Introduction to Percents

Percent means “parts of 100,”
In the following figure I have 100 parts. If 15 of the parts are shaded, 15% of the figure is shaded:

![Diagram showing 15 shaded parts out of 100]

**WRITING A PERCENT AS A FRACTION OR A DECIMAL**

In most applied problems involving percents, it is necessary either to rewrite a percent as a fraction or a decimal or to rewrite a fraction or a decimal as a percent:

To write a percent as a fraction, remove the percent sign and multiply by 1/100:

\[ 15\% = 15 \times \frac{1}{100} = \frac{15}{100} \]

To rewrite a percent as a decimal, remove the percent sign and multiply by 0.01:

\[ 15\% = 15 \times 0.01 = 0.15 \]

(You move the decimal point two places to the left. Then, remove the percent sign.)

**EXAMPLE**

Write 120% as a fraction and as a decimal:

**Solution:**

Fraction: \( 120\% = 120 \times \frac{1}{100} = \frac{120}{100} = 1 \frac{1}{5} \)

Decimal: \( 120\% = 120 \times 0.01 = 1.2 \)
WRITING A FRACTION OR A DECIMAL PERCENT

A fraction or a decimal can be written as a percent by multiplying by 100%.

Write 3/8 as a percent.

\[
\frac{3}{8} = \frac{3}{8} \times 100\% = \frac{3}{8} \times \frac{100}{1} = \frac{300}{8} \% = 37 \frac{1}{2}\% \text{ or } 37.5\%
\]

Write 0.37 = 0.37 \times 100\% = 37\%

EXAMPLE

Write 0.015 as a percent:

Solution:

\[
0.015 = 0.015 \times 100\% = 1.5\%
\]