

Percent or % really means “divided by 100.”

Percentage of

To find a percentage of an amount, replace the % symbol with division by 100, and then interpret “of” to be multiplication. This example shows that 6% of 1200 is 72:

$$6\% \text{ of } 1200 = \frac{6}{100} * 1200 = 72$$

Proper Fraction to Decimal

To convert from a proper fraction to a decimal, divide the numerator by the denominator to get an equivalent decimal number.

$$\frac{3}{4} = 3/4 = 0.75$$

Decimal to Percentage

To convert from a decimal to a percentage, multiply by 100%. This example shows that 0.25 is equivalent to 25%:

$$0.25 \rightarrow 0.25 * 100\% = 25\%$$

Percentage to Decimal

To convert from a percentage to a decimal number, replace the % symbol with division by 100. This example shows that 85% is equivalent to 0.85:

$$85\% = \frac{85}{100} = 0.85$$

There are three types of fractions: proper fractions, improper fractions, and mixed fractions. A proper fraction is a fraction that has no whole number part and its numerator is smaller than its denominator. An improper fraction is a fraction that has a larger numerator than denominator and it represents a number greater than one. A mixed fraction (also called a "mixed number") is a whole number and a proper fraction combined. All fractions (proper, improper and mixed) can be converted to a decimal number. All decimals can be converted to a fraction and/or mixed number.

$$\text{Mixed Fraction} = \text{Whole Number} \frac{\text{Numerator}}{\text{Denominator}}$$

Improper Fractions are not bad. For mathematics, improper fractions are actually better than mixed fractions. Because mixed fractions can be confusing when we write them in a formula. But, for everyday use, people understand mixed fractions better.

Example:

It is easier to say "I ate $2\frac{1}{4}$ pizzas", than "I ate $\frac{9}{4}$ pizzas"

Decimal to Mixed Fraction

$$9.25 = 9\frac{1}{4}$$

Decimal number (Remember the 9 for later) $\rightarrow 9.25$

Just the decimal $\rightarrow .25$

Multiply to remove the 2 decimal places $\rightarrow \frac{0.25 * 10^2}{10^2} \rightarrow \frac{25}{100}$

The Greatest Common Factor of 25 and 100 is $\rightarrow 25$

Simplify the fraction $\rightarrow \frac{25/25}{100/25}$

Simplified $\rightarrow \frac{1}{4}$

As a Mixed Fraction (Bring back the 9) $\rightarrow 9\frac{1}{4}$

Mixed Fraction to Improper Fraction

$$9\frac{1}{4} = \frac{37}{4}$$

Multiply the whole number part by the denominator $\rightarrow 9 * 4 = 36$

Add that to the numerator $\rightarrow 36 + 1 = 37$

Then write that result above the denominator $\rightarrow \frac{37}{4}$

Proper or Improper Fraction to Decimal

To convert a proper or improper fraction to a decimal, divide the numerator by the denominator to get an equivalent decimal number.

Note:

Proper fractions (and the decimal equivalents) are always greater than zero but less than 1.

Improper fractions (and the decimal equivalents) are always greater than 1.

Mixed fractions (and the decimal equivalents) are always greater than 1.

Examples:

$$\text{Proper Fraction} \rightarrow \frac{3}{10} = 3/10 = 0.3$$

$$\text{Improper Fraction} \rightarrow \frac{17}{10} = 17/10 = 1.7$$