

# Compare and Order Fractions and Decimals

Name \_\_\_\_\_

**Learning Target:** Compare and order fractions and decimals.

**Success Criteria:**

- I can rewrite fractions and decimals.
- I can compare fractions and decimals.
- I can order fractions and decimals from least to greatest.

## Think and Grow

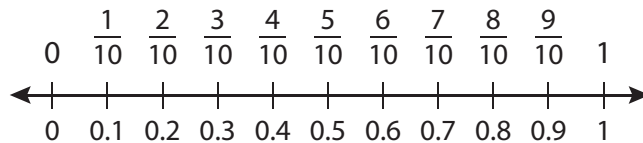
**Example** Compare 0.7 and  $\frac{3}{5}$ .

Write 0.7 as a fraction, 0.7 is 7 tenths, or  $\frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$ .

Write  $\frac{3}{5}$  as an equivalent fraction with a denominator of 10.

$$\frac{3}{5} = \frac{3 \times \boxed{\phantom{00}}}{5 \times \boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{10}$$

$$\frac{7}{10} \bigcirc \frac{6}{10}, \text{ so } 0.7 \bigcirc \frac{3}{5}.$$



When comparing fractions and decimals, write the numbers as all fractions or all decimals.



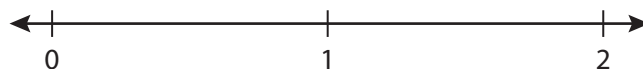
**Example** Order  $\frac{3}{10}$ , 0.09,  $1\frac{1}{3}$ , and  $\frac{5}{6}$  from least to greatest.

$$\frac{3}{10} \bigcirc \frac{1}{2} \text{ and is close to } \underline{\hspace{2cm}}.$$

$$0.09 \bigcirc 0.1 \text{ and is close to } \underline{\hspace{2cm}}.$$

$$1\frac{1}{3} \bigcirc 1 \text{ and is close to } \underline{\hspace{2cm}}.$$

$$\frac{5}{6} \bigcirc 1 \text{ and is close to } \underline{\hspace{2cm}}.$$



Use benchmarks such as 0,  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and 1 to compare fractions and mixed numbers.

So, the order from least to greatest is \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.



## Show and Grow

Compare.

1.  $1.25 \bigcirc \frac{7}{8}$

2.  $\frac{1}{5} \bigcirc 0.25$

3. Order 1.01,  $\frac{5}{4}$ ,  $\frac{7}{8}$ , and 0.75 from least to greatest. \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

# Practice

Name \_\_\_\_\_

Compare.

4.  $2.45 \bigcirc 2\frac{1}{4}$

5.  $\frac{11}{10} \bigcirc 1.1$

6.  $\frac{1}{3} \bigcirc 0.86$

Order the numbers from least to greatest.

7.  $\frac{5}{8}, 0.9, \frac{1}{12}$

8.  $1\frac{1}{6}, 1.6, \frac{2}{3}$

9.  $0.55, \frac{7}{5}, 1.7, \frac{7}{10}$

10.  $0.072, \frac{3}{2}, 0.27, 0.2, \frac{79}{100}$

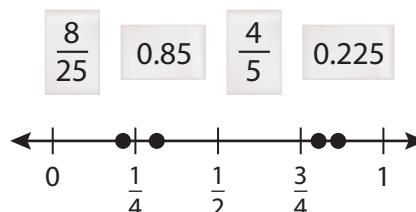
11.  $\frac{9}{100}, 1.34, \frac{13}{12}, 0.8$

12.  $1\frac{3}{8}, 0.495, 1.15, \frac{3}{5}$

13. **YOU BE THE TEACHER** Descartes says the numbers shown are in order from least to greatest. Is he correct? Explain.

$0.105, \frac{3}{20}, 0.3$

14. **MP Precision** Write all of the numbers as fractions or as decimals. Then match each number with its point on the number line.



15. **Modeling Real Life** Order the insects from shortest to longest. Explain.

Insect	Length (inches)
Ladybug	$\frac{2}{5}$
Honeybee	0.95
Dung beetle	$\frac{3}{4}$
Mosquito	0.475
Head louse	0.095

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