

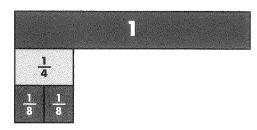




Equivalent Fractions: Use Models

Another Look!

You can use fraction strips to find equivalent fractions.

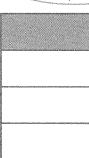


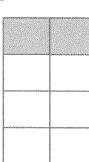
You can see that two $\frac{1}{8}$ strips show the same part of the whole as one $\frac{1}{4}$ strip.



 $\frac{1}{4}$ and $\frac{2}{8}$ are equivalent fractions because they name the same amount. You can write

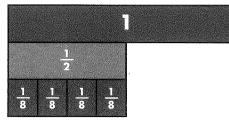
You can also use area models to show that $\frac{1}{4}$ and $\frac{2}{8}$ are equivalent. You can see the two fractions name the same part of the whole.





In 1-8, find the equivalent fractions. Use fraction strips or draw area models to help.

1



3.

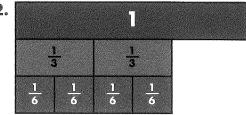








2.





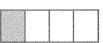


7.
$$\frac{1}{2} = \frac{1}{4}$$

8.
$$\frac{3}{6} = \frac{2}{2}$$

- **9. Q Vocabulary** Explain what equivalent fractions are and give an example.
- **10. @ MP.5 Use Appropriate Tools** When you use fraction strips, how can you tell if two fractions are **NOT** equivalent?

11. Taylor colored $\frac{1}{4}$ of this rectangle. Draw an area model showing a fraction equivalent to $\frac{1}{4}$. Use the picture to help.



12. Number Sense Joyce is thinking of a 3-digit number. Her number has the digits 8, 4, and 6. To the nearest hundred, it rounds to 600. What is the number?

- 13. MP.4 Model with Math Dinner plates are arranged on 5 shelves, with 8 plates on each shelf. How many dinner plates are on all of the shelves? Draw a bar diagram and write an equation to solve.
- 14. Higher Order Thinking Fred says that $\frac{1}{2}$ and $\frac{7}{8}$ are equivalent fractions. Draw area models for $\frac{1}{2}$ and $\frac{7}{8}$ to show if Fred's statement is correct. Name two fractions that you know are equivalent to $\frac{1}{2}$.

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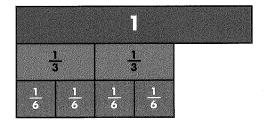
15. Which fraction pairs are **NOT** equivalent? Choose all that apply.

	<u>1</u>	and	$\frac{1}{6}$
--	----------	-----	---------------

	<u>1</u>	and	3
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 $\frac{2}{3}$ and $\frac{3}{6}$

$\frac{2}{6}$ ar	nd =
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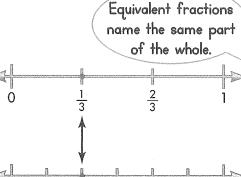
Equivalent Fractions: Use the Number Line

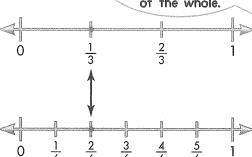
Another Look!

Leah shares a fruit roll with her sister. Her sister says that Leah took $\frac{1}{3}$ of the fruit roll. Leah thought that she took $\frac{2}{6}$ of the fruit roll. She drew two number lines to see if the two fractions were equivalent.

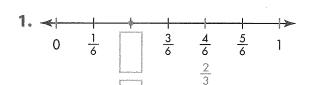
The fractions are at the same location on the number line, so the fractions are equivalent.

$$\frac{1}{3} = \frac{2}{6}$$

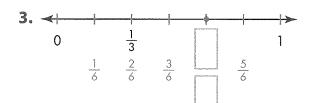




In 1-6, write two fractions that name the same location on the number line.



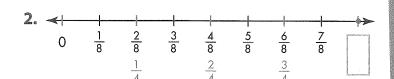


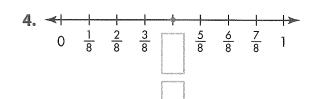








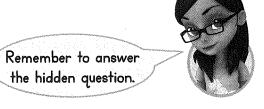






6.
$$\frac{1}{4}$$
 $\frac{1}{4}$ $\frac{2}{4}$ $\frac{3}{4}$ 1

- 7. MP.4 Model with Math Oliver and Peter had the same length of string. Oliver used $\frac{3}{4}$ of his string to tie a bundle of newspapers. Peter used $\frac{6}{8}$ of his string to tie a bundle of magazines. Did they use the same amount of string? Draw a number line and write the fractions to show your answer.
- 8. Eric divides a strip of paper into 8 equal parts. He cuts off 2 of the parts. He shades 4 of the remaining parts blue. What fraction of the remaining whole does Eric shade blue?

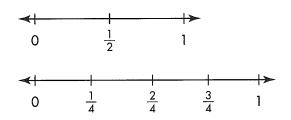


- 9.

 MP.5 Use Appropriate Tools How can Brady use fraction strips to show that $\frac{3}{4}$ and $\frac{7}{8}$ are **NOT** equivalent?
- 10.

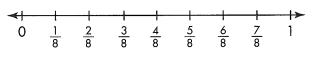
 MP.3 Critique Reasoning Isabel divided 32 by 8 and got 4. She says that if she divides 32 by 4, the quotient will be greater than 4. Is she correct? Explain.

11. Higher Order Thinking Perry thinks that $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent fractions. But when he draws the number lines to the right, he sees that $\frac{1}{2}$ and $\frac{2}{4}$ do not name the same location. Explain what is going on.



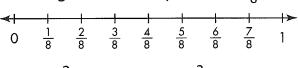
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12. Tanner used two ribbons of equal length to wrap packages. One ribbon is $\frac{4}{8}$ yard. Which of the following is **NOT** a possible length for the second ribbon?



- (A) $\frac{4}{6}$ yard (C) $\frac{1}{2}$ yard

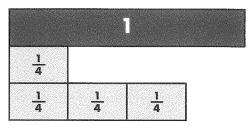
13. Stacy made a number line to show equivalent fractions. Which of the following fractions is equivalent to $\frac{6}{8}$?



Another Look!

You can use fraction strips to compare fractions that have the same denominator.

Compare $\frac{1}{4}$ and $\frac{3}{4}$.



The denominator for each fraction is 4.

Fractions that you compare must be part of the same whole

or of equal-sized wholes.

Use fraction strips to help you compare the fractions. Use one $\frac{1}{4}$ strip to show $\frac{1}{4}$ and three $\frac{1}{4}$ strips to show $\frac{3}{4}$. More $\frac{1}{4}$ strips are used to show $\frac{3}{4}$. So, $\frac{3}{4} > \frac{1}{4}$ and $\frac{1}{4} < \frac{3}{4}$.

Homework

& Practice 13-3

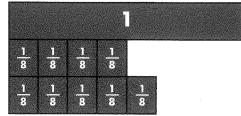
Compare Fractions:

Same Denominator

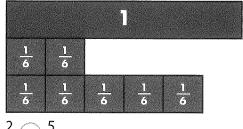
Use Models to

In 1–12, compare. Write <, >, or =. Use or draw fraction strips to help. The fractions refer to the same whole.

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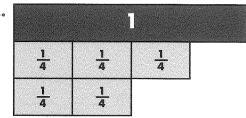
3.



5. $\frac{4}{8}$ \bigcirc $\frac{4}{8}$



2.



4.

7. $\frac{7}{8}$ \bigcirc $\frac{1}{8}$

8. $\frac{2}{6}$ $\bigcirc \frac{3}{6}$

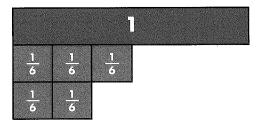
9. $\frac{5}{6}$ $\bigcirc \frac{5}{6}$

10. $\frac{1}{8}$ $\bigcirc \frac{2}{8}$

11. $\frac{4}{6}$ $\bigcirc \frac{2}{6}$

12. $\frac{1}{6}$ $\bigcirc \frac{5}{6}$

13. MP.6 Be Precise Ali is comparing fractions using fraction strips. Using the symbols > and <, write two different comparisons for the fractions.



14. @ MP.5 Use Appropriate Tools How could you use fraction strips to help you decide which fraction is greater, $\frac{5}{8}$ or $\frac{6}{8}$?

- **15. Number Sense** Keisha has 10 coins. Two of the coins are nickels, 6 are pennies, and the rest are dimes. What is the value of Keisha's coins?
- **16. Wocabulary** Write a fraction that has 6 as the denominator. Write a fraction that does not have 6 as the denominator.

17. Higher Order Thinking Draw fraction strips to show the following fractions: $\frac{4}{6}$, $\frac{1}{6}$, and $\frac{5}{6}$. Then, write the three fractions in order from least to greatest.

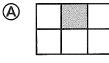


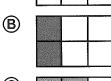
Fraction strips can help you order fractions.

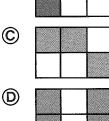


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18. The pictures below show tile designs. Which shows more than $\frac{3}{6}$ of the whole shaded?







19. These fractions refer to the same whole. Which of these comparisons is **NOT** correct?

(A)
$$\frac{2}{4} < \frac{3}{4}$$

B
$$\frac{5}{8} > \frac{7}{8}$$

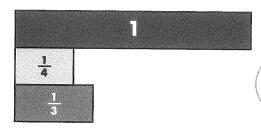
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$$\frac{2}{3} > \frac{1}{3}$$

①
$$\frac{1}{6} < \frac{5}{6}$$



Another Look!

Compare $\frac{1}{3}$ and $\frac{1}{4}$. $\frac{1}{3}$ $\stackrel{\text{same numerators}}{\text{different denominators}} \xrightarrow{\frac{1}{4}}$



Same Numerator You can use fraction strips to represent and compare fractions with the same numerator. The $\frac{1}{3}$ strip represents a greater part of the whole.



Homework

& Practice 13-4

Compare Fractions:

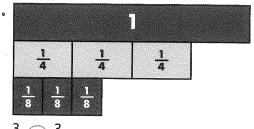
Use Models to

The $\frac{1}{4}$ strip is not as long as the $\frac{1}{3}$ strip. These fractions have the same numerator, which means the fraction with the lesser denominator is greater.

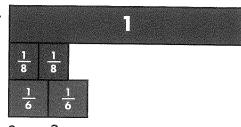
So, $\frac{1}{3} > \frac{1}{4}$.

In 1–12, compare. Write <, >, or =. Use or draw fraction strips to help. The fractions refer to the same whole.

1



2.



3.



4.



 $\frac{4}{6}$ $\bigcirc \frac{4}{6}$

$$\frac{2}{8}$$
 \bigcirc $\frac{2}{3}$

5. $\frac{2}{3}$ \bigcirc $\frac{2}{4}$

6. $\frac{1}{8}$ \bigcirc $\frac{1}{4}$

7. $\frac{3}{6}$ \bigcirc $\frac{3}{6}$

8. $\frac{1}{2}$ \bigcirc $\frac{1}{3}$

9. $\frac{4}{4}$ $\bigcirc \frac{4}{6}$

10. $\frac{2}{3}$ \bigcirc $\frac{2}{6}$

11. $\frac{3}{4}$ \bigcirc $\frac{3}{4}$

12. $\frac{6}{8}$ \bigcirc $\frac{6}{6}$

- 13. Ivan played basketball for two thirds of an hour on Tuesday and two fourths of an hour on Wednesday. Which day did he spend the most time playing basketball?

 Use the symbols >, <, or = to compare.
- 14. MP.4 Model with Math On a trip to the beach, Josie collected 64 shells. Her father collected 57 shells, and her mother collected 73 shells. How many shells did Josie's parents collect? Complete the bar diagram to help solve the problem.



- ? shells —>

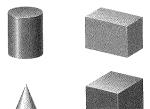
 57

 Father's Mother's 73 shells
- **15. Math and Science** A plant's life has different stages. Leah measured the length of a seed. It was $\frac{1}{4}$ inch long. She then planted the seed. It grew into a seedling that was $\frac{3}{4}$ inch long. Use the fraction strips to compare the two fractions. Write <, >, or =.
 - $\frac{1}{4}$ \bigcirc $\frac{3}{4}$

			000000000000000000000000000000000000000
		6	
1 4	-	1 4	
4	4	4	
<u>1</u>			
4			
	681		

16. Higher Order Thinking There are 4 people in Mitchell's family and 3 people in Paul's family. Each family buys the same-sized bag of trail mix to share equally. Who gets more trail mix, Mitchell or Paul? Use reasoning about fraction size to explain how you know.

17. Circle the solid figure that has 2 flat surfaces and 0 vertices. What is this solid figure called?



- © Common Core Assessment
- **18.** These fractions refer to the same whole. Which of these comparisons are correct? Choose all that apply.

	$\frac{3}{4} = \frac{3}{4}$
\bigcap	1 - 1

<u>2</u> =	$=\frac{2}{3}$
4	_ 4





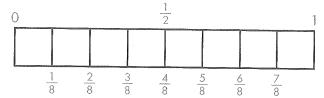


Compare Fractions:

Use Benchmarks

Another Look!

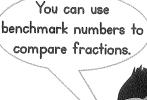
Compare $\frac{3}{8}$ and $\frac{7}{8}$.



The denominator for each fraction is 8. Use the benchmark numbers 0, $\frac{1}{2}$, and 1 to reason about the relative sizes of the numerators in $\frac{3}{8}$ and $\frac{7}{8}$.

 $\frac{1}{2}$ and $\frac{4}{8}$ are equivalent fractions. $\frac{3}{8}$ is less than $\frac{4}{8}$ and closer to 0.

 $\frac{7}{8}$ is greater than $\frac{4}{8}$ and closer to 1. So, $\frac{3}{8}$ is less than $\frac{7}{8}$.





In 1 and 2, choose from the fractions $\frac{1}{3}$, $\frac{5}{6}$, $\frac{3}{4}$, $\frac{3}{8}$.

- 1. Which of the fractions are closer to 1 than to 0?
- 2. Which of the fractions are closer to 0 than to 1?
- 3. Write two fractions with a denominator of 8 that are closer to 0 than to 1.
- **4.** Use the benchmark $\frac{1}{2}$ and the fractions $\frac{1}{8}$ and $\frac{5}{8}$ to write three comparison statements.

In **5–10**, compare. Write <, >, or =.

5.
$$\frac{2}{6}$$
 \bigcirc $\frac{2}{4}$

6.
$$\frac{1}{4}$$
 \bigcirc $\frac{1}{8}$

7.
$$\frac{3}{6}$$
 $\bigcirc \frac{5}{6}$

8.
$$\frac{2}{3}$$
 \bigcirc $\frac{2}{3}$

9.
$$\frac{1}{6}$$
 \bigcirc $\frac{1}{4}$

10.
$$\frac{3}{3}$$
 \bigcirc $\frac{3}{8}$

In 11-14, use the table at the right.

11. The 3rd grade classes at Haines Elementary are each making a class banner. The banners are all the same size. The table shows how much of a banner each class has completed so far. Has Ms. Holmes class or Mrs. Johnson's class completed the greater fraction of a banner?

ø	12.	In whose classes are the fractions of the banners
		completed equivalent?

Class	Fraction of Class Banner Completed
Ms. Holmes	6 8
Mr. Cline	3 6
Mr. Gomez	$\frac{1}{3}$
Mrs. Johnson	<u>7</u>
Ms. Park	3/4

- 13. In whose classes is the fraction of a completed banner closer to 1 than to 0?
- 14.

 MP.3 Construct Arguments In whose class is the fraction of a completed banner closer to neither 0 nor 1? Use benchmark numbers to explain.
- **15.** Using the denominators 2, 3, 6, or 8, write two fractions less than 1. Then tell if the fractions are closer to 0 than to 1.
- 16. MP.1 Make Sense and Persevere

 Natalie has 28 erasers. She divided some of her erasers equally among 3 friends.

 Natalie has 10 erasers left. How many erasers did each friend get?
- 17. Higher Order Thinking Write two fractions using the numbers from the cards at the right. One fraction should be closer to 0 than to 1. The other fraction should be closer to 1 than to 0. Explain which fraction meets each rule.

1 2 3

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18. Write each fraction in the correct answer space to show whether the fraction is closer to 0 or to 1.

***********	Closer	to () than	to	9	Closer	to	Bereard	than	to	0
	CIOSCI		/ 11 (VAR)								uwwesto
	5	<u>3</u>	<u>1</u>	_	respectation process are an electrical and the elec	1	an are the Color of the Color o	2		4	
	6	8	4	}		3		8		6	







Homework

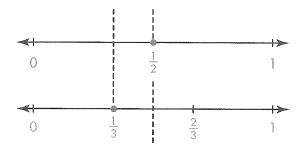
& Practice 13-6

Compare Fractions:

Use the Number Line

Another Look!

Ben has $\frac{1}{2}$ yard of string. John has $\frac{1}{3}$ yard of string. Who has more string?



You can draw two number lines of equal length to compare fractions with different denominators.

Mark 0 and 1 on both number lines.

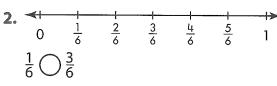
Divide the first number line into 2 equal parts. Mark $\frac{1}{2}$.

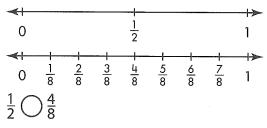
Divide the second number line into 3 equal parts. Mark $\frac{1}{3}$.

 $\frac{1}{2}$ is farther to the right than $\frac{1}{3}$. So, $\frac{1}{2} > \frac{1}{3}$. Ben has more string than John.

In 1–4, use the number lines to compare the fractions. Write >, <, or =.

 $\frac{1}{3}\bigcirc\frac{1}{6}$

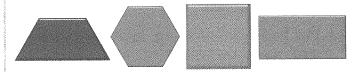




In 5–8, compare the fractions. Use number lines to help. Write >, <, or =.

- 5. $\frac{1}{4}$ $\bigcirc \frac{1}{8}$
- 6. $\frac{3}{6}$ $\frac{3}{4}$
- 7. $\frac{4}{8}$ $\bigcirc \frac{4}{6}$
- 8. $\frac{2}{3}$ $\bigcirc \frac{2}{4}$

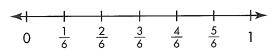
- 9. Number Sense Angela drove 82 miles on Monday. She drove 94 miles on Tuesday. To the nearest hundred, how many miles did Angela drive over the two days?
- **10.** I have 4 sides. The lengths of all my sides are equal. Which shape am !?



- 11.

 MP.6 Be Precise Dylan and Javier had the same size serving of vegetables for dinner. Dylan finished $\frac{2}{3}$ of his vegetables. Javier ate $\frac{4}{6}$ of his serving. Who ate more vegetables? Draw two number lines to justify your answer.
- 12. **@ MP.3 Critique Reasoning** Felipe ate $\frac{7}{8}$ of an orange. Angel ate $\frac{5}{8}$ of a banana. Felipe says he ate more because $\frac{7}{8}$ is greater than $\frac{5}{8}$. Do you agree? Explain.

13. **Higher Order Thinking** Some friends are sharing a watermelon. Simone eats $\frac{2}{6}$ of the watermelon. Ken eats $\frac{3}{6}$ of the watermelon and Claire eats the rest. Alex has his own watermelon equal in size to the one shared by his friends. He eats $\frac{5}{6}$ of his watermelon. Which of the friends eats the least amount of watermelon?



The number line shows the whole.

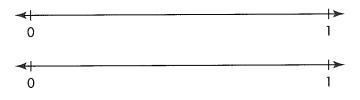


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14. Molly's dad is grilling burgers. He uses $\frac{1}{4}$ lb of beef in each burger for Molly and her mother. He uses $\frac{1}{3}$ lb of beef to make a burger for himself.

Part A

Complete number lines to show these fractions.



Part B

Use the number lines to compare the fractions. Then write a comparison statement using <, >, or =. Explain how you used the number lines.





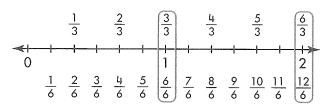


Whole Numbers and Fractions

Another Look!

Whole numbers have equivalent fraction names.

- 1 whole divided into 1 equal part can be written as $\frac{1}{1}$.
- 2 wholes each divided into 1 equal part can be written as $\frac{2}{1}$.



You can name fractions as whole numbers and whole numbers as fractions.

This number line shows other equivalent fractions for 1 and 2. You can see how many equal parts make up 1 or 2 wholes.

$$1 = \frac{1}{1} = \frac{3}{3} = \frac{6}{6}$$

$$2 = \frac{2}{1} = \frac{6}{3} = \frac{12}{6}$$



In 1-4, complete each number line.

- 1. sixths
- 2. thirds
- 3. fourths
- 4. halves

In 5–8, write two equivalent fractions for each whole number. You can draw number lines to help.

5.
$$3 = \frac{1}{1} = \frac{1}{3}$$

6.
$$2 = \frac{1}{1} = \frac{4}{4}$$

5.
$$3 = \frac{\Box}{1} = \frac{\Box}{3}$$
 6. $2 = \frac{\Box}{1} = \frac{\Box}{4}$ **7.** $8 = \frac{\Box}{1} = \frac{\Box}{2}$ **8.** $1 = \frac{\Box}{2} = \frac{\Box}{3}$

8.
$$1 = \frac{1}{2} = \frac{1}{3}$$

In 9–12, for each pair of fractions, write the equivalent whole number.

9.
$$\frac{12}{3} = \frac{4}{1} =$$

10.
$$\frac{18}{3} = \frac{6}{1} =$$

11.
$$\frac{5}{5} = \frac{3}{3} =$$

12.
$$\frac{15}{3} = \frac{5}{1} =$$

13. Andy earned \$38 on Monday and \$34 on Tuesday. How many lucky bamboo plants can he buy with the total money he earned?



- 14. MP.3 Critique Reasoning Julio says, "To turn the whole number 3 into a fraction, I just put 3 under a numerator of 3." Is he correct? Explain.
- 15.

 MP.7 Look for Relationships What do you notice about all fractions that are equivalent to 2? Explain and give an example.

- 16. The kid's meal at Happy Time Diner comes with an apple slice that is ¹/₄ of a whole apple. How many kid's meals would need to be ordered to have 3 whole apples?
- 17. Kevin is selling apples at the farmer's market. He arranges 32 apples into an array with 4 rows. How many columns of apples are there?

18. Higher Order Thinking Look at the fraction strip diagram. Write the whole number represented and its equivalent fraction name. Then write a story problem where the same whole number equals the fraction.

1		1		1	
1 1 3	3	$\frac{1}{3}$ $\frac{1}{3}$	1/3	$\frac{1}{3}$ $\frac{1}{3}$	<u>1</u> 3

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19. Complete the equations. Draw lines to match the whole number on the left to the equivalent fractions on the right.

3	
	1-I
5 L	i
1	

2



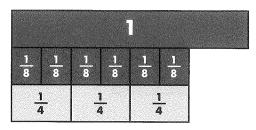
Set A

pages 673-678

Two fractions are equivalent if they name the same part of a whole.

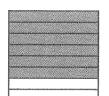
What is one fraction that is equivalent to $\frac{6}{8}$?

You can use fraction strips to find equivalent fractions.



$$\frac{6}{8} = \frac{3}{4}$$

You can also use area models to see that $\frac{6}{8}$ and $\frac{3}{4}$ are equivalent fractions. The fractions shaded both show the same part of the whole.

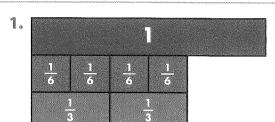




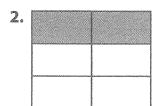
Remember to check that both sets of strips are the same length.

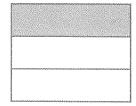
Reteaching

In 1 and 2, find an equivalent fraction. Use fraction strips and models to help.



$$\frac{4}{6}$$



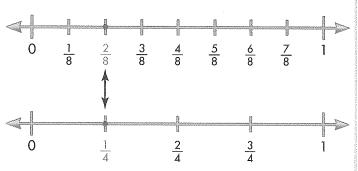


$$\frac{2}{6} =$$

Set B pages 679–684

Riley says the library is $\frac{2}{8}$ of a mile from their house. Sydney says it is $\frac{1}{4}$ of a mile.

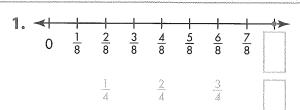
Use a number line to find who is correct.

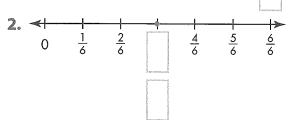


The fractions $\frac{2}{8}$ and $\frac{1}{4}$ are equivalent. They are the same distance from 0 on a number line. Riley and Sydney are both correct.

Remember equivalent fractions have different names, but they represent the same point on a number line.

In 1 and 2, write two fractions that name the same location on the number line.





You can use fraction strips to compare fractions with the same denominator.

Compare $\frac{3}{4}$ to $\frac{2}{4}$.

1/4	<u>1</u> 4	<u>1</u> 4	
1/4	14		

The denominator of each fraction is 4.

Three $\frac{1}{4}$ fraction strips show $\frac{3}{4}$.

Two $\frac{1}{4}$ fraction strips show $\frac{2}{4}$.

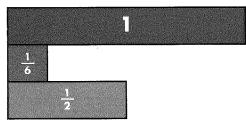
The fraction strips showing $\frac{3}{4}$ have 1 more unit fraction than the strips showing $\frac{2}{4}$.

So
$$\frac{3}{4} > \frac{2}{4}$$
.

Set D pages 691–696

You can use fraction strips to compare fractions with the same numerator.

Compare $\frac{1}{6}$ to $\frac{1}{2}$.



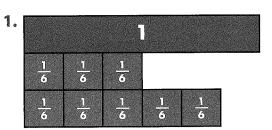
The numerator of each fraction is 1.

The $\frac{1}{6}$ fraction strip is less than the $\frac{1}{2}$ strip. So $\frac{1}{6} < \frac{1}{2}$.

You can use reasoning to understand. Think about dividing a whole into 6 pieces and dividing it into 2 pieces. One of 6 pieces is less than 1 of 2 pieces.

Remember that if fractions have the same denominator, the greater fraction has a greater numerator.

In **1–3**, compare. Write <, >, or =. Use fraction strips to help.



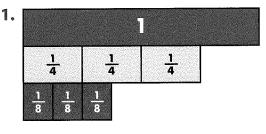
$$\frac{3}{6}$$
 \bigcirc $\frac{5}{6}$

2.
$$\frac{4}{6}$$
 $\bigcirc \frac{5}{6}$

3.
$$\frac{5}{8}$$
 \bigcirc $\frac{3}{8}$

Remember that if fractions have the same numerator, the greater fraction has a lesser denominator.

In 1-3, compare. Write <, >, or =. Use fraction strips to help.



$$\frac{3}{4}$$
 \bigcirc $\frac{3}{8}$

2.
$$\frac{5}{6}$$
 $\bigcirc \frac{5}{8}$

3.
$$\frac{1}{3}$$
 \bigcirc $\frac{1}{2}$

TOPIC 13

Reteaching

Set E

pages 697–702

You can compare fractions using benchmark numbers such as $0, \frac{1}{2}$, and 1.

Chris and Mary are painting pictures. The pictures are the same size. Chris has painted $\frac{3}{4}$ of his picture. Mary has painted $\frac{3}{8}$ of her picture. Who has painted the greater amount?

$$\frac{3}{4}$$
 is greater than $\frac{1}{2}$.

 $\frac{3}{8}$ is less than $\frac{1}{2}$.

Chris has painted the greater amount.

Remember that you can compare each fraction to a benchmark number to see how they relate to each other.

In 1 and 2, use benchmark numbers to help solve.

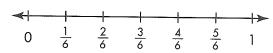
- 1. Mike had $\frac{2}{6}$ of a candy bar. Sally had $\frac{4}{6}$ of a candy bar. Whose fraction of a candy bar was closer to 1? Closer to 0?
- 2. Paul compared two bags of rice. One weighs $\frac{4}{6}$ pound, and the other weighs $\frac{4}{8}$ pound. Which bag is heavier?

Set F

pages 703-708

You can use a number line to compare fractions.

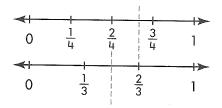
Which is greater, $\frac{3}{6}$ or $\frac{4}{6}$?



 $\frac{4}{6}$ is farther to the right than $\frac{3}{6}$, so $\frac{4}{6}$ is greater.

You can also compare two fractions with the same numerator by drawing two number lines.

Which is greater, $\frac{2}{4}$ or $\frac{2}{3}$?

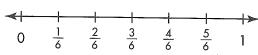


 $\frac{2}{3}$ is farther to the right than $\frac{2}{4}$, so $\frac{2}{3}$ is greater.

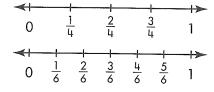
Remember to draw two number lines that are equal in length when comparing fractions with different denominators.

In **1** and **2**, compare. Write <, >, or =. Use number lines to help.

1.
$$\frac{2}{6}$$
 \bigcirc $\frac{3}{6}$

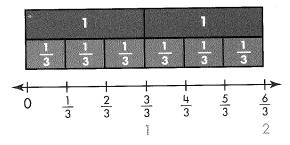


2.
$$\frac{3}{4}$$
 $\bigcirc \frac{3}{6}$



How many thirds are in 2 wholes?

You can use a number line or fraction strips to find a fraction name for 2 using thirds.



$$2 = \frac{6}{3}$$

The whole number 2 can also be written as the fraction $\frac{6}{3}$.

Remember that when you write whole numbers as fractions, the numerator can be greater than the denominator.

In 1-4, write an equivalent fraction for each whole number.

1.3

2. 2

3.5

4. 1

In 5–8, for each fraction write the equivalent whole number.

Set H pages 715–720

Think about these questions to help you construct arguments.

Thinking Habits

- How can I use numbers, objects, drawings, or actions to justify my argument?
- Am I using numbers and symbols correctly?
- Is my explanation clear and complete?



Remember that when you construct an argument, you explain why your work is right.

Odell and Tamra paint two walls with the same dimensions. Odell paints $\frac{2}{6}$ of a wall. Tamra paints $\frac{1}{3}$ of the other wall. Conjecture: Odell and Tamra paint the same amount.

1. Draw a diagram to justify the conjecture.

2. Use the diagram to justify the conjecture.