

Percent Notes:

$$\frac{2}{3} \text{ as a } \%$$

① Do the division

$$2 \div 3 = 0.66\bar{6}$$

$$\times 100 \rightarrow 66.7\%$$

② multiply by 100

Translate English into math

OF means multiply

OF whole

IS means equals

One way to solve percent problems is to use the **Percent Pyramid**.

The pyramid will explain what operation is necessary to solve the problem.

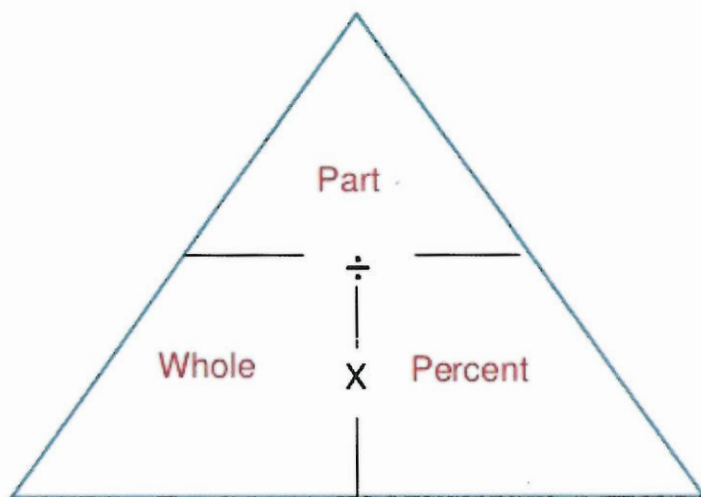
In other words:

$$80\% = 80 \div 100$$

When given the **PART**, division is required.

$$= 0.8$$

When given the **WHOLE** and the **PERCENT**, multiplication is required.



$80\% * 16 \text{ hrs} = 12.8 \text{ hrs}$   
 80% of the time,  
 I'm happy.

Percent Practice:

① 15% of what amount is <sup>part</sup> \$45

$$\frac{45}{15} \times 100 = \boxed{\$300}$$

② 20 feet is 40% of the total length, <sup>whole</sup> what's the total length

$$20 = 40\% * X$$

$$20 \div 0.4 = X$$

$$\boxed{50 \text{ feet}}$$

③ 110% of what is 80?

$$110\% * X = 80$$

$$\frac{80}{110\%} = 72.72$$

Add 5% tax on \$100

what is 5% of 100 ← tax

\$5

total = 100 + 5

\$105

$$150.12 \times 0.055 = 8.2566$$

$$150.12 - 8.2566$$

$$= 141.8634$$

\$141.86 + 5.5% tax