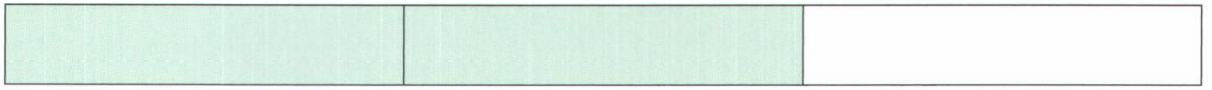
b)



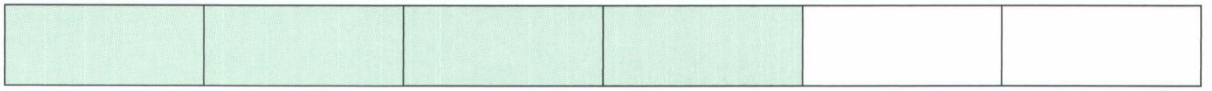
c)

d)

e)



f)



Fractions of a set

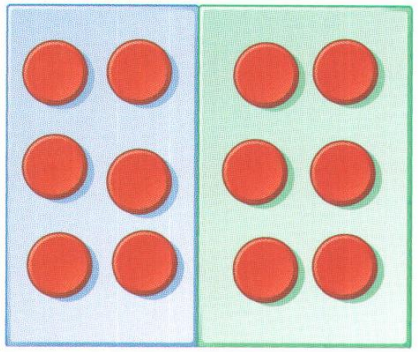
To find a fraction of a set, start by counting.

- There are 6 stickers.
  5 of the 6 stickers are yellow.
  5 sixths of the stickers are yellow.

- There are 12 spaces in the paint tray.
  8 of the 12 spaces have paint.
  8 twelfths of the spaces have paint.
  4 twelfths of the spaces are empty.

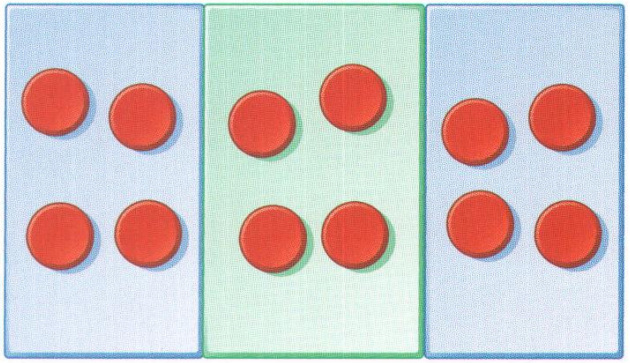
➤ Here are some ways to make equal groups with 12 counters.
Think about sharing the 12 counters.

2 equal groups of 6
Each group is 1 half of 12.



1 half of 12 = 6

3 equal groups of 4
Each group is 1 third of 12.



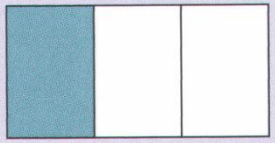
1 third of 12 = 4

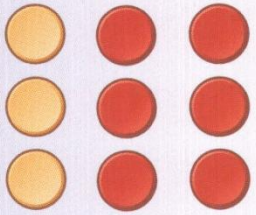
➤ Jody had 12 dimes.
She gave 1 fourth of them to her brother and kept the rest.
How many dimes did she keep?

Here are 12 dimes in 4 equal groups.
Each group has 3 dimes.
1 fourth of 12 dimes is 3 dimes.
Jody gave 3 dimes to her brother.
She kept 9 dimes.
9 dimes is 3 fourths of 12.

Reflect

Use words, pictures, or numbers.
Explain how all these pictures show 1 third.





Naming and writing fractions

You can use fractions to tell about:

- equal parts of a whole
- equal parts of a length
- equal parts of a set

The fraction name suggests a **symbol** for writing the fraction.

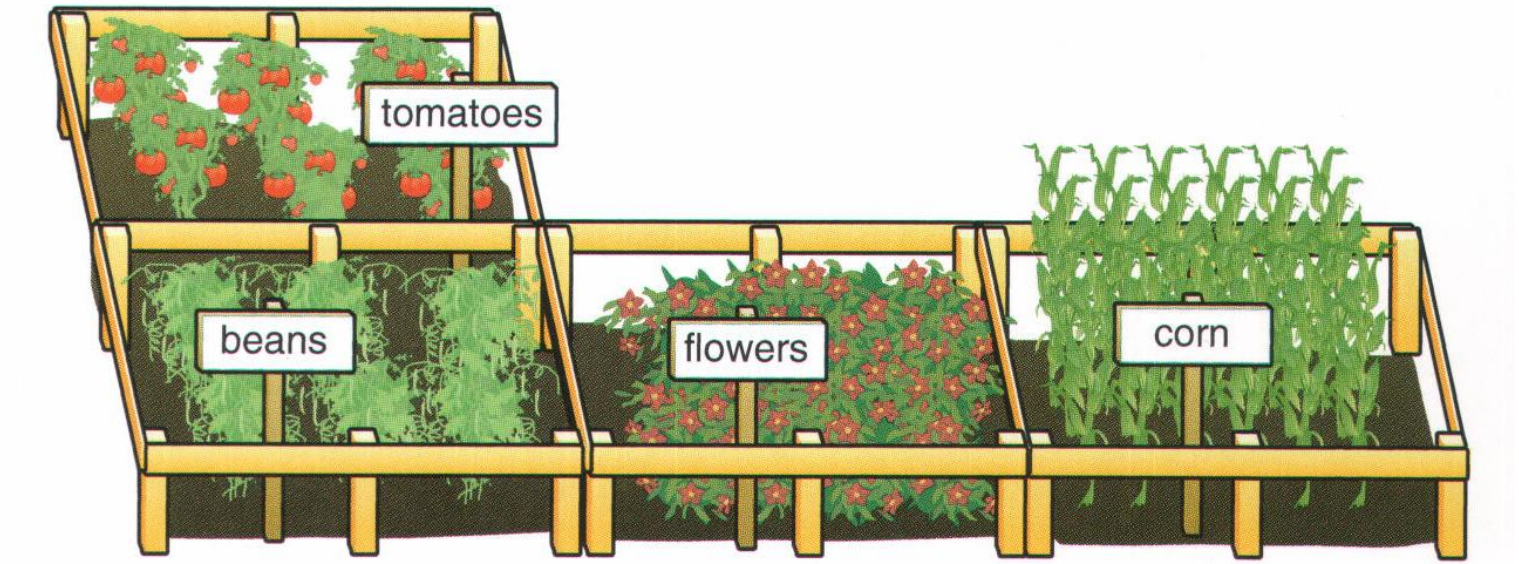
$$\frac{3}{4}$$

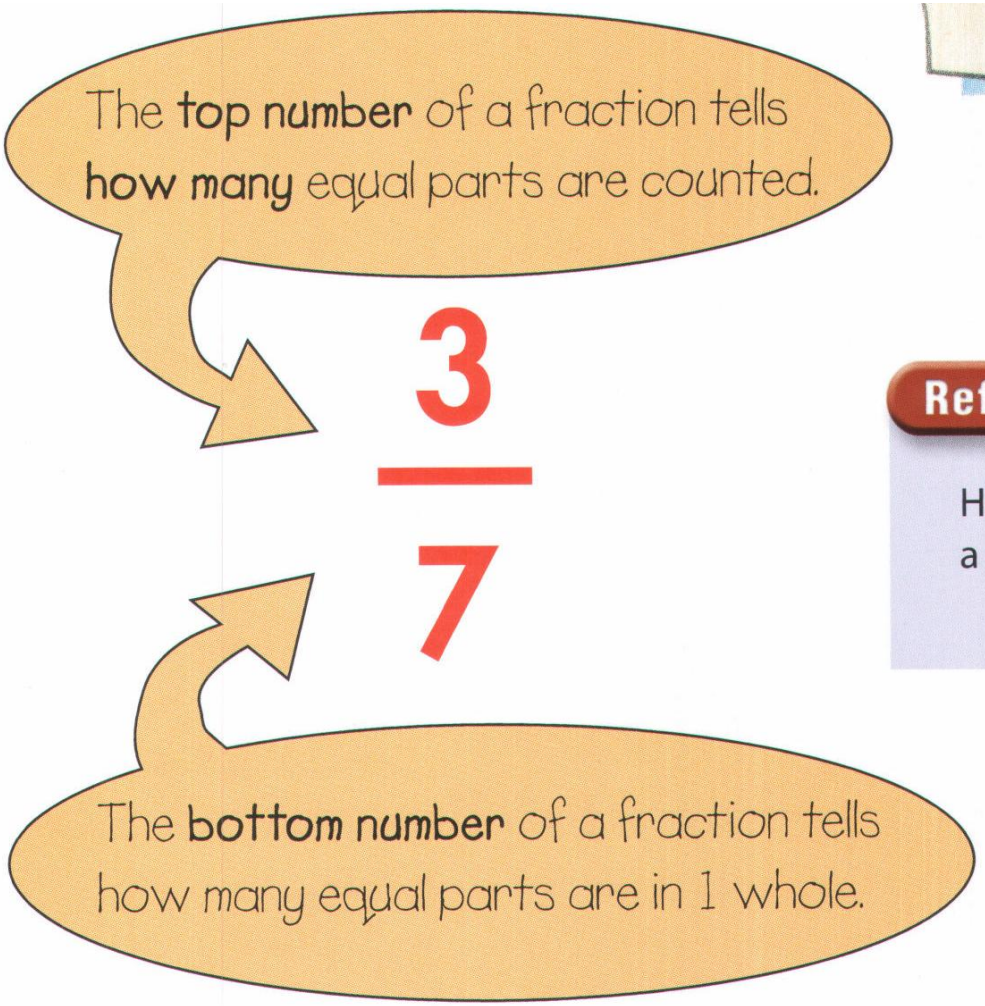
← 3

← of

← 4 equal parts are for growing food.

This community garden
is divided into 4 equal parts.
3 fourths of the garden are
for growing food.



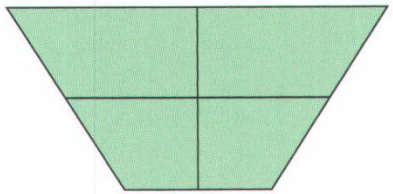


Reflect

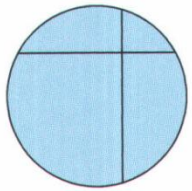
How would you explain the fraction $\frac{2}{5}$ to a Grade 2 student?

1. Which picture shows fourths? How do you know?

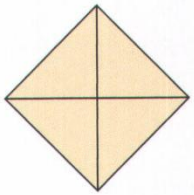
a)



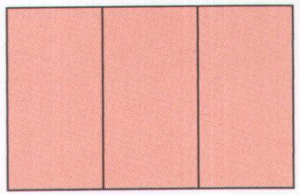
b)



c)



d)



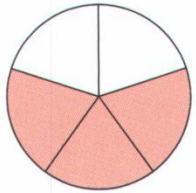
2. Fold a paper strip to show sixths.

a) Colour $\frac{1}{6}$ of the strip.
Explain the strategy you used.

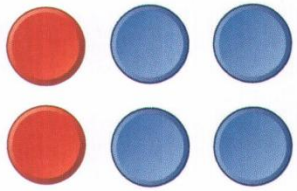
b) What fraction is not coloured?

3. What fraction does each picture show?

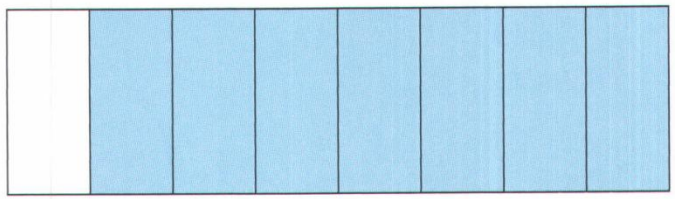
a)



b)



c)



4. Use a set of 16 counters.

a) What fraction of the set is 4 counters?

b) What other fractions can you show with 16 counters?
Draw a picture for each one.

5. Draw a picture to show $3\frac{3}{4}$ pies.
How many quarters is this?