Name: $\qquad$
Math6
Period: $\qquad$
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 $\qquad$ of something. $\qquad$ of 10 is $\qquad$

What is $25 \%$ of 40 ?
25\% means I need to find $\qquad$ of something. $\qquad$ of 40 is $\qquad$

What is $33 \%$ of 60 ?
$33 \%$ means I need to find $\qquad$ of something. $\qquad$ of 60 is $\qquad$

What is $75 \%$ of 12 ?
75\% means I need to find $\qquad$ of something. $\qquad$ of 12 is $\qquad$

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 $\mathbf{7 5 \%}$ of $\mathbf{3 6}$ ?

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 ?
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\frac{3}{4}\times36
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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.
$\begin{aligned} & \text { 2. The second way I can answer this question is by } \\ & \text { understanding that fractions can always be substituted }\end{aligned} \quad \frac{75}{100}=0.75 \quad 0.75 \times 36.0$ 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.

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

This method is EXTREMELY HELPFUL (and $\qquad$ when we don't know what the percent is as a simple fraction like one fourth, half, one third, etc...

## What is $p \%$ of $n$ ? ...do $p \times n$

$\qquad$


Simplify. Round your answer to the nearest hundredth.
$\qquad$

1. $28 \%$ of 11
2. $44 \%$ of 46 $\qquad$ 3. $66 \%$ of 21 $\qquad$
3. $95 \%$ of 49 $\qquad$
4. $12 \%$ of 8 $\qquad$ 6. $14 \%$ of 37 $\qquad$
5. $29 \%$ of $\$ 16.50$
6. $1 \%$ of 32 $\qquad$ 9. $15 \%$ of 60 $\qquad$
7. $42 \%$ of 4 $\qquad$ 11. $17 \%$ of 2.89 $\qquad$ 12. $39 \%$ of 83.75 $\qquad$
8. $11 \%$ of 18 $\qquad$ 14. $3 \%$ of 15 $\qquad$ 15. $24 \%$ of 100 $\qquad$
9. $20 \%$ of 7.63 $\qquad$ 17. 19\% of $\$ 21.95$ $\qquad$ 18. $6 \%$ of 53 $\qquad$
