Finding Percent of a Number

Name:

Math6 Period: ____



How can I find the percent of a given number?

Some percents are easier to find than others...

What is 50% of 10?	50% means I need to find of something of 10 is
What is 25% of 40?	25% means I need to find of something of 40 is
What is 33% of 60?	33% means I need to find of something of 60 is
What is 75% of 12?	75% means I need to find of something of 12 is

There are 36 students on the student council. 75% of those students voted for the next spirit day to be *Neon Day*. How many students voted for *Neon Day*?

The Question being asked: What is 75% of 36?

In order to solve this word problem, having an understanding of what 75% is really helps. If I know that 75% really means 75 'out of' 100, or $\frac{75}{100}$, it really helps me understand and attack the problem in more than one way. One way is...

1. We know $\frac{75}{100}$ can be simplified to $\frac{3}{4}$. The question being asked can actually be written as 'What is $\frac{3}{4}$ of 36? To find a fraction of a number, just multiply the number times the fraction. Therefore, $\frac{3}{4} \times 36$ will give me the answer to this problem.

Method 1: Multiply the number times the percent as a fraction.

2. The second way I can answer this question is by understanding that fractions can always be substituted with decimal equivalents in any math problem. I can convert 75% (which is a fraction) into a decimal. 75% means 75 out of 100, or 75 *hundredths*. Now you can multiply the number times a decimal.

$$\frac{75}{100} = 0.75$$
 0.75 × 36.

 $\frac{3}{4} \times 36$

Method 2: Multiply the number times the percent as a decimal.

This method is EXTREMELY HELPFUL (and ______

when we don't know what the percent is as a simple fraction like one fourth, half, one third, etc...



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