

## Lesson # 70 - Part of a Whole Using Equations

- 1) In TJ's math class, 20% of students earned an A on a test. If there were 30 students in the class, how many got an A?

Percent: 20%Part: xWhole: 30

$$\text{Part} = \%(\text{whole})$$

$$x = 20\%(30)$$

$$x = .20(30)$$

$$x = 6 \text{ students got an A}$$

- 2) In Arianna's art class, 12% of the Flag Day art projects received a perfect score. There were 25 art projects turned in by Arianna's class. How many of the art projects earned a perfect score?

Percent: 12%Part: xWhole: 25

$$\text{Part} = \%(\text{whole})$$

$$x = .12(25)$$

$$x = 3 \text{ art projects earned a perfect score}$$

- 3) In Justin's English class, 70% of the students completed an essay by the due date. There are 30 students in Justin's English class. How many completed the essay by the due date?

Percent: 70%Part: xWhole: 30

$$\text{Part} = \%(\text{whole})$$

$$x = .70(30)$$

$$x = 21 \text{ completed the essay by the due date}$$

- 4) A bag of candy contains 300 pieces of which 28% are red. How many pieces are red?  
whole part

$$\text{Part} = \%(\text{whole})$$

$$x = .28(300)$$

$$x = 84 \text{ pieces are red.}$$

- 5) A bag of candy contains 300 pieces of which 28% are red. How many pieces are not red?  
whole %

- a. What percent represents the number of pieces that are not red?

$$100\% - 28\% = 72\%$$

- b. Use an equation to find the number of pieces of candy that are not red.

$$x = .72(300)$$

$$x = 216 \text{ pieces are not red}$$

- 6) Zoey inflated 24 balloons for decorations at the middle school dance. If Zoey inflated 15% of the balloons for the dance, how many balloons are there total? Solve the problem using the percent equation.

$$\text{Part} = \%(\text{whole})$$

$$\frac{24}{.15} = \frac{.15x}{.15}$$

$$160 = x$$

balloons in total

- 7) Ryan is making admission tickets to the middle school dance. So far he has made 112 tickets, and his plan is to make 320 tickets. What percent of the admission tickets has Ryan produced so far?

$$\text{Part} = \%(\text{whole})$$

$$\frac{112}{320} = \frac{x(320)}{320}$$

$$.37\bar{3} = x$$

37. $\bar{3}$ % Ryan has produced so far

Name \_\_\_\_\_

Date \_\_\_\_\_