

Take & Teach



$N^2 \times H^3 = a \times c$
 $\frac{d}{91m} = \frac{b}{91m}$
 $x^2 + y^3 + z^2 + xyz = 2$
 $c^2 = 2c$
 $x_7 = \left(\frac{2}{3} \times 2x\right)$
 $a^2 = b$
 $\frac{a}{5nd} =$
 $y = \frac{2}{\sqrt{3+1}}$
 $xyz = 2$
 $(dx) = 26 + c^2 \left(\frac{2}{3} \times 2x\right)$

$\epsilon = c005$

$9 + x_7 = \left(\frac{2}{3} \times 2x\right)$

bc
 a
 $(2x)$
 y

2

2

What's Inside This Sample Lesson?

- A fully guided **Explore activity** written to meet rigorous state and national standards
- **Teacher Edition** pages, **Student Workbook** pages, and **other helpful resources** to fully experience a STEMscopes Math Explore activity

Table of Contents

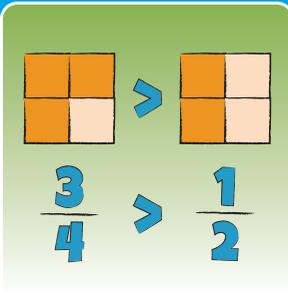
Grade 4, Compare Fractions - Explore 2

Teacher Edition Sample	4
Product Pages	4
Student Workbook Sample	12
Product Pages	12
Additional Resources	21
Math Chat	21
Show What You Know	22

Go Online!

Explore the digital resources for this lesson.





GRADE 4 NUMBER AND OPERATIONS - FRACTIONS

COMPARE FRACTIONS

FOCUS STANDARDS

Extend understanding of fraction equivalence and ordering.

- Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or \sim , and justify the conclusions, e.g., by using a visual fraction model.

CONNECTING STANDARDS

Generalize place value understanding for multi-digit whole numbers.

- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and \sim symbols to record the results of comparisons.

Understand decimal notation for fractions, and compare decimal fractions.

- Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or \sim , and justify the conclusions, e.g., by using the number line or another visual model.

ENGAGE ACTIVITIES

ACCESSING PRIOR KNOWLEDGE

Students will engage in comparing fractions with the same numerator or denominator to determine the validity of justifications using symbols, words, and pictorial models.

- Students compare fractions by reasoning about their size, ensuring comparisons are valid only when fractions refer to the same whole.
- They record results using symbols ($>$, $=$, $<$) and justify conclusions with visual fraction models.
- The activity includes class discussions to facilitate understanding and correct misconceptions.
- If students struggle, additional foundational support is provided to reinforce prior knowledge.

HOOK PIZZA DELIVERIES

Students engage in comparing fractions with different numerators and denominators through a real-world scenario.

- Students begin by observing a phenomenon and discussing initial thoughts on fraction comparisons related to pizza delivery orders.
- They work in groups to explore and solve the problem using fraction models, focusing on identifying common denominators.
- The activity involves hands-on practice with shading fraction models to visually compare fractions.
- Students conclude by discussing their findings and understanding of equivalent fractions and common denominators.

EXPLORE ACTIVITIES

EXPLORE 1 COMPARING FRACTIONS WITH MODELS

Students engage in comparing fractions using manipulatives and visual models to understand their values and relationships.

- Students work in groups to play a "Would You Rather?" game, using fraction circles and tiles to model and compare fractions.
- They explore concepts of equivalent fractions by adjusting numerators and denominators to facilitate comparison.
- Students record their findings and decisions in their Student Journals, using symbols $>$, $=$, or $<$ to represent their comparisons.
- The activity concludes with a class discussion to share strategies and insights, reinforcing the importance of consistent whole sizes in fraction comparisons.

EXPLORE 2 COMPARING FRACTIONS WITH NUMBER LINES

Students will engage in comparing fractions using number lines and common denominators.

- Students use fraction tiles and number lines to model and compare fractions, discussing equivalency and differences.
- They work in groups to create equivalent fraction tables, finding common numerators or denominators to facilitate comparison.
- Students apply their understanding by comparing distances on road signs, using various strategies to determine which locations are closer or farther.
- The activity concludes with a Math Chat, where students share strategies and observations, reinforcing their understanding of fraction comparison.

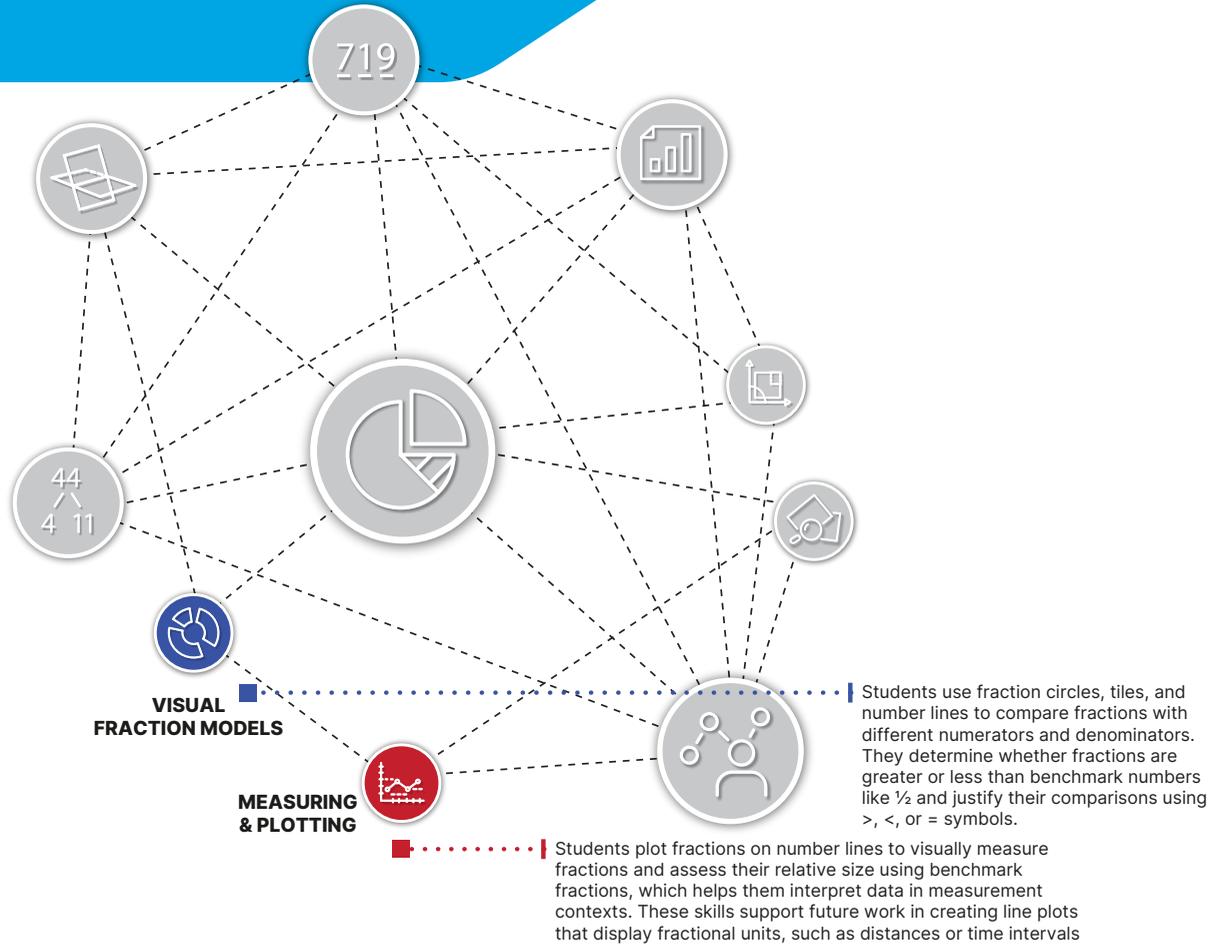
EXPLORE 3 COMPARING FRACTIONS USING BENCHMARKS

Students engage in comparing fractions with different numerators and denominators using benchmark fractions.

- Students work in small groups using fraction circles to determine if daily walking goals are met based on benchmark fractions like one-half.
- They explore comparing fractions by analyzing scenarios and using guiding questions to deepen understanding.
- Students are encouraged to explain their reasoning and share strategies during a Math Chat, fostering collaborative learning.
- The activity concludes with an Exit Ticket to assess understanding and a class discussion to consolidate learning.

JUMP IN HERE

SCOPE BIG IDEAS



KEY CONCEPTS

- I can understand that two different fractions can have the same value.
- I can generate and recognize equivalent fractions.
- I can use fraction models, common denominators, or common numerators to compare fractions.
- I can recognize that comparisons are valid only if both fractions refer to the same whole.
- I can record comparisons using the symbols $>$, $=$, or \sim .
- I can justify comparisons using a fraction model.
- I can use benchmark fractions to compare fractions.

FUNDAMENTAL QUESTIONS

- How can two different fractions have the same value?
- How can I generate and recognize equivalent fractions?
- How can I use fraction models, common denominators, or common numerators to compare fractions?
- How can I be sure that a comparison between fractions is valid?
- What symbols can I use to compare fractions?
- How can I use a fraction model to justify comparisons?
- How can benchmark fractions be used to compare fractions?

SCAN HERE
for the
Teacher
Prep Video



EXPLORE 2 - COMPARING FRACTIONS WITH NUMBER LINES

Standard(s)

- **Extend understanding of fraction equivalence and ordering.** Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

Big Ideas	Standards for Mathematical Practice	Content Connections	Drivers of Investigation
Visual Fraction Models Measuring and Plotting	<p>MP.1 Make sense of problems and persevere in solving them.</p> <p>MP.2 Reason abstractly and quantitatively.</p> <p>MP.3 Construct viable arguments and critique the reasoning of others.</p> <p>MP.4 Model with mathematics.</p> <p>MP.5 Use appropriate tools strategically.</p> <p>MP.6 Attend to precision.</p>	<p>CC1 Reasoning with Data</p> <p>CC3 Taking Wholes Apart, Putting Parts Together</p>	<p>DI1 Make Sense of the World (Understand and Explain)</p> <p>DI2 Predict What Could Happen (Predict)</p>

DESCRIPTION

Students compare two fractions by using number lines and finding common denominators.

MATERIALS

PRINTED

- 1 Student Journal (per student)
- 1 Teacher Road Sign (per class)
- 1 Set of Number Lines (per group)
- 1 Set of Student Road Signs (per class)
- 1 Exit Ticket (per student)

REUSABLE

- 1 Projector or document camera (per teacher, optional)
- 1 Dry-erase marker (per group)
- 1 Set of fraction tiles (per group)
- 1 Sheet protector (per group)
- 1 Dry-erase eraser (per group)

CONSUMABLE

- 1 Sheet of chart paper (per teacher, optional)

PREPARATION

- Plan to have students work in 6 groups to complete this activity.
- Print the Student Journal and an Exit Ticket for each student.
- Prepare the set of fraction tiles for each group.
- Print the set of Number Lines for each group. Put them in a clear sheet protector.
- Plan to project Teacher Road Sign, if desired.
- For students who need more support in recalling information, see our Fraction Circles, Fraction Strips, and Assorted Number Lines Supplemental Aids elements in the Intervention section.
- **Go Digital!** Have students explore or present their solutions using virtual manipulatives. The manipulatives used in this lesson can be found in the Explore drop-down menu and can be digitally assigned to students. (Fraction Circles, Fraction Tiles, and Number Lines)



GRADE 4 COMPARE FRACTIONS

EXPLORE > EXPLORE 2

Explore Compare Fractions Explore 2

Name: _____ Date: _____

Where Should We Eat?

Look at your road sign. Compare the fractions by creating a model using your fraction tiles and a number line showing each fraction. Find a common numerator or denominator between the two fractions to further prove which one is greater or less. Write two comparison statements using the symbols $<$, $>$, or $=$ to compare the restaurants' distances.

Where to go?

Road Sign 1

Draw the fraction tile model of each fraction.

Draw the number line model for each fraction.

Find a common denominator.

2	4	6	8	10
5	10	15	20	
2	4	6	8	10
4	8	12	16	20

Write two comparison statements using symbols.

$\frac{2}{5} < \frac{3}{4}$

$\frac{3}{4} > \frac{2}{5}$

Sammy's Seafood restaurant is closer.

© Accelerate Learning Inc. - All Rights Reserved

Explore Compare Fractions Explore 2

Road Sign 4

Draw the fraction tile model of each fraction.

Draw the number line model for each fraction.

Find a common denominator.

4	8	12
6	12	
5	10	12
12	24	

Write two comparison statements using symbols.

$\frac{4}{6} > \frac{5}{12}$

$\frac{5}{12} < \frac{4}{6}$

Tasty Tacos restaurant is farther.

Road Sign 5

Draw the fraction tile model of each fraction.

Draw the number line model for each fraction.

Find a common denominator.

1	2	3	4
5	10	15	20
1	2	3	4
4	8	12	16

Write two comparison statements using symbols.

$\frac{1}{5} < \frac{1}{4}$

$\frac{1}{4} > \frac{1}{5}$

Cow-a-Bunga restaurant is closer.

© Accelerate Learning Inc. - All Rights Reserved

Explore Compare Fractions Explore 2

Road Sign 2

Draw the fraction tile model of each fraction.

Draw the number line model for each fraction.

Find a common denominator.

4	8	12
9	18	
5	10	15
6	12	18

Write two comparison statements using symbols.

$\frac{4}{9} < \frac{5}{6}$

$\frac{5}{6} > \frac{4}{9}$

Lucky Star Buffet restaurant is farther.

Road Sign 3

Draw the fraction tile model of each fraction.

Draw the number line model for each fraction.

Find a common denominator.

3	6	9				
7	14					
1	2	3	4	5	6	7
2	4	6	8	10	12	14

Write two comparison statements using symbols.

$\frac{3}{7} < \frac{1}{2}$

$\frac{1}{2} > \frac{3}{7}$

Fruity Smoothie restaurant is closer.

© Accelerate Learning Inc. - All Rights Reserved

Explore Compare Fractions Explore 2

Road Sign 6

Draw the fraction tile model of each fraction.

Draw the number line model for each fraction.

Find a common denominator.

3	6	9	12
6	12	18	24
4	8	12	
8	16	24	

Write two comparison statements using symbols.

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

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

Neither restaurant is closer.

Reflect

What is the relationship between the fraction tiles and the number line?
They both are showing the same fractions, just in two different ways. The fraction that was greater when I built it with the tiles was the same fraction that was farther from zero on the number line. Each fraction tile is like a section of the number line.

Explain how you can compare two fractions when the numerators or denominators are not equal.
You can use models such as fraction tiles or number lines. You can also find equivalent fractions for the fractions you are comparing so that they have a common numerator or denominator.

© Accelerate Learning Inc. - All Rights Reserved

STUDENT JOURNAL ANSWER KEY



Show What You Know

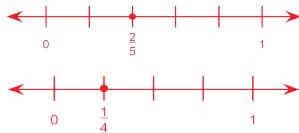
Compare Fractions Part 2

Name: _____ Date: _____

Compare Fractions

Part 2: Compare Fractions Using Number Lines

Draw number lines to show the positions of $\frac{2}{5}$ and $\frac{1}{4}$.



Find a common denominator for 5 and 4.

2	4	6	8
5	10	15	20

1	2	3	4	5
4	8	12	16	20

Write two comparison statements, using > and <:

$$\frac{2}{5} > \frac{1}{4}$$

$$\frac{1}{4} < \frac{2}{5}$$

© Accelerate Learning Inc. - All Rights Reserved

1

PROCEDURE AND FACILITATION POINTS

PART I

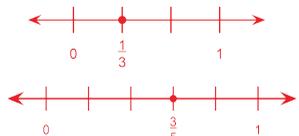
- Distribute fraction tiles, a set of Number Lines, and a dry-erase marker and eraser to each group.
- Show the Teacher Road Sign on the board. Ask students to turn and talk with the partner next to them about what the sign says and where they might have seen a similar sign.
 - Listen to discussions to ensure students are naming fractions correctly, such as, "The fraction $\frac{1}{4}$ should be said as 'one-fourth,' not 'one dash four' or 'one over four.'"
- Explain to students that, many times, highway signs will show the distance from one point to another point. This would mean that the distance from where the sign is to the place listed on the sign is how far apart they are. Discuss the following question:
 - DOK-1** When we look at this sign, what information is it telling us? *Math Road is $\frac{1}{4}$ of a mile away, Science Avenue is $\frac{4}{8}$ of a mile away, and Reading Court is $\frac{9}{12}$ of a mile away.*
- Tell students to build a model of each fraction on the road sign using their fraction tiles. On the Number Lines, they will work together in groups to create a number line for each fraction as well. If needed, students can use the fraction tiles to help them build a number line.
- Students should align one edge of their fraction tiles to easily see a comparison of the fractions.
- Discuss the following questions:
 - DOK-1** What does it mean if two fractions are equivalent? *It means they have the same value even if they may look different or have different numerators and denominators.*
 - DOK-2** Are all of these fractions equivalent? How do you know? *No, they are not because when I line up my fraction tiles, they are not the same amount. When I look at the location of the three points on my number lines, they are not all the same distance from zero.*
 - DOK-1** What do you notice about the numerators in these fractions? *They are different.*
 - DOK-1** What do you notice about the denominators in these fractions? *They are different.*
 - DOK-2** How can we compare these fractions? *We could look at our tiles to see which fraction is larger or smaller. We could look at the number line to see which fraction is closer to one.*
 - DOK-1** Which street is the farthest away? How do you know? *Reading Court is the farthest. If I look at my fraction tiles, $\frac{9}{12}$ is greater than the other fractions. My point for $\frac{9}{12}$ is closest to 1 on the number line.*
 - DOK-1** Which street is closest? How do you know? *Math Road is closest. If I look at my fraction tiles, $\frac{1}{4}$ is the smallest amount. If I look at my number line, my point at $\frac{1}{4}$ is closer to 0 than the other fractions are.*



Show What You Know

Compare Fractions Part 2

Draw number lines to show the positions of $\frac{1}{3}$ and $\frac{3}{5}$.



Find a common denominator for 3 and 5.

1	2	3	4	5
3	6	9	12	15

3	6	9
5	10	15

Write two comparison statements, using > and <:

$$\frac{1}{3} < \frac{3}{5}$$

$$\frac{3}{5} > \frac{1}{3}$$

© Accelerate Learning Inc. - All Rights Reserved

2

SHOW WHAT YOU KNOW PART 2 ANSWER KEY



GRADE 4 COMPARE FRACTIONS

EXPLORE > EXPLORE 2

- h. **DOK-2** Look at $\frac{4}{8}$ using your fraction tiles and on your number line. What can you determine about this amount? *It is equal to $\frac{1}{2}$; 4 out of 8 pieces is half. My point on my number line is right in the middle between 0 and 1.*
- i. **DOK-1** What fraction is $\frac{4}{8}$ equal to? *The fraction $\frac{1}{2}$ is equal to $\frac{4}{8}$.*
- j. **DOK-2** What if you didn't have a model to build the fractions? What could you do? We could draw a number line to compare them. *We could create common denominators or common numerators to compare the fractions.*

- 7. Briefly review how to find equivalent fractions.
- 8. Create the tables below on the board.

1			
4			
4			
8			
9			
12			

- 9. Invite students to create equivalent fraction tables on their desks with dry-erase markers by listing multiples of each numerator and denominator.
- 10. Challenge them to generate equivalent fractions and find a common numerator or denominator. Students will collaborate to complete each table until they find an equal numerator or denominator for all three fractions.
- 11. Call on volunteers to come up to the board and complete the tables until an equal denominator is reached. Students may quickly see that multiplying the numerator and denominator in a fraction by 2, then 3, then 4 results in skip counting by each. This strategy can be used to quickly generate equivalent fractions.

1	2	3	4	5	6
4	8	12	16	20	24
4	8	12			
8	16	24			
9	18				
12	24				

- 12. Students will circle their three fractions with equal numerators or equal denominators. They should circle $\frac{6}{24}$, $\frac{12}{24}$, and $\frac{18}{24}$. Ask them what the numerators for these fractions are. Students should see that the numerators are different. Discuss the following question:
 - a. **DOK-1** How can we compare these fractions now that we have equal denominators? *We can look at the numerators and compare the fractions based on those. Since the denominators are the same, we know we are comparing same-sized pieces, so looking at the numerator can let us know how many of those pieces we have for each fraction.*
- 13. Emphasize the usefulness of having a common numerator or denominator when comparing fractions.

PART II

- 1. Give a Student Journal to each student.
- 2. Each group will need one Student Road Sign, a set of fraction tiles, and a set of Number Lines.
- 3. Read the following scenario to the class: Your family is taking a long road trip. As you drive, you see various road signs showing restaurants nearby. The signs show you how far away each restaurant is from where you are on the highway. Look at each Road Sign, and compare each restaurant's distance.
- 4. Students will work cooperatively to compare the distances of the restaurants on their road signs. They will use fraction tiles and number lines to compare the two fractions. In addition, they will find equivalent fractions with equal denominators using an equivalent fraction table to compare the fractions. All of these strategies will help determine which restaurant is closer or farther and lead students to write two comparison statements to justify their answers.
- 5. Give students about 8 minutes to complete their Student Journals for each road sign before rotating signs among the groups.
- 6. Come back together as a whole group to discuss the models that were created and the comparison of each set of fractions.
- 7. Ask students to share their strategies, and encourage them to ask each other questions and make connections. Encourage students to notice the similarities and differences between the strategies used to compare fractions.
- 8. After the Explore, invite the class to a Math Chat to share their observations and learning.



Explore

Multiply Fractions by Whole Numbers
Explore 2

Name: _____ Date: _____

Equal Groups Exit Ticket

Read the problem below, and create a model to represent the situation.

Mrs. Johnson uses $\frac{3}{5}$ of a cup of peanut butter to make each batch of peanut butter fudge she sells in the bakery. Each day, she makes 6 batches of the fudge.

Peanut Butter in Fudge Batches	
$\underline{\quad 6 \quad}$ groups of $\underline{\quad \frac{3}{5} \quad}$	
Model:	
Mrs. Johnson needs $\underline{\quad 3 \frac{3}{5} \quad}$ cups of peanut butter to make the fudge.	
Multiplication expression:	Equivalent expression:
$6 \times \frac{3}{5}$	$6 \times \frac{3}{5} = 18 \times \frac{1}{5}$

© Accelerate Learning Inc. - All Rights Reserved 1

EXIT TICKET
ANSWER KEY

MATH CHAT

- **Choose a Structured Conversation routine to facilitate the following question:**
 - **DOK-2** What is the relationship between the fraction tiles and the number line? *They both show the same fractions, just two different ways. The fraction that was greater when I built it with the tiles is the same fraction that is closer to 1 on the number line. Each tile is like a section of the number line.*
- **DOK-2** Why can each comparison be written two ways? *The two statements are saying the same thing. We are just changing the number order. When we do that, the symbol changes.*
- **DOK-2** Why is it helpful to find a common denominator when comparing fractions? *If I have a common denominator, then I could look at the numerators and determine which was greater or lesser because the equal denominators tell me the size of the pieces will be the same for both fractions.*
- **DOK-2** If you were asked to teach a classmate to compare fractions, what are five vocabulary terms you would use in your explanation? *I would use many vocabulary terms in my explanation, such as equivalent fraction, common denominator, numerator, greater than, and less than.*
- **DOK-2** What is something new you learned about fractions during this Explore? *I learned you can compare fractions without a model. I noticed that finding a common denominator to compare two fractions can be done by thinking about what multiple the denominators have in common.*

POST-EXPLORE

1. Have students complete the Exit Ticket to formatively assess their understanding of the concept.
2. Complete the Anchor Chart as a class.
3. Have each student complete their Interactive Notebook.



GRADE 4 COMPARE FRACTIONS

EXPLORE > EXPLORE 2

INSTRUCTIONAL SUPPORTS

1. If students need additional support representing each fraction on a number line, revisit number lines using whole numbers. Then move on to representing halves on that number line. Assorted Number Lines are available as a Supplemental Aids element in the Intervention section of the scope.
2. To provide additional visual support, students can look at the measurements on a ruler to better understand that there are fractional amounts between whole numbers. Additionally, students could use fraction tiles and translate the model into a number line model with each fractional part representing a jump on the number line.
3. It may be necessary to remind students of what each comparison symbol represents.
4. If students need additional support creating equivalent fractions, then have them write the multiplier, such as “ $\times 2$ ” or “ $\times 3$,” between each numerator and denominator on every column on the table. Emphasize that both the numerator and denominator are being multiplied by the same number because to create an equivalent amount we need to multiply by one whole, which can be represented as a fraction such as $2/2$, $3/3$, and so on.
5. Students may be able to compare the fractions correctly but have a difficult time putting them into the context of the problem. Check for understanding that the lesser fraction represents the restaurant that is closest, whereas the greater fraction represents the restaurant that is farthest. If needed, have students illustrate or act out what is happening in the scenario.
6. Because each problem in the Student Journal has multiple parts, students may benefit from labeling all models within each part with the restaurant name.
7. As an extension, challenge students to name distances that would be between two of the fractions on a sign.

LANGUAGE SUPPORTS

Table is a word that has multiple meanings in English. Support multilingual learners by explaining that table in this context refers to the chart used to show sets of numbers.

Read each step of the Student Journal directions, and demonstrate key words as you read. For example, as you read “draw the fraction tile model of each fraction,” show it by modeling the fractions and drawing them out.

As students work and discuss ideas with their groups, summarize what you hear and repeat key ideas and vocabulary through intonation, slower speech, and visual cues. Ideas and words to listen for include greater than, less than, equal to, common numerator, and common denominator.

Facilitate a structured conversation between pairs of students. Use the sentence structures provided to support students in asking and answering questions. Allow students to take turns being partner A and partner B.

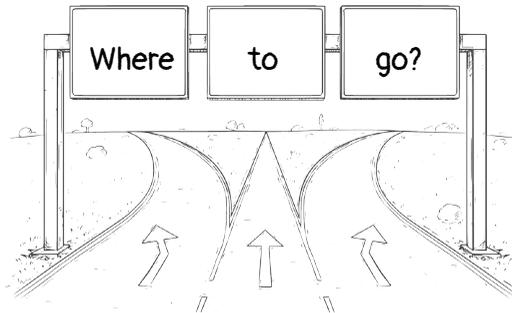
- Partner A: How did you model the problem?
- Partner B: I used a ____ to model the problem.
- Partner A: How did you find the answer?
- Partner B: To find the answer, I
- Partner A: I heard you say Is that right?



Name: _____ Date: _____

Where Should We Eat?

Look at your road sign. Compare the fractions by creating a model using your fraction tiles and a number line showing each fraction. Find a common numerator or denominator between the two fractions to further prove which one is greater or less. Write two comparison statements using the symbols $<$, $>$, or $=$ to compare the restaurants' distances.



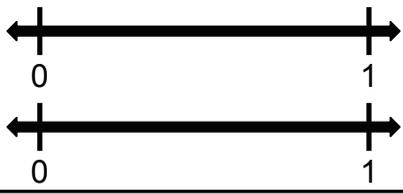
Road Sign 1	
<p>Draw the fraction tile model of each fraction.</p>	<p>Draw the number line model for each fraction.</p>
<p>Find a common denominator.</p>	<p>Write two comparison statements using symbols.</p>

_____ restaurant is **closer**.

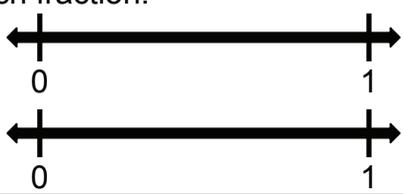


Explore

Compare Fractions
Explore 2

Road Sign 2	
<p>Draw the fraction tile model of each fraction.</p>	<p>Draw the number line model for each fraction.</p> 
<p>Find a common denominator.</p>	<p>Write two comparison statements using symbols.</p>

_____ restaurant is **farther**.

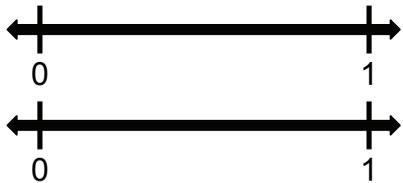
Road Sign 3	
<p>Draw the fraction tile model of each fraction.</p>	<p>Draw the number line model for each fraction.</p> 
<p>Find a common denominator.</p>	<p>Write two comparison statements using symbols.</p>

_____ restaurant is **closer**.

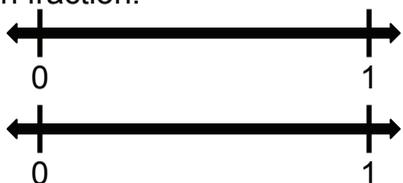


Explore

Compare Fractions
Explore 2

Road Sign 4	
<p>Draw the fraction tile model of each fraction.</p>	<p>Draw the number line model for each fraction.</p> 
<p>Find a common denominator.</p>	<p>Write two comparison statements using symbols.</p>

_____ restaurant is **farther**.

Road Sign 5	
<p>Draw the fraction tile model of each fraction.</p>	<p>Draw the number line model for each fraction.</p> 
<p>Find a common denominator.</p>	<p>Write two comparison statements using symbols.</p>

_____ restaurant is **closer**.



Explore

Compare Fractions
Explore 2

Road Sign 6	
<p>Draw the fraction tile model of each fraction.</p>	<p>Draw the number line model for each fraction.</p>
<p>Find a common denominator.</p>	<p>Write two comparison statements using symbols.</p>

_____ restaurant is **closer**.

Reflect

What is the relationship between the fraction tiles and the number line?

Explain how you can compare two fractions when the numerators or denominators are not equal.



Explore

Compare Fractions
Explore 2

Name: _____ Date: _____

Where Should We Eat?

Exit Ticket

Look at the two fractions below. Draw a model and a number line for both fractions. Create equivalent fractions for both fractions so that they share a common numerator or denominator. Once completed, write two statements to compare both fractions, using the symbols $<$, $>$, or $=$.

$$\frac{2}{3} \quad ? \quad \frac{4}{10}$$

<p>Draw the fraction tile model of each fraction.</p>	<p>Draw the number line model for each fraction.</p>
<p>Find a common denominator.</p>	<p>Write two comparison statements using symbols.</p>



Compare Fractions
Explore 2

Road Sign



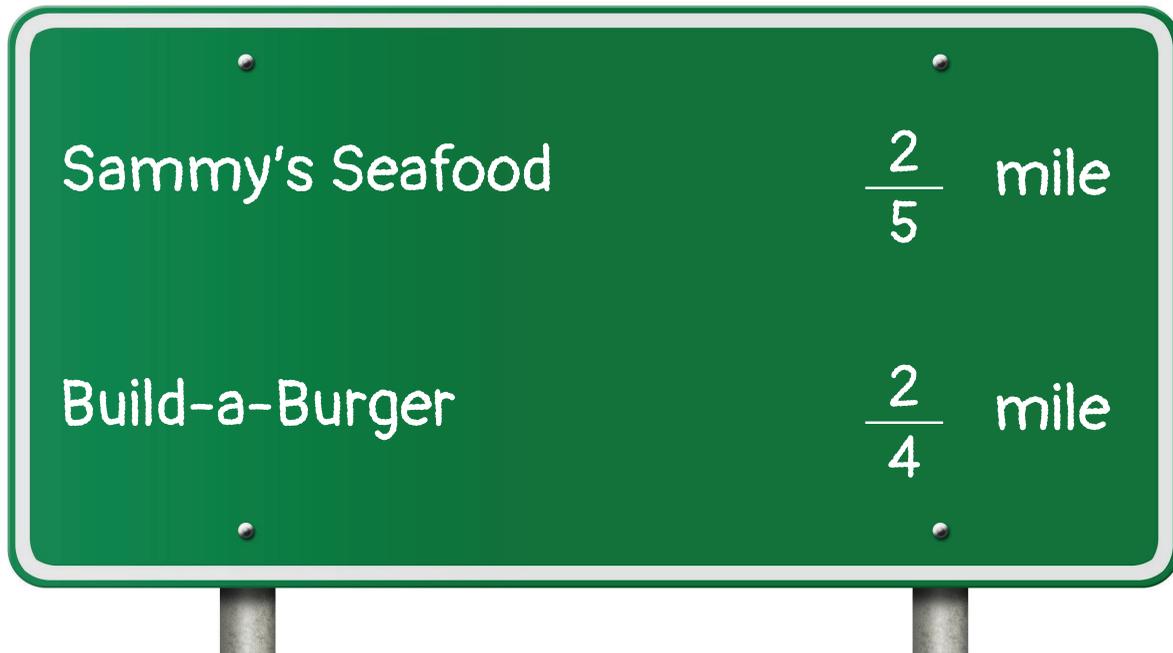
© Accelerate Learning Inc. - All Rights Reserved

1



Compare Fractions
Explore 2

Road Sign 1



© Accelerate Learning Inc. - All Rights Reserved

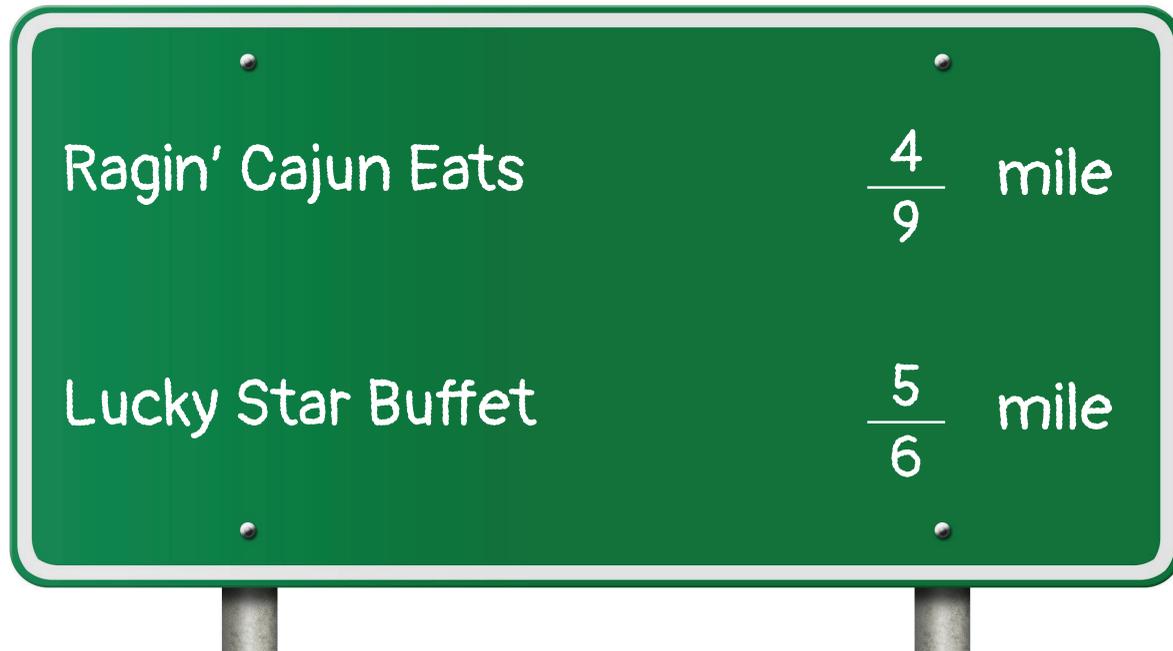
1



Explore

Compare Fractions
Explore 2

Road Sign 2



© Accelerate Learning Inc. - All Rights Reserved

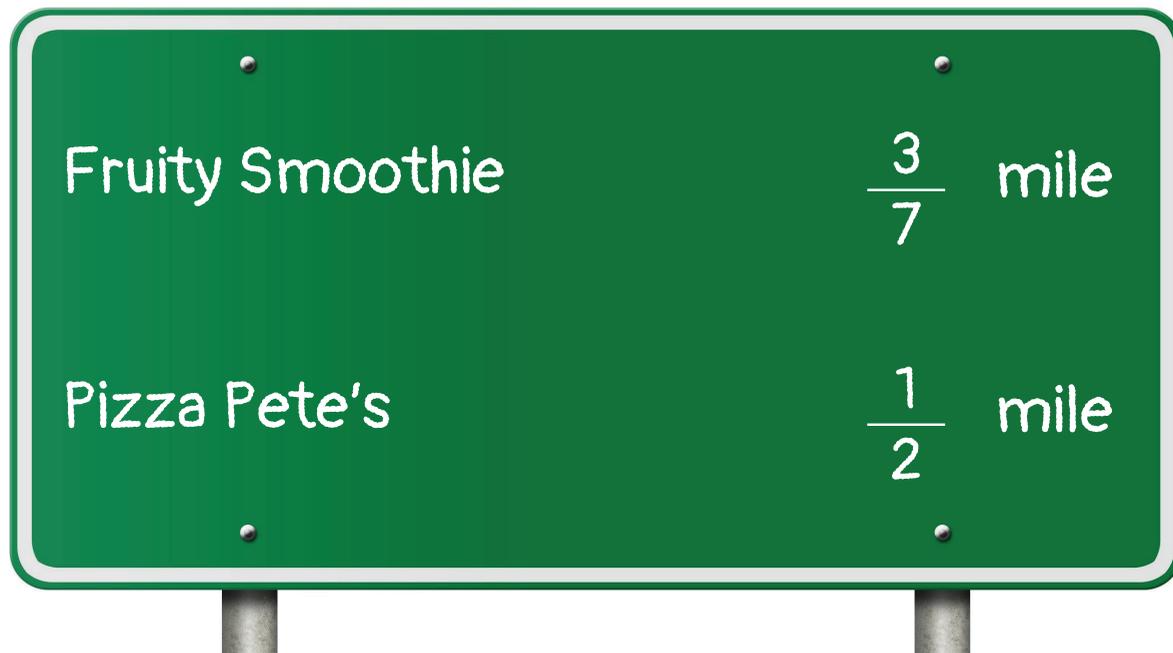
2



Explore

Compare Fractions
Explore 2

Road Sign 3



© Accelerate Learning Inc. - All Rights Reserved

3



Explore

Compare Fractions
Explore 2

Road Sign 4



© Accelerate Learning Inc. - All Rights Reserved

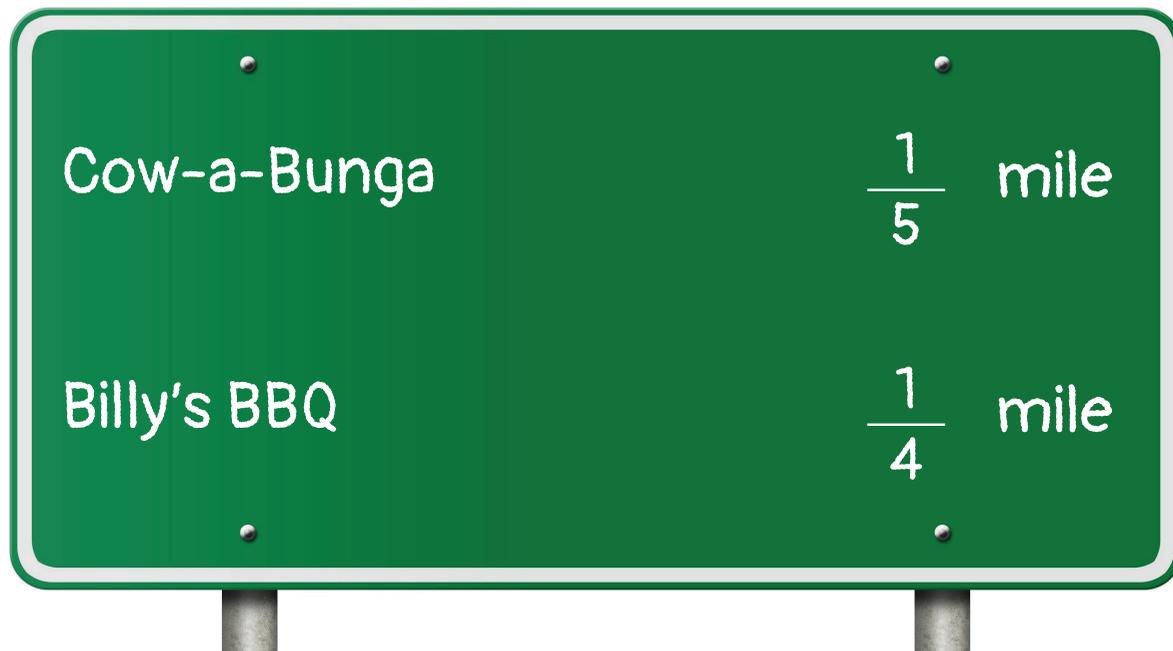
4



Explore

Compare Fractions
Explore 2

Road Sign 5

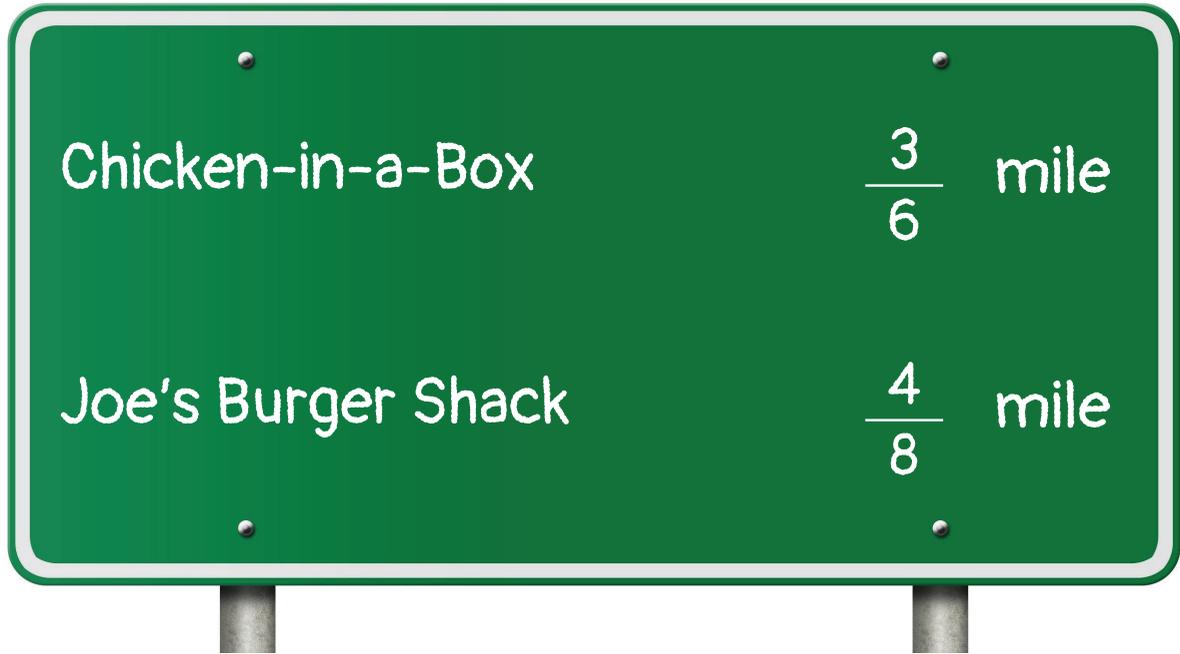


© Accelerate Learning Inc. - All Rights Reserved

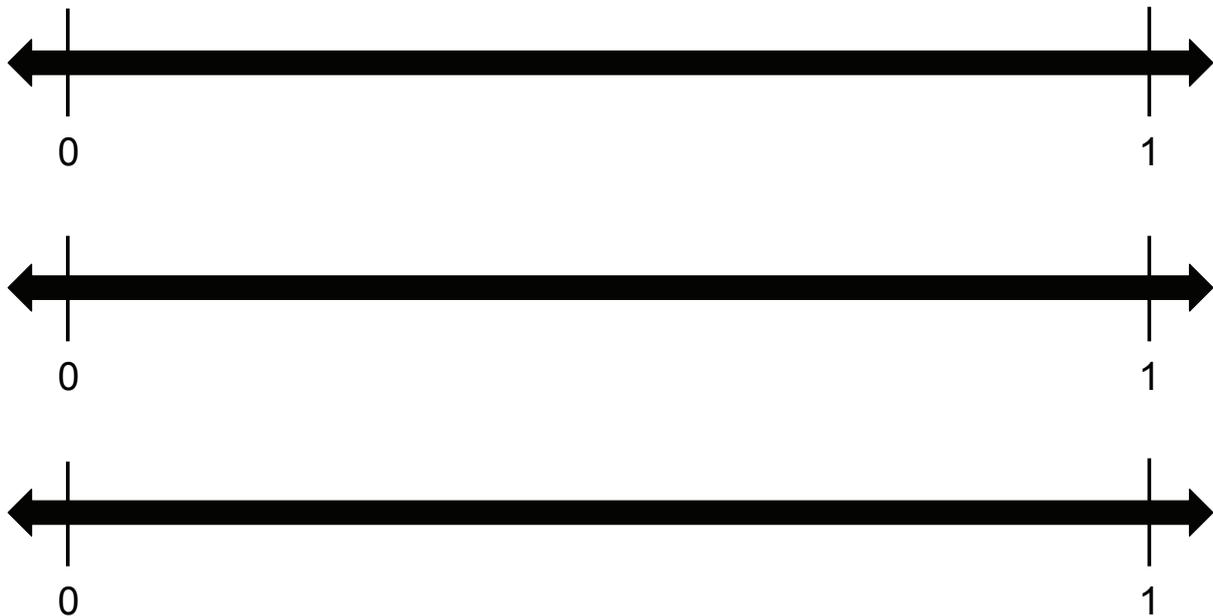
5



Road Sign 6



Number Lines





Math Chat

Part II

Math Chat
What is the relationship between the fraction tiles and the number line?
Why can each comparison be written two ways?
Why is it helpful to find a common denominator when comparing fractions?
If you were asked to teach a classmate to compare fractions, what are five vocabulary terms you would use in your explanation?
What is something new you learned about fractions during this Explore?



Show What You Know

Name: _____ Date: _____

Compare Fractions

Part 2: Compare Fractions Using Number Lines

Draw number lines to show the positions of $\frac{2}{5}$ and $\frac{1}{4}$.

Find a common denominator for 5 and 4.

Write two comparison statements, using $>$ and $<$:

$$\frac{2}{5} \bigcirc \frac{1}{4}$$

$$\frac{1}{4} \bigcirc \frac{2}{5}$$



Show What You Know

Draw number lines to show the positions of $\frac{1}{3}$ and $\frac{3}{5}$.

Find a common denominator for 3 and 5.

Write two comparison statements, using $>$ and $<$:

$$\frac{1}{3} \bigcirc \frac{3}{5}$$

$$\frac{3}{5} \bigcirc \frac{1}{3}$$



Ready to see the full program?

Scan here!



Exploring this lesson with your students?

We'd love to see it in action! Snap a pic, share your classroom experience, and tag us with @AccelerateLearningInc on Facebook.

By sharing, you'll join a community of math educators who are making math meaningful. You might even get featured!

*Accelerate*LEARNING
THE LEADER in STEM EDUCATION

learn more at acceleratelearning.com/math/national

© 2025 Accelerate Learning Inc. - All Rights Reserved
09/23/25