

2nd Edition

NUMBERS

Mathematics

Workbook



Isabelle Deshaies
Catherine Lincourt
Christiane Bessette

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A Quick Tour of Your Workbook IV

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Monster Appetites

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THEME 2



Pirates Ahoy!

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Pirates Ahoy!

Theme

2

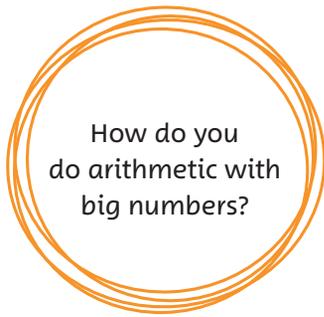
After months at sea, Captain Goldbeard and his crew have finally found Treasure Island. Legend says that the first person to touch the treasure will live forever. But the captain cannot touch it yet: someone has stolen the treasure map! The captain is furious!



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GOOD at ARITHMETIC?

Take the test.



How do you do arithmetic with big numbers?

I Explore

► Observe ► Think ► Use tools ► Communicate



Section
13

Math Chat



I see 30 lemon halves in this picture. What do you see?

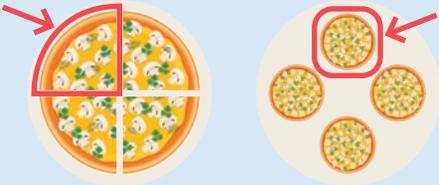


Can you use other fractions than halves to describe what you see? Discuss the question with your classmates.

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A **fraction** represents one or more parts of a **whole**. The whole can be a single object or a group of objects (a **collection**).

Single whole **Collection**



$\frac{1}{4}$

This fraction is called a *quarter*.

Single whole **Collection**



$\frac{1}{2}$

This fraction is called a *half*.

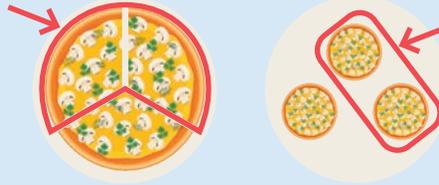
Single whole **Collection**



$\frac{1}{5}$

This fraction is called a *fifth*.

Single whole **Collection**



$\frac{2}{3}$

This fraction is called *two thirds*.

A written fraction consists of a **numerator** and a **denominator**.

Numerator → **1** Number of parts to consider

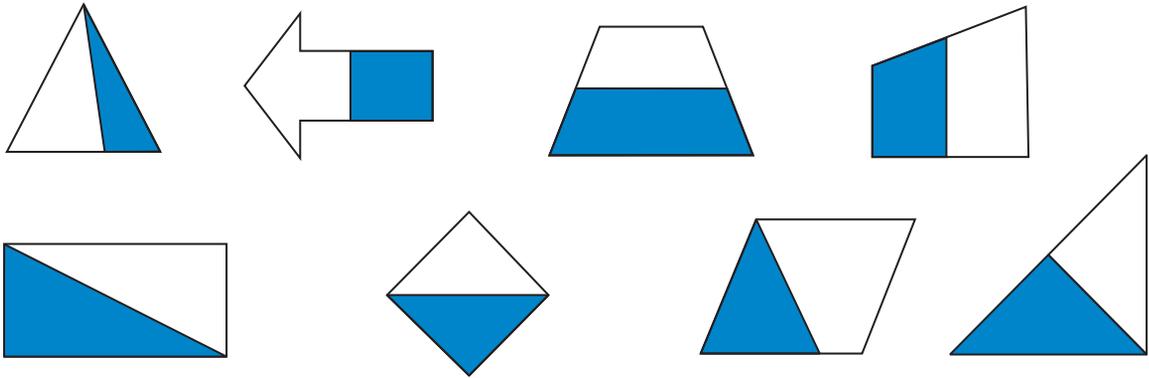
Denominator → **4** Total number of equivalent parts in the whole. A fraction gets its name from the denominator.



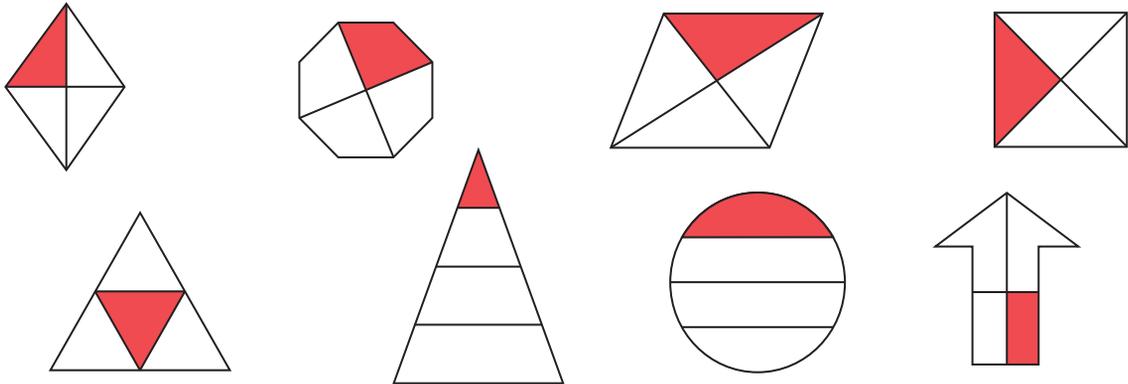
In a fraction, the whole is always divided into *equivalent parts* (equal parts).

1 Practise

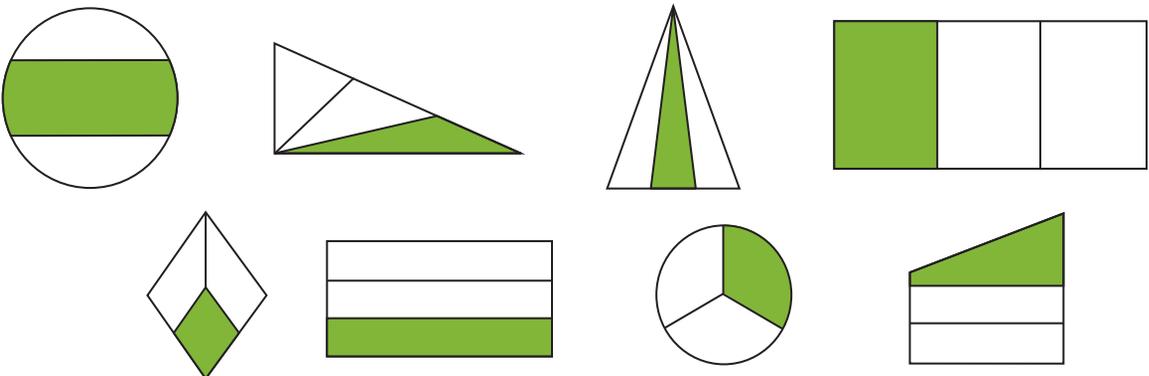
1 Circle the figures in which the coloured part represents $\frac{1}{2}$.



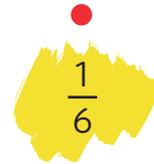
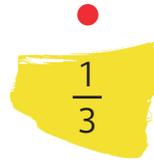
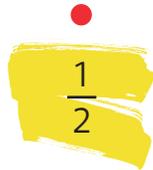
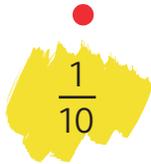
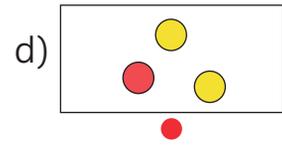
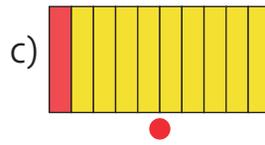
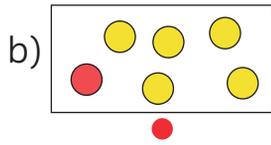
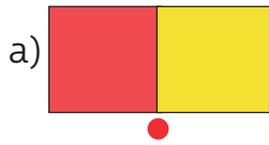
2 Circle the figures in which the coloured part represents $\frac{1}{4}$.



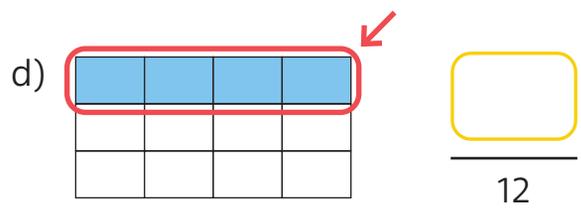
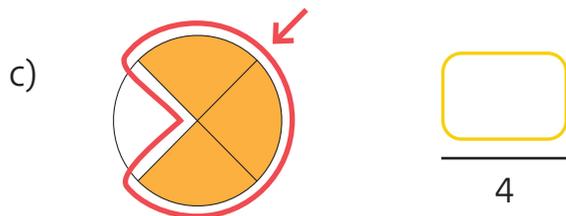
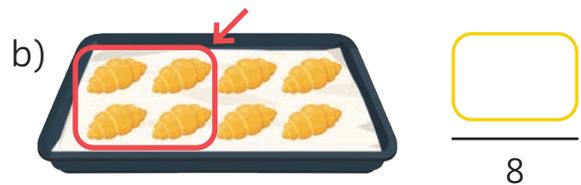
3 Circle the figures in which the coloured part represents $\frac{1}{3}$.



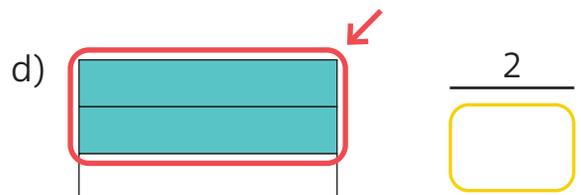
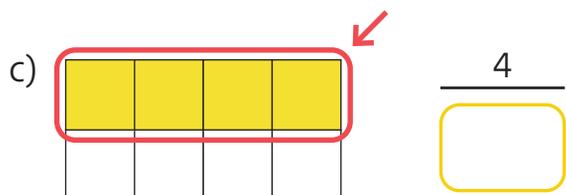
4 Match each picture to the fraction represented by the part in red.



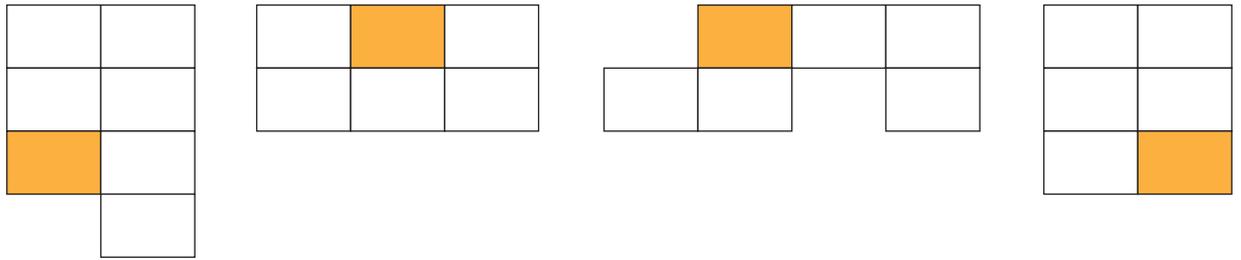
5 Complete each fraction by writing the numerator.



6 Complete each fraction by writing the denominator.



- 7 Circle** the picture in which the coloured part does not represent the same fraction as in the other pictures.



- 8 Write** the fraction represented by the picture. Then **match** each fraction to its name in words.

a) Four fifths

b) Two eighths

c) Three sixths

d) Three quarters

e) Two twelfths

f) Four eighths

9 Match each fraction to its whole.

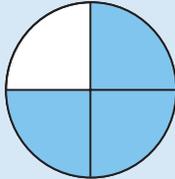
a)  represents $\frac{1}{2}$ of  

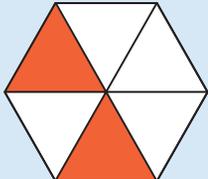
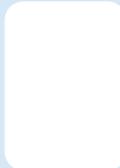
b)  represents $\frac{1}{3}$ of  

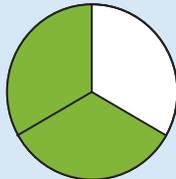
c)  represents $\frac{1}{2}$ of  

d)  represents $\frac{1}{4}$ of  

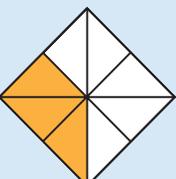
10 Write the fraction represented by the coloured part of each figure.

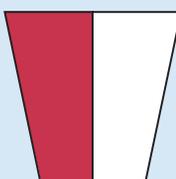
a)  

b)  

c)  

d)  

e)  

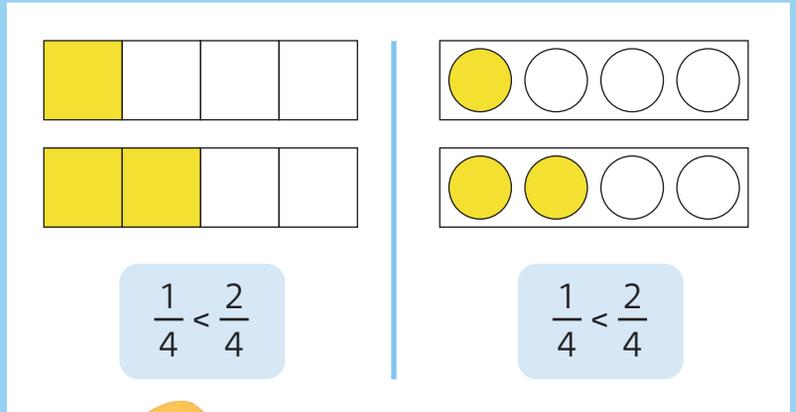
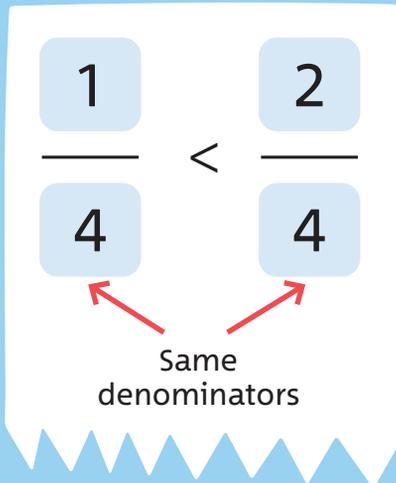
f)  

I Learn

Comparing Fractions

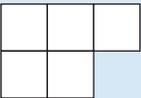
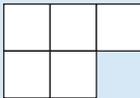
To compare fractions, the wholes must be the same.

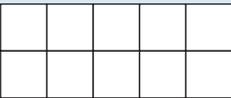
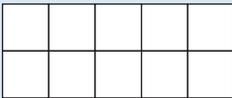
If the wholes are the same and the fractions have the same denominator, then all you have to do is compare the numerators.

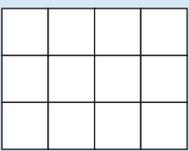
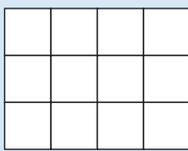


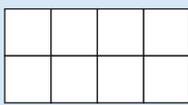
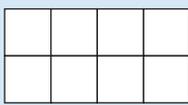
I Practise

1 Represent the fractions and then compare them using $<$, $>$ or $=$.

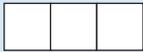
a)   $\frac{1}{5}$  $\frac{2}{5}$

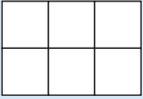
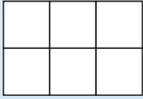
b)   $\frac{5}{10}$  $\frac{8}{10}$

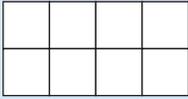
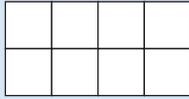
c)   $\frac{9}{12}$  $\frac{3}{12}$

d)   $\frac{4}{8}$  $\frac{2}{8}$

e)  
 $\frac{3}{4}$  $\frac{1}{4}$

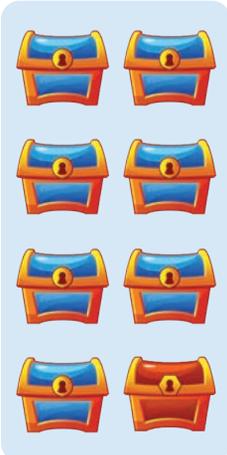
f)  
 $\frac{1}{3}$  $\frac{3}{3}$

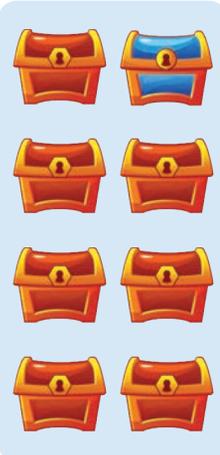
g)  
 $\frac{3}{6}$  $\frac{4}{6}$

h)  
 $\frac{6}{8}$  $\frac{7}{8}$

2 Find the fractions represented by the blue treasure chests.

a) 

b) 

c) 

d) 

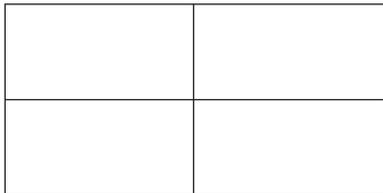
3 Write the fractions from question 2 in increasing order.



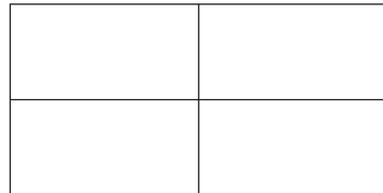
4 Solve the problems.

- a) $\frac{1}{4}$ of Simona's flag is blue. $\frac{2}{4}$ of Gabriella's flag is blue.
Who has more blue on her flag?

Simona's flag

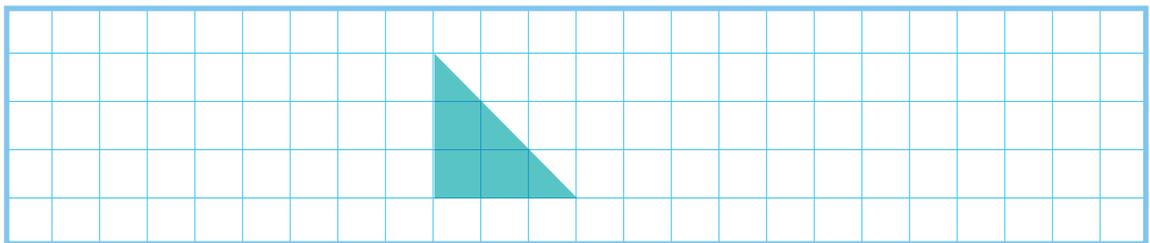


Gabriella's flag



has more blue on her flag.

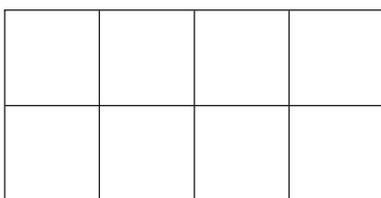
- b) Thomas drew a figure to make a pirate flag. He painted $\frac{1}{4}$ of his figure. **Draw** the rest of the figure.



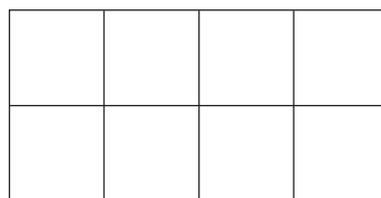
- c) Young sailors Moby and Hazim have to wash equal parts of the deck on the captain's ship. Moby has washed $\frac{5}{8}$ of his part. Hazim has washed $\frac{6}{8}$ of his part.

Which sailor is farther ahead in his work?

Moby's part



Hazim's part



is farther ahead in his work.

Jack the Seagull's Treasure

Jack the Seagull has hidden his treasure on Palm Grove Island. The last time he visited the island, he left various objects in different places. His treasure lies under one of these objects. You must find the object that sits on top of the hidden treasure. Look on pages 71 to 117 for the objects shown below. Near each object is a number. Copy this number into the corresponding box below. Then follow the instructions at the bottom of the page.



Instructions

- Draw an X on the numbers with digits that add up to less than 9.
- Draw an X on the odd numbers.
- The remaining number indicates which object sits on top of the treasure. Circle this object on the map on the next page.



