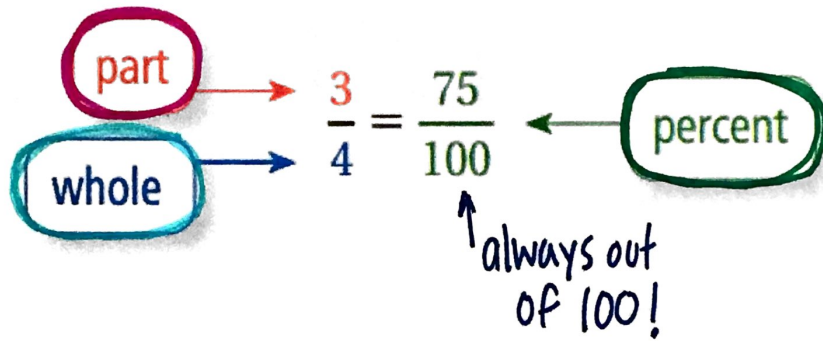


### 6.3 Notes: Percent Proportions

#### The Percent Proportion

Think of writing a fraction and turning that fraction into a percent....

3 out of 4 is 75%



#### Example #1: Finding a Percent

What percent of 15 is 12?

%      whole    part

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

~~$$\frac{12}{15} = \frac{x}{100}$$~~

★ Cross multiply or scale up-down to solve

$$\frac{15x}{15} = \frac{1200}{15}$$

$$x = 80\%$$

#### Example #2: Finding a Part

What number is 36% of 50?

~~$$\frac{x}{50} = \frac{36}{100}$$~~

÷2

←

←

÷2

$$x = 18$$

OR

$$\frac{100x}{100} = \frac{1800}{100}$$

$$x = 18$$

Example #3: Finding a Whole

150% of what number is 24?  
*part*  
~~150% is what number of 24?~~  
%

$$\frac{24}{X} = \frac{150}{100}$$

$$150x = 2400$$

$$X = 16$$

Practice:

1. What percent of 5 is 3?

$$\frac{3}{5} = \frac{X}{100}$$

$$5x = 300$$

$$X = 60\%$$

2. What number is 80% of 60?

$$\frac{X}{60} = \frac{80}{100}$$

$$100x = 4800$$

$$X = 48$$

3. 25 is what percent of 20?

$$\frac{25}{20} = \frac{X}{100}$$

$$20x = 2500$$

$$X = 125\%$$

4. 10% of 40.5 is what number?

$$\frac{X}{40.5} = \frac{10}{100}$$

$$100x = 405$$

$$X = 4.05$$

5.  $\frac{1}{2}$  is 25% of what number?

$$\frac{1/2}{X} = \frac{25}{100}$$

$$25x = 50$$

$$X = 2$$

6. 0.1% of what number is 4?

$$\frac{4}{X} = \frac{0.1}{100}$$

$$0.1x = 400$$

$$X = 4000$$