

Name \_\_\_\_\_


## Relate Fractions and Whole Numbers

**Essential Question** When might you use a fraction greater than 1 or a whole number?

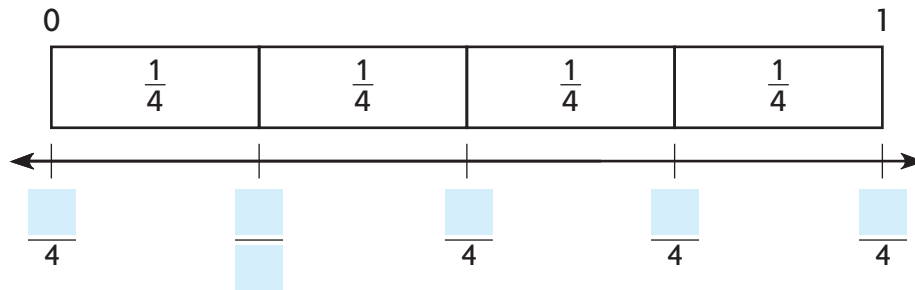
**Learning Objective** You will locate and draw points as fractions and whole numbers on a number line and then use models to write fractions greater than 1.

### Unlock the Problem

Steve ran 1 mile and Jenna ran  $\frac{4}{4}$  of a mile.  
Did Steve and Jenna run the same distance?

 **Locate 1 and  $\frac{4}{4}$  on a number line.**

- Shade 4 lengths of  $\frac{1}{4}$  and label the number line.
- Draw a point at 1 and  $\frac{4}{4}$ .



Since the distance \_\_\_\_\_ and \_\_\_\_\_ end at the same point, they are equal.

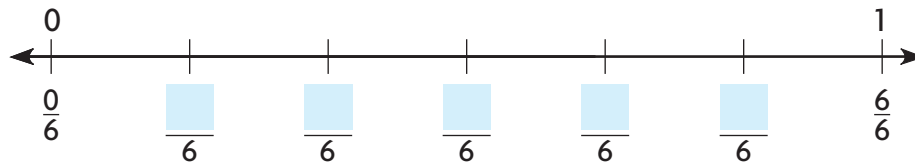
So, Steve and Jenna ran the \_\_\_\_\_ distance.

#### Math Idea

If two numbers are located at the same point on a number line, then they are equal and represent the same distance.



**Try This!** Complete the number line. Locate and draw points at  $\frac{3}{6}$ ,  $\frac{6}{6}$ , and 1.



**A** Are  $\frac{3}{6}$  and 1 equal? Explain.

**Think:** Do the distances end at the same point?

\_\_\_\_\_

\_\_\_\_\_

So,  $\frac{3}{6}$  and 1 are \_\_\_\_\_.

**B** Are  $\frac{6}{6}$  and 1 equal? Explain.

**Think:** Do the distances end at the same point?

\_\_\_\_\_

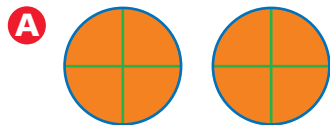
\_\_\_\_\_

So,  $\frac{6}{6}$  and 1 are \_\_\_\_\_.

**CONNECT** The number of equal parts the whole is divided into is the denominator of a fraction. The number of parts being counted is the numerator. A **fraction greater than 1** has a numerator greater than its denominator.

## Examples

Each shape is 1 whole. Write a whole number and a fraction greater than 1 for the parts that are shaded.

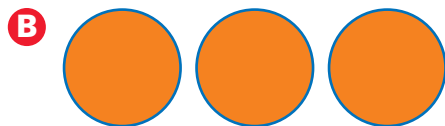


There are 2 wholes.

Each whole is divided into 4 equal parts, or fourths.

$$2 = \frac{8}{4}$$

There are \_\_\_\_ equal parts shaded.




There are 3 wholes.

Each whole is divided into 1 equal part.

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

There are \_\_\_\_ equal parts shaded.

  
**Remember**  
4 ← numerator  
1 ← denominator

1. Explain what *each whole is divided into 1 equal part* means in Example B.

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2. How do you divide a whole into 1 equal part?

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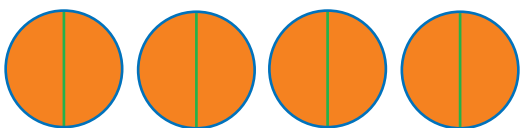
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### Read Math

Read  $\frac{3}{1}$  as *three ones*.

## Try This!

Each shape is 1 whole. Write a whole number and a fraction greater than 1 for the parts that are shaded.



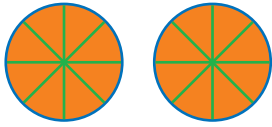
$$\square = \frac{\square}{\square}$$

Name \_\_\_\_\_

## Share and Show



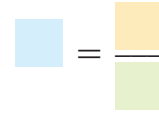
1. Each shape is 1 whole. Write a whole number and a fraction greater than 1 for the parts that are shaded.



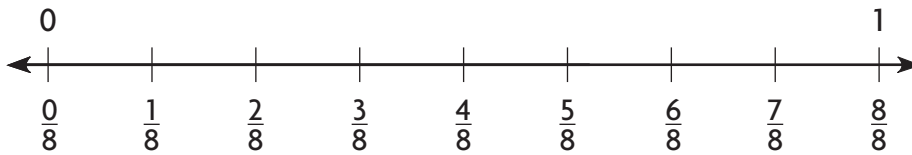
There are \_\_\_\_ wholes.

Each whole is divided into \_\_\_\_ equal parts.

There are \_\_\_\_ equal parts shaded.



Use the number line to find whether the two numbers are equal. Write *equal* or *not equal*.



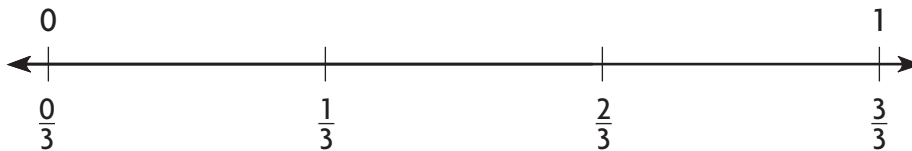
2.  $\frac{1}{8}$  and  $\frac{8}{8}$  \_\_\_\_\_

3.  $\frac{8}{8}$  and 1 \_\_\_\_\_

4. 1 and  $\frac{4}{8}$  \_\_\_\_\_

## On Your Own

Use the number line to find whether the two numbers are equal. Write *equal* or *not equal*.



5.  $\frac{0}{3}$  and 1 \_\_\_\_\_

6. 1 and  $\frac{2}{3}$  \_\_\_\_\_

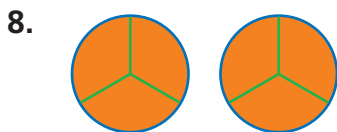
7.  $\frac{3}{3}$  and 1 \_\_\_\_\_

**Math Talk**

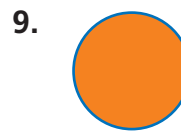
Math Processes and Practices 1

**Evaluate** How do you know whether the two fractions are equal or not equal when using a number line?

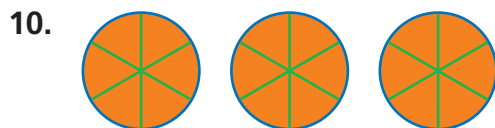
Each shape is 1 whole. Write a fraction for the parts that are shaded.



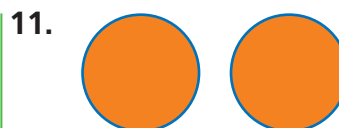
2 = \_\_\_\_\_



1 = \_\_\_\_\_



3 = \_\_\_\_\_



2 = \_\_\_\_\_