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.

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

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

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

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: $\frac{5}{2}, \frac{5}{3}, \frac{5}{4}, \frac{5}{6}, \frac{5}{8}$.
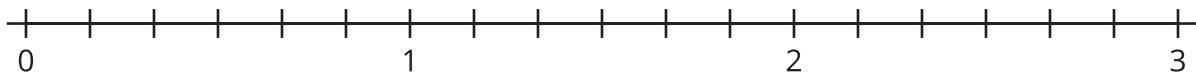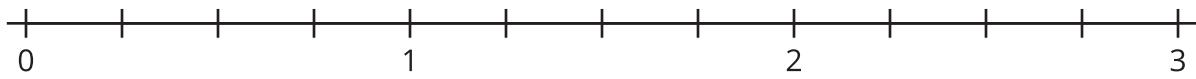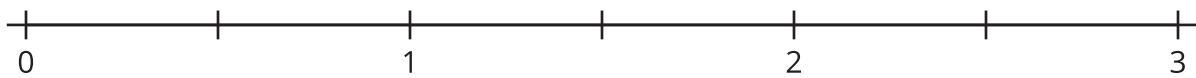
What do you notice about the points? Make 1 or 2 observations.

_____

_____

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. $\frac{1}{3} < \frac{1}{\rule{1cm}{0.4pt}}$

   b. $\frac{6}{4} > \frac{6}{\rule{1cm}{0.4pt}}$

   c. $\frac{4}{4} < \frac{4}{\rule{1cm}{0.4pt}}$

   d. $\frac{2}{6} < \frac{2}{\rule{1cm}{0.4pt}}$