

## Converting Fractions to Decimals

Word	Definition	Examples/Picture
Terminating decimals	Each decimal has a definite number of decimal places	0.1    0.25    2.4839
Non-terminating decimals	Each decimal has an infinite number of decimal places	0.91374928379234... $\pi$
Repeating decimals	Some digits in each decimal repeat forever	0.12121212.... 0.687687687.... $0.\overline{81}$
Numerator	The top number in a fraction	$\frac{2}{3}$ 2 is the numerator
Denominator	The bottom number in a fraction	$\frac{2}{3}$ 3 is the denominator
Equivalent fractions	Fractions that have the same value	$\frac{2}{3}$ and $\frac{6}{9}$
Front-end estimation	A technique used to estimate the sum or difference of decimals	$23.2 + 56.8$ $23 + 56 = 79$
Quotient	The result when one number is divided by another	$20 \div 2 = 10$
Dividend	The number being divided	dividend    divisor    quotient
Divisor	A number that will divide the dividend exactly	
Order of operations	A series of 'rules' about how to properly solve equations	BEDMAS $(2 + 3)^2 \times 4 - 99 = 1$

**Example 1: Write each fraction as a decimal:**  $\frac{3}{5}$ ,  $\frac{17}{200}$ ,  $\frac{4}{13}$

1. Try to write each fraction with a denominator of 10, 100, or 1000. If you cannot, use long division!

**Example 2: Write each decimal as a fraction:** 0.07, 0.97,  $0.\overline{083}$

1. Look at each decimal and identify the highest decimal place. This number will be the denominator. If there is a line above the decimal (meaning that the decimal is repeating), the denominator will be the highest decimal place subtract 1.