

Name \_\_\_\_\_

# Compare Fractions

**I Can** use a number line to compare fractions.

Florida's B.E.S.T.

- Fractions 4.FR.1.4
- Mathematical Thinking & Reasoning  
MTR.2.1, MTR.3.1, MTR.4.1, MTR.5.1, MTR.6.1



## UNLOCK the Problem Real World

Every year, Jace's school has a fair. This year,  $\frac{3}{8}$  of the booths had face painting and  $\frac{1}{4}$  of the booths had sand art. Were there more booths with face painting or sand art?

Compare  $\frac{3}{8}$  and  $\frac{1}{4}$ .

### One Way Find a common denominator.

When two fractions have the same denominator, they have equal-sized parts. You can compare the number of parts.



#### THINK

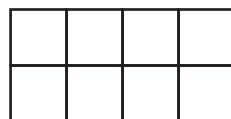
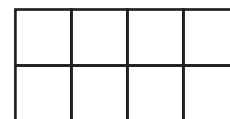
**Think:** 8 is a multiple of both 4 and 8.  
Use 8 as a common denominator.

$$\frac{1}{4} = \frac{1 \times \boxed{\phantom{00}}}{4 \times \boxed{\phantom{00}}} = \frac{\phantom{00}}{8}$$

$\frac{3}{8}$  already has 8 as a denominator.

#### MODEL AND RECORD

Shade the model. Then compare.


 $\frac{3}{8}$ 

 $\frac{2}{8}$ 

### Another Way Use a number line.

Plot the fractions on a number line. The fraction that is farther right is greater.

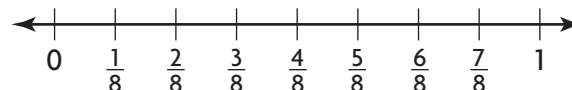
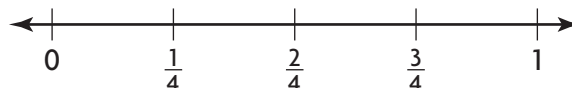
#### THINK

**Use benchmarks to plot the fractions.**

Think:

$\frac{3}{8}$  is more than  $\frac{1}{4}$  and less than  $\frac{1}{2}$ .

#### MODEL AND RECORD


 $\frac{3}{8}$ 

 $\frac{1}{4}$ 

Since  $\frac{3}{8} \bigcirc \frac{1}{4}$ , there were more booths with \_\_\_\_\_.

**Math Talk**

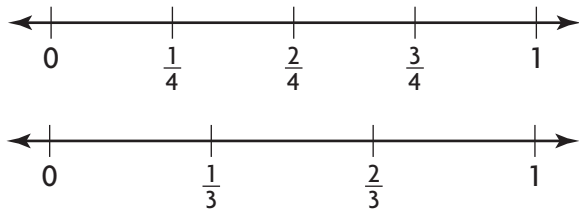
**MTR 6.1**

Assess the reasonableness of solutions.

Why can you not use  $\frac{1}{2}$  as a benchmark to compare  $\frac{3}{8}$  and  $\frac{1}{4}$ ?

**Try This!** Plot the numbers on the number line. Compare the fractions. Explain your reasoning.

**A**  $\frac{3}{4}$    $\frac{1}{3}$



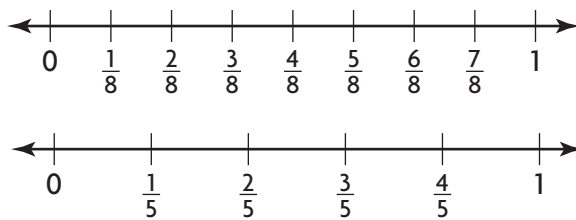

---

---

---

---

**B**  $\frac{3}{5}$    $\frac{3}{8}$



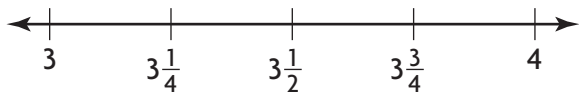

---

---

---

---

**C**  $3\frac{3}{4}$    $3\frac{7}{8}$




---

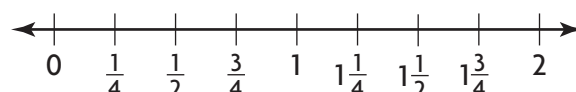
---

---

---

---

**D**  $\frac{3}{2}$    $\frac{5}{4}$




---

---

---

---

---

1. Which would you use to compare  $\frac{11}{12}$  and  $\frac{5}{6}$ , a common numerator or a common denominator? Explain.

---

---