



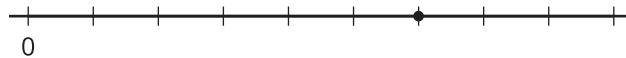
Relate Fractions to Benchmarks

Let's compare the size of fractions to $\frac{1}{2}$ and to 1.

Warm-up

Notice and Wonder: A Point on a Number Line

What do you notice? What do you wonder?



Activity 1

Greater than or Less than 1?

For each number line:

- Name a fraction that the point represents.
- Is that fraction greater than or less than 1?
- How far is it from 1?

1.

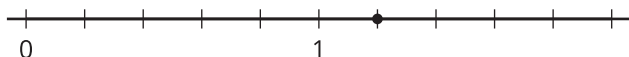


a.

b.

c.

2.

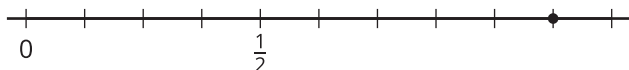


a.

b.

c.

3.



a.

b.

c.

4.



a.

b.

c.

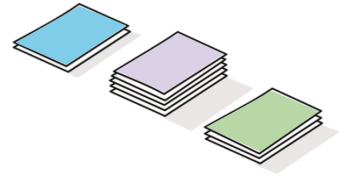


Activity 2

Card Sort: Where Do They Belong?

Your teacher will give you a set of cards that show fractions.

1. Sort the cards into 3 groups: less than $\frac{1}{2}$, equal to $\frac{1}{2}$, and greater than $\frac{1}{2}$. Be ready to explain your reasoning.



Discuss your sorting with another group. Then record the fractions in the table.

less than $\frac{1}{2}$	equal to $\frac{1}{2}$	greater than $\frac{1}{2}$

2. Discuss your sorting with the class. Then complete the sentences.

- A fraction is less than $\frac{1}{2}$ when ...

- A fraction is greater than $\frac{1}{2}$ when ...

- A fraction is between $\frac{1}{2}$ and 1 when ...

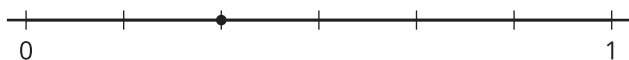
Activity 3

Greater than or Less than $\frac{1}{2}$?

For each number line:

- Name a fraction that the point represents.
- Is that fraction greater than or less than $\frac{1}{2}$?
- What fraction describes how far the point is from $\frac{1}{2}$?

1.

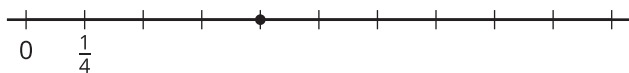


a.

b.

c.

2.

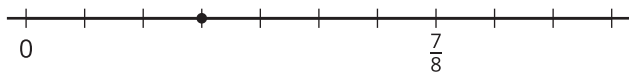


a.

b.

c.

3.

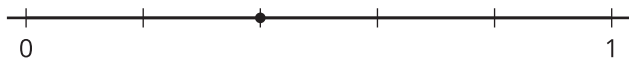


a.

b.

c.

4.



a.

b.

c.



Section A Summary

We used fraction strips to represent fractions with denominators of 2, 3, 4, 5, 6, 8, 10, and 12.

Fraction strips helped us reason about relationships between fractions.

1									
$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$		$\frac{1}{5}$	
$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$	$\frac{1}{10}$

Example:

- One whole split into 5 equal parts makes 5 fifths.
- Each fifth split into 2 equal parts makes 10 equal parts, or 10 tenths.
- When the denominator is larger, there are more parts in a whole.

Fraction strips also helped us reason about the sizes of fractions.

1											
$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$		$\frac{1}{6}$	
$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$

Same denominator: The size of the parts is the same. So, the fraction with more parts is greater.

Example: $\frac{5}{6}$ is greater than $\frac{2}{6}$.

Same numerator: The number of parts is the same. So, the fraction with larger parts is greater.

Example: $\frac{5}{6}$ is greater than $\frac{5}{12}$.

We used what we learned about fraction strips to partition number lines and represent fractions.

