

CONVERTING PERCENTAGES

A **percentage** is any number or ratio expressed as a fraction of 100. The word *percent* comes from the Latin phrase *per centum*, which means "per one hundred."

For example, 45% represents 45 out of 100, or 45 per 100.

CONVERTING PERCENTS TO DECIMALS

1. Place a decimal at the end of the number
2. Move the decimal two places to the left ("two step")
3. Remove the percent sign (%)

- **60%** → 60.0% → "two step" → 0.60% → 0.60 → **0.6**
- **11%** → 11.0% → "two step" → 0.11% → **0.11**
- **0.5%** → "two step" → 0.005% → **0.005**

Remember: you can simplify a decimal by removing any zeroes that appear at the end.

CONVERTING PERCENTS TO FRACTIONS

1. Remove the percent sign (%)
2. Divide the number by 100
3. Simplify!

$$\bullet \text{ **74\%** } \rightarrow 74 \rightarrow \frac{74}{100} \rightarrow \frac{\text{**37**}}{\text{**50**}}$$

$$\bullet \text{ **3\%** } \rightarrow 3 \rightarrow \frac{\text{**3**}}{\text{**100**}}$$

$$\bullet \text{ **124\%** } \rightarrow 124 \rightarrow \frac{124}{100} \rightarrow \frac{\text{**31**}}{\text{**25**}}$$

There are several real-world uses for percents, decimals, and fractions. **Percents** are often used for test scores, leaving a tip at a restaurant, and calculating sales taxes. **Decimals** are often used when dealing with money, weight, and length. **Fractions** are generally used to divide a total amongst friends, follow a recipe, and tell time.

