## **Using Proportions to Solve Percent Problems**

$$\frac{is}{of} = \frac{\%}{100}$$

13 is 70% of what number
$$13_{is} = \frac{70}{00}$$
13 is 70% of what number
$$13_{is} = \frac{70}{100}$$

13 is the IS 70 is the % and we want to find the of  $\frac{13}{?} = \frac{70}{100}$ Now you have a proportion set up...solve it.

$$\frac{13 \times 100}{70} \approx \boxed{18.6}$$

$$\frac{\text{part}}{\text{whole}} = \frac{\%}{100}$$

Elizabeth got 34 correct out of 40 questions on her test. What percent did she get correct?

Elizabeth got 34 correct out of 40 whole on  $\frac{34}{40}$  part her test. What percent did she get correct?  $\frac{34}{40}$  whole  $\frac{34}{100}$ 

34 is the part and 40 is the whole (notice the of?) Now you have a proportion set up...solve it.  $\frac{34}{40} = \frac{?}{100}$ 

$$\frac{34 \times 100}{40} = 85\%$$