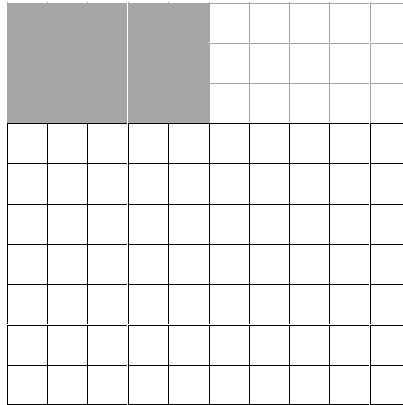


Chapter 5 Section 1

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:



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 $1/100$:

$$15\% = 15 \times 1/100 = 15/100$$

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: $120\% = 120 \times 1/100 = 120/100 = 1 \frac{1}{5}$

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 $\frac{3}{8}$ as a percent.

$$\frac{3}{8} = \quad \frac{3}{8} \times 100\% = \quad \frac{3}{8} \times \frac{100}{1} = \quad 300/8 \% = \quad 37 \frac{1}{2}\% \text{ or } 37.5\%$$

$$\text{Write } 0.37 = \quad 0.37 \times 100\% = \quad 37\%$$

EXAMPLE

Write 0.015 as a percent:

Solution:

$$0.015 = \quad 0.015 \times 100\% = \quad 1.5\%$$