

# Compare Fractions with the Same Numerator

Let's compare 2 fractions with the same numerator.

## Warm-up

### True or False: Unit Fractions

Decide whether each statement is true or false. Be prepared to explain your reasoning.

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

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

- $\frac{1}{6} > \frac{1}{8}$

## Activity 1

### Five Parts of Something

1. Priya says that  $\frac{5}{6}$  is greater than  $\frac{5}{8}$ .

Tyler says that  $\frac{5}{8}$  is greater than  $\frac{5}{6}$ .

Who do you agree with? Show your thinking, using diagrams or number lines.

2. For each pair of fractions, which fraction do you think is greater?

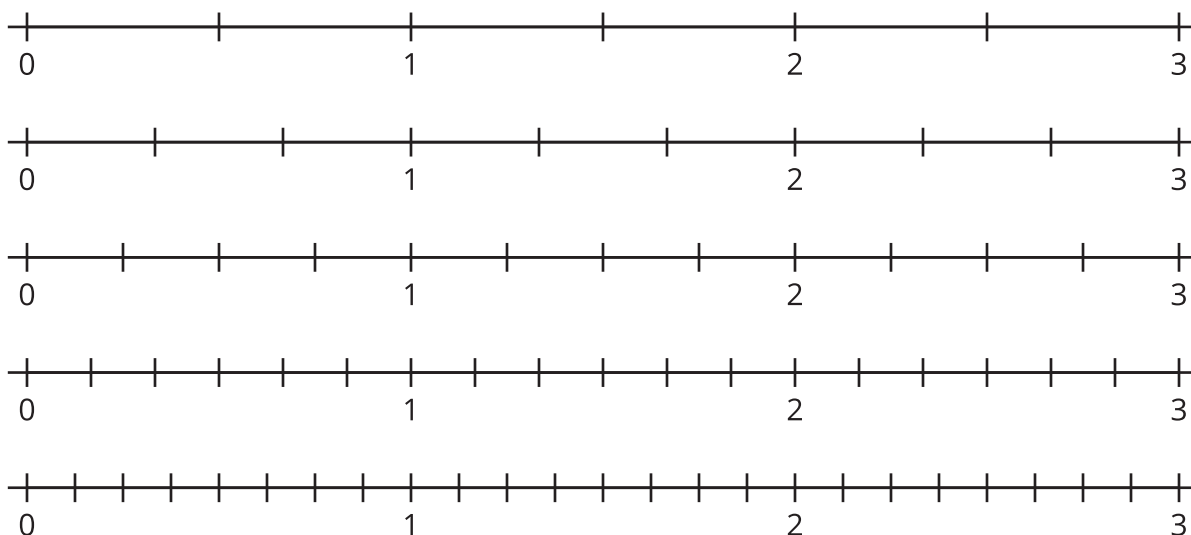
a.  $\frac{5}{3}$  or  $\frac{5}{4}$

b.  $\frac{5}{8}$  or  $\frac{5}{2}$

c.  $\frac{5}{6}$  or  $\frac{5}{4}$



3. Locate and label each fraction on a number line:  $\frac{5}{2}$ ,  $\frac{5}{3}$ ,  $\frac{5}{4}$ ,  $\frac{5}{6}$ ,  $\frac{5}{8}$ .



What do you notice about the points? Make 1 or 2 observations.

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## Activity 2

### Fractions with the Same Numerator

1. For each pair of fractions, circle the fraction that is greater. Explain or show your reasoning.

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

b.  $\frac{3}{4}$  and  $\frac{3}{8}$

c.  $\frac{5}{3}$  and  $\frac{5}{6}$

d.  $\frac{9}{8}$  and  $\frac{9}{6}$

2. Use the symbol  $>$  or  $<$  to make each statement true. Be prepared to explain your reasoning.

a.  $\frac{2}{2}$  \_\_\_\_\_  $\frac{2}{6}$

b.  $\frac{4}{3}$  \_\_\_\_\_  $\frac{4}{8}$

c.  $\frac{8}{8}$  \_\_\_\_\_  $\frac{8}{4}$

d.  $\frac{5}{4}$  \_\_\_\_\_  $\frac{5}{3}$

3. Write a number for the unknown denominator of the fraction to make each statement true. Be prepared to explain your reasoning.

a.  $\frac{1}{3} < \frac{1}{\underline{\hspace{1cm}}}$

b.  $\frac{6}{4} > \frac{6}{\underline{\hspace{1cm}}}$

c.  $\frac{4}{4} < \frac{4}{\underline{\hspace{1cm}}}$

d.  $\frac{2}{6} < \frac{2}{\underline{\hspace{1cm}}}$