

Reteaching 1-5

Rational Numbers

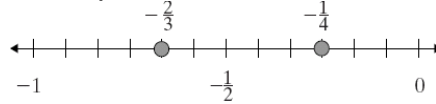
A **rational number** is a number that can be written as a quotient of two integers, where the divisor is not zero. A negative rational number can be written in three different ways.

$$-\frac{2}{3} = -\frac{2}{3} = -\frac{2}{3}$$

Comparing Negative Rational Numbers

Compare $-\frac{2}{3}$ and $-\frac{1}{4}$.

Method 1 Use a number line. Graph both points on a number line and see which is farther to the left.



Since $-\frac{2}{3}$ is farther to the left, $-\frac{2}{3} < -\frac{1}{4}$.

Method 2 Use the lowest common denominator.

$$-\frac{2}{3} = \frac{-2}{3} = \frac{-2 \cdot 4}{3 \cdot 4} = \frac{-8}{12}$$

$$-\frac{1}{4} = \frac{-1}{4} = \frac{-1 \cdot 3}{4 \cdot 3} = \frac{-3}{12}$$

Since $\frac{-8}{12} < \frac{-3}{12}$, then $-\frac{2}{3} < -\frac{1}{4}$.

Compare. Use <, >, or =.

1. $\frac{4}{9}$ _____ $\frac{2}{3}$

4. $-\frac{1}{3}$ _____ $-\frac{5}{6}$

2. -1 _____ $-\frac{4}{5}$

5. $-\frac{2}{5}$ _____ $-\frac{1}{10}$

3. $-\frac{7}{8}$ _____ $-\frac{1}{8}$

6. $-\frac{2}{8}$ _____ $-\frac{1}{4}$

Order from least to greatest.

7. $-\frac{1}{3}, 0.3, -0.35, -\frac{3}{10}$

8. $\frac{1}{5}, -0.25, 0.21, \frac{3}{10}$

9. You and your brother invested an equal amount of money in a college savings plan. In the last quarter your investment was worth $1\frac{5}{6}$ of its original value. Your brother's investment was worth 1.85 of its original value. Whose investment is worth more? _____