6.4 The Percent Equation

Remember in a mathematical sentence the word "is" represents the equal sign in the equation.   part = % of the whole

Be sure to change all PERCENTS into **DECIMALS** when creating equations!

Write and solve an equation to answer each question.

Ex: What number is 24% of 50?

$$a = (0.24)(50)$$

$$\boxed{a = 12}$$

Ex: 9.5 is what percent of 25?

$$\frac{9.5}{25} = \frac{x(25)}{25}$$

$$x = 0.38$$

$$\boxed{x = 38\%}$$

Ex: 39 is 52% of what number?

$$\frac{39}{0.52} = \frac{(0.52)(x)}{0.52}$$

$$\boxed{x = 75}$$

Ex: 18 is 15% of what number?

$$\frac{18}{0.15} = \frac{(0.15)(x)}{0.15}$$

$$\boxed{x = 120}$$

Ex: Find the percent of sales tax on the food total.

tax is what % of food total?

$$\frac{1.65}{27.50} = \frac{(x)(27.50)}{27.50}$$

$$x = 0.06$$

$$\boxed{x = 6\%}$$

Ex: Find the amount of a 16% tip on the food total.

what is 16% of food total?

$$x = (0.16)(27.50)$$

$$x = 4.4$$

$$\boxed{x = \$4.40 \text{ tip}}$$

8th Street Cafe

DATE: MAY04'13 05:45PM
TABLE: 29
SERVER: JANE

Food Total	27.50
Tax	1.65
Subtotal	29.15

TIP: _____

TOTAL: _____

Thank You