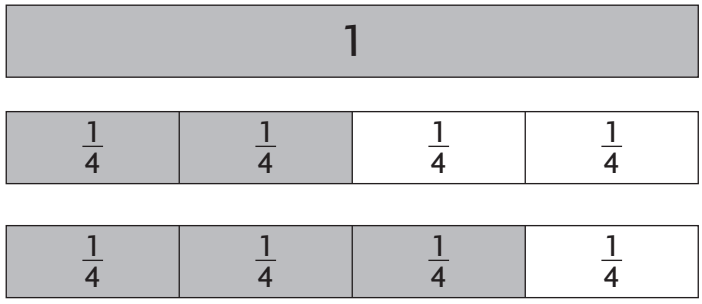
Name _____

Problem Solving • Compare Fractions

Nick walked $\frac{2}{4}$ mile to the gym. Then he walked $\frac{3}{4}$ mile to the store. Which distance is shorter?

Read the Problem	Solve the Problem
What do I need to find? I need to find which distance is shorter.	
What information do I need to use? Nick walked $\frac{2}{4}$ mile to the gym. Then he walked $\frac{3}{4}$ mile to the store.	**Compare the lengths.** $\frac{2}{4} < \frac{3}{4}$
How will I use the information? I will use fraction strips and compare the lengths of the models to find which distance is shorter.	The length of the $\frac{2}{4}$ model is less than the length of the $\frac{3}{4}$ model. So, the distance to the gym is shorter.

1. Mariana and Shawn each had 6 pages to read. Mariana read $\frac{2}{3}$ of her pages. Shawn read $\frac{1}{3}$ of his pages. Who read more pages? **Explain.**

2. Carlos ran $\frac{3}{8}$ of the race course. Lori ran $\frac{3}{6}$ of the same race course. Who ran farther? **Explain.**

© Houghton Mifflin Harcourt Publishing Company

Name _____

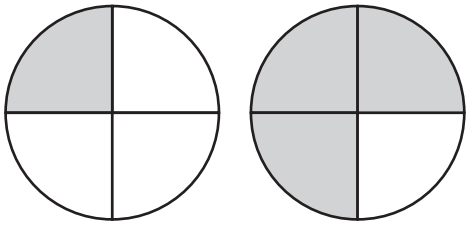
Compare Fractions with the Same Denominator

Pete's Prize Pizzas makes a special pizza. Of the toppings, $\frac{1}{4}$ is peppers and $\frac{3}{4}$ is ham. Does the pizza have more peppers or ham?

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

Step 1 The denominators of both fractions are the same, **4**.
Use fraction circles divided into fourths to model the fractions.

Step 2 Shade 1 part of the first circle to show $\frac{1}{4}$.
Shade **3** parts of the second circle to show $\frac{3}{4}$.



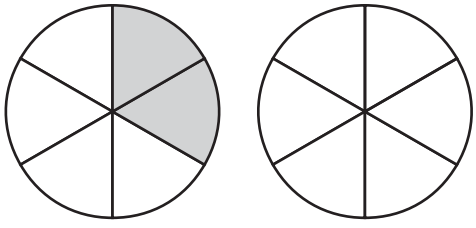
Step 3 Compare. **3** parts is more than **1** part.

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

So, the pizza has more **ham**.

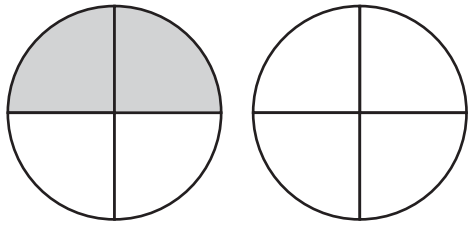
Compare. Write <, >, or =.

1.



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

2.



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

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

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

5. $\frac{1}{4} \bigcirc \frac{3}{4}$

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

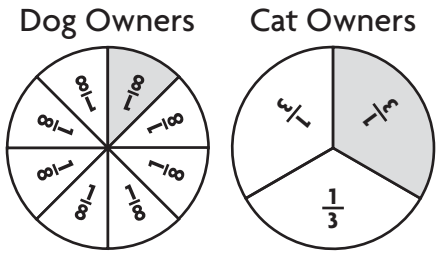
© Houghton Mifflin Harcourt Publishing Company

Name _____

Compare Fractions with the Same Numerator

Ryan takes a survey of his class. $\frac{1}{8}$ of the class has dogs, and $\frac{1}{3}$ of the class has cats. Are there more dog owners or cat owners in Ryan's class?

Compare the fractions. $\frac{1}{8} \bigcirc \frac{1}{3}$



Step 1 Divide the first circle into 8 equal parts. Shade $\frac{1}{8}$ of the circle to show dog owners.

Step 2 Divide the second circle into 3 equal parts. Shade $\frac{1}{3}$ of the circle to show cat owners.

Step 3 Compare the shaded parts of the circles. Which shaded part is larger?

$\frac{1}{3}$ **is larger than** $\frac{1}{8}$. $\frac{1}{8} < \frac{1}{3}$

So, there are more **cat owners** than **dog owners** in Ryan's class.

Compare. Write <, >, or =.

1. $\frac{3}{4} \bigcirc \frac{3}{6}$
2. $\frac{1}{8} \bigcirc \frac{1}{6}$
3. $\frac{2}{4} \bigcirc \frac{2}{6}$
4. $\frac{2}{3} \bigcirc \frac{2}{6}$
5. $\frac{4}{6} \bigcirc \frac{4}{8}$
6. $\frac{2}{8} \bigcirc \frac{2}{4}$
7. $\frac{5}{6} \bigcirc \frac{5}{8}$
8. $\frac{1}{3} \bigcirc \frac{1}{4}$
9. $\frac{3}{6} \bigcirc \frac{3}{4}$
10. $\frac{1}{3} \bigcirc \frac{1}{3}$
11. $\frac{3}{3} \bigcirc \frac{3}{4}$
12. $\frac{2}{8} \bigcirc \frac{2}{6}$

© Houghton Mifflin Harcourt Publishing Company