

## Writing Numbers as Decimals, Fractions, and Percents

By definition, **percent** means “**per hundred**” or **divided by 100**. So, to write a percent as a decimal, simply, **divide the number by 100** and **remove the percent sign (%)**. Finally, **simplify your answer**.

**Examples:**  $20\% = \frac{20}{100} = 0.2$        $430\% = \frac{430}{100} = 4.3$        $1.6\% = \frac{1.6}{100} = 0.016$

By definition, **percent** means “**per hundred**” or **divided by 100**. So, to write a percent as a fraction, simply, **divide the number by 100** and **remove the percent sign (%)**. Finally, **simplify your answer by reducing to lowest terms**.

**Examples:**  $28\% = \frac{28}{100} = \frac{7}{25}$        $450\% = \frac{450}{100} = \frac{9}{2}$        $.5\% = \frac{.5}{100} = \frac{5}{1000} = \frac{1}{200}$

To write a **fraction as a percent**, simply **do the opposite** and **multiply by 100**. Remember to **simplify your answer** and **write the percent sign behind it**.

**Note:** Remember that **multiplying by 100%** is the **same as multiplying by 1.00**.

**Examples:**  $\frac{1}{2} \cdot \frac{100}{1} \% = 50\%$        $\frac{5}{4} \cdot \frac{100}{1} \% = 125\%$        $\frac{1}{150} \cdot \frac{100}{1} \% = \frac{2}{3} \%$

To write a **decimal as a percent**, simply **do the opposite** and **multiply by 100**. Remember to **simplify your answer** and **write the percent sign behind it**.

**Note:** Remember that **multiplying by 100%** is the **same as multiplying by 1.00**.

**Examples:**  $0.37 \cdot 100\% = 37\%$      $12.5 \cdot 100\% = 1250\%$      $0.0083 \cdot 100\% = 0.83\%$

**Recall** that **dividing by 100** is the same as moving the decimal point **two places to the left**.

**Examples:**  $37.5 / 100 = 0.375$        $5805.3 / 100 = 58.053$

**Recall** that **multiplying by 100** is the same as moving the decimal point **two places to the right**.

**Examples:**  $0.0825 \cdot 100 = 8.25$        $7.632 \cdot 100 = 763.2$