Unit 2, Lesson 12

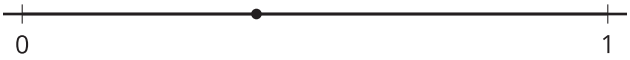
Ways to Compare Fractions

Let's compare some fractions.

Warm-up

Estimation Exploration: What's That Point?

What number is represented by the point on the number line?



Make an estimate that is:

too low	about right	too high

Activity 1

The Greatest of Them All

Here are 25 fractions in a table.

	A	B	C	D	E
1	$\frac{2}{3}$	$\frac{2}{5}$	$\frac{2}{10}$	$\frac{2}{12}$	$\frac{2}{100}$
2	$\frac{4}{3}$	$\frac{4}{5}$	$\frac{4}{10}$	$\frac{4}{12}$	$\frac{4}{100}$
3	$\frac{7}{3}$	$\frac{7}{5}$	$\frac{7}{10}$	$\frac{7}{12}$	$\frac{7}{100}$
4	$\frac{11}{3}$	$\frac{11}{5}$	$\frac{11}{10}$	$\frac{11}{12}$	$\frac{11}{100}$
5	$\frac{26}{3}$	$\frac{26}{5}$	$\frac{26}{10}$	$\frac{26}{12}$	$\frac{26}{100}$

For each question, be prepared to explain your reasoning.

1. Identify the greatest fraction in each column (A, B, C, D, and E).

2. Identify the greatest fraction in each row (1, 2, 3, 4, and 5).

3. Which fraction is the greatest fraction in the entire table?

Activity 2

Relative to $\frac{1}{2}$ and 1

Here is the same table you saw earlier.

	A	B	C	D	E
1	$\frac{2}{3}$	$\frac{2}{5}$	$\frac{2}{10}$	$\frac{2}{12}$	$\frac{2}{100}$
2	$\frac{4}{3}$	$\frac{4}{5}$	$\frac{4}{10}$	$\frac{4}{12}$	$\frac{4}{100}$
3	$\frac{7}{3}$	$\frac{7}{5}$	$\frac{7}{10}$	$\frac{7}{12}$	$\frac{7}{100}$
4	$\frac{11}{3}$	$\frac{11}{5}$	$\frac{11}{10}$	$\frac{11}{12}$	$\frac{11}{100}$
5	$\frac{26}{3}$	$\frac{26}{5}$	$\frac{26}{10}$	$\frac{26}{12}$	$\frac{26}{100}$

1. Which fractions are less than $\frac{1}{2}$? Circle each of them. Then complete this sentence:

   I know a fraction is less than $\frac{1}{2}$ when . . .

2. Which fractions are greater than $\frac{1}{2}$ but less than 1? Circle each of them with a pencil of a different color. (Or draw a triangle around each one.) Then complete this sentence:

   I know a fraction is greater than $\frac{1}{2}$ but less than 1 when . . .

3. Circle the remaining fractions with a pencil of a third color. (Or draw a square around each one.) How would you describe the size of these fractions?

4. Next to the table, create a legend or key to show what each color (or each shape) represents.

5. Here are some pairs of fractions from the table. In each pair, which fraction is greater?

   a. $\frac{2}{5}$ or $\frac{7}{10}$

   b. $\frac{4}{10}$ or $\frac{7}{12}$

   c. $\frac{11}{100}$ or $\frac{4}{3}$

   d. $\frac{26}{10}$ or $\frac{11}{12}$