

## Math 7 - Unit 4

### Day 3 - The Percent Equation

#### Lesson Objectives:

- I can use the percent equation to solve percent problems.

Seventy percent of the 100 students in a middle school cafeteria bought their lunch. Some of these students leave the cafeteria to attend an assembly. Now only 60% of the remaining students bought their lunch. How many students are remaining in the cafeteria?



75 students

You can use the percent equation to solve problems that involve percent. The percent equation is

part = percent  $\times$  whole.

$$a = p \cdot w$$

$$y = k \cdot x$$

There are three types of percent problems. Use the equation  $1 = 0.5 \times 2$  to help see the different problems.

Notice: 50% is written as a decimal.

Find the part.	$a = 0.5 \times 2$	What number is 50% of 2?
Find the percent.	$1 = p \times 2$	1 is what percent of 2?
Find the whole.	$1 = 0.5 \times w$	1 is 50% of what number?

Sixty-eight is 20% of what number?

$$\frac{68}{0.2} = \frac{0.2 \cdot x}{0.2}$$

$$340 = x$$

37 is what percent of 296?

$$\frac{37}{296} = \frac{x \cdot 296}{296}$$

$$12.5\% = x$$

What is 70% of 50?

$$x = 0.7 \cdot 50$$

$$x = 35$$

A local grocery store found that about 8% of sales came from items displayed near the cash register. If the sales from those items displayed near the cash register for a week were \$18,745, approximately what were the total sales for that week?

$$a = p \cdot w$$

$$\frac{18745}{.08} = \frac{0.08 \cdot w}{.08}$$

$$235,312.50 = w$$

## Homework

4.1 pg 162 #1-3, 10-22, 32-35

#### \* Individual Think Time \*



#### What to do if you get stuck...

- Reread the problem. Did you write it down correctly?
- Reread your notes. Is there a problem similar that we did together in class?
- Find a problem similar in your book. Try this one to see if it helps.
- Skip the problem until the end of Individual Think Time. Then ask an "educated" question of a neighbor or Mrs. Call.

Today we're working by...

