Find 28% of 25

Remember that "of" means to multiply.

Two ways to solve a problem like this…

1st Way:

Change the percent to a decimal and multiply.
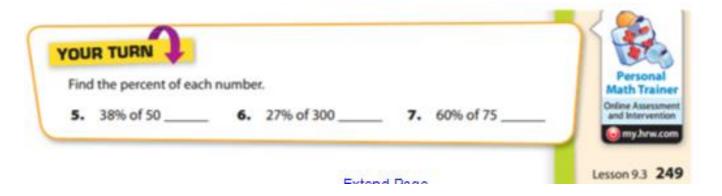
```
   .28
X  25
   140
+ 560
  7.00
```
← Don't forget to put the decimal in your answer in the correct place!

2nd way:

Change the percent to a fraction and multiply.

$$\frac{28}{100} \times \frac{\overset{1}{\cancel{25}}}{\underset{4}{1}} = \frac{28}{4} = 7$$

Mrs. Potts wants to buy her son Michael a Playstation and games for Christmas. She can spend $500 total. Of that money, she can spend $150 on games. What percent of the money can she spend on games?

Step 1: Set up a ratio of part to whole
Part   150
Whole   500

Step 2:
Write a proportion comparing it to 100.

$$\frac{150}{500} = \frac{?}{100}$$

Step 3: Find how to go from one number of the ratio to the other side

        To go from 500 to 100, you divide by 5.

Step 4: multiply or divide by that same amount to find the top number
        Whatever you do to the bottom, you also have to do to the top. 150 ÷ 5 = 30

Step 5: use that ratio to name the percent and/or decimal

$\frac{30}{100}$ = 30% = .30

Nine trees in the park are maple trees. Those nine trees make up 36% of all the trees in the park. How many total trees are in the park?

Percent means "per 100" so 36% is 36 out of 100. That can be written as a fraction. However, there aren't 36 Maple trees. There's only 9. So we have to set up a ratio to find out how many trees there are.

$\frac{9}{?} = \frac{36}{100}$

To go from 36 to 9, you divide by 4. So, to go from 100 to the missing number you divide by 4 also. 100 divided by 4 = 25.

Reflect

10. **Multiple Representations** Sixteen students in the school band play clarinet. Clarinet players make up 20% of the band. Use a bar model to find the number of students in the school band.

| 0% | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% | 100% |

0   16

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