absolute value

The absolute value of a number is its distance from 0 on a number line. Numbers that are the same distance from 0 have the same absolute value. For example, −3 and 3 both have an absolute value of 3.

improper fraction

A fraction in which the absolute value of the numerator is greater than the absolute value of the denominator. The fraction $\frac{5}{2}$ is an improper fraction. The fraction $\frac{5}{2}$ means 5 halves and is equivalent to $2\frac{1}{2}$.

mixed number

A number that is written with both a whole number and a fraction. A mixed number is the sum of the whole number and the fraction. The number $2\frac{1}{2}$ represents 2 wholes and a $\frac{1}{2}$ and can be thought of as $2 + \frac{1}{2}$.

opposites

Two numbers whose sum is 0. For example, −3 and 3 are opposites. On a number line, opposites are the same distance from 0 but in different directions from 0. The number 0 is its own opposite.

rational number

A number that can be written as a quotient of two integers where the denominator is not 0. The decimal representation of a rational number either ends or repeats. Examples of rational numbers are $\frac{1}{2}$, $\frac{80}{99}$, 7, 0.2, and 0.191919...

benchmark

A reference number that can be used to estimate the size of other numbers. For work with fractions, 0, $\frac{1}{2}$, and 1 are good benchmarks. We often estimate fractions or decimals with benchmarks because it is easier to do arithmetic with them, and estimates often give enough accuracy for the situation. For example, many fractions and decimals—such as $\frac{37}{50}$, $\frac{5}{8}$, 0.43, and 0.55—can be thought of as being close to $\frac{1}{2}$. You might say $\frac{5}{8}$ is between $\frac{1}{2}$ and 1 but closer to $\frac{1}{2}$, so you can estimate $\frac{5}{8}$ to be about $\frac{1}{2}$. We also use benchmarks to help compare fractions and decimals. For example, we could say that $\frac{5}{8}$ is greater than 0.43 because $\frac{5}{8}$ is greater than $\frac{1}{2}$ and 0.43 is less than $\frac{1}{2}$.

Comparing Bits & Pieces 3.3

No new vocabulary terms.

Comparing Bits & Pieces 3.4

No new vocabulary terms.

Comparing Bits & Pieces 3.5

No new vocabulary terms.