Solving Percent Problems

Key Words or Phrases

- "what is" looking for the part
- "of what" looking for the whole

Use the words from the problem to set-up the proportion and then solve.

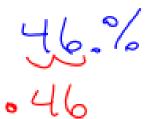
Method Two: Percent Equation

Must convert % to a decimal.

Use the words from the problem to set-up the equation and then solve.

Mini-lesson: Converting Percents to Decimals

- move the decimal point two places to the left and drop the % sign.
- a) 46%



b) 5.2%

c) 147%

d) 30 1/4%

Solve using the percent proportion or the percent equation.

1) Find 65% of 440.

$$\frac{\times}{440} = \frac{65}{100}$$

$$100 \times = 28600$$

Solve using the percent proportion or the percent equation.

2) What number is 8.8% of 20?

$$\frac{x}{20} = \frac{8.8}{100}$$
 $100x = 176$
 $x = 1.76$

$$x = .088 \times 20$$

 $x = 1.76$

Solve using the percent proportion or the percent equation.

3) Six is what percent of 47?

$$\frac{6}{47} = \frac{\times}{100}$$
 $47 \times = 600$
 $\times = 12.8$

4) An Asian Salad gets 28 of its Calories from protein. If this is 22% of the total Calories, how many Calories does the salad have? Round to the nearest whole number.

$$\frac{28}{x} = \frac{22}{100}$$

$$28 = \frac{22}{100}$$

$$22x = 2800$$

$$22x = 2800$$

$$22x = 127 \text{ total}$$
(alorles)

5) Of the 58 students that took the Chapter 5-5 to 5-10 Test, 34 received an A. What percent were As?

$$\frac{34}{58} = \frac{x}{100}$$

$$58x = 3400$$

$$x = 58.6\%$$