

Converting Between Fractions, Decimals, and Percents

DECIMAL → PERCENT

Rule:

- Move the decimal point two places to the right.
- Write a % sign at the end of the number.

Examples:

$$0.47 \rightarrow 47\%$$

$$0.02 \rightarrow 2\%$$

$$0.3426 \rightarrow 34.26\%$$

$$3.264 \rightarrow 326.4\%$$

DECIMAL → FRACTION

Rule:

- Write the decimal as the numerator of your fraction.
- Choose your denominator. If the last digit of the decimal was tenths, use "10" as your denominator, if the last digit of the decimal was hundredths, use "100" as your denominator, etc.

Examples:

$$0.26 \rightarrow \frac{26}{100} = \frac{13}{50}$$

$$0.04 \rightarrow \frac{4}{100} = \frac{1}{25}$$

$$0.7 \rightarrow \frac{7}{10}$$

$$0.234 \rightarrow \frac{234}{1,000} = \frac{117}{500}$$

$$4.87 \rightarrow \frac{487}{100}$$

PERCENT → FRACTION

Rule:

- Write the percent as a decimal (see the box to the right).
- Write the decimal as a fraction (see the box above, to the right).

Examples:

$$14\% \rightarrow 0.14 \rightarrow \frac{14}{100}$$

$$7.63\% \rightarrow 0.0763 \rightarrow \frac{763}{10,000}$$

PERCENT → DECIMAL

Rule:

- Move the decimal point two places to the left.

Examples:

$$15\% \rightarrow 0.15$$

$$4.7\% \rightarrow 0.047$$

$$427.6\% \rightarrow 4.276$$

FRACTION → DECIMAL

Rule:

- Divide the numerator by the denominator.

Examples:

$$\frac{3}{4} \rightarrow 0.75$$

$$\frac{17}{23} \rightarrow 0.7391$$

FRACTION → PERCENT

Rule:

- Write the fraction as a decimal (see the box above).
- Write the decimal as a percent (see the top, left box).

Examples:

$$\frac{1}{2} \rightarrow 0.5 \rightarrow 50\%$$

$$\frac{3}{7} \rightarrow 0.4285 \rightarrow 42.85\%$$