Math 8   Name _____
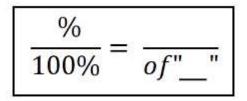   Date _____

Sec 5.3 – Solving Percent Problems Notes

When solving percent problems, it is important to identify whether you are looking for the
_____ or the _____ or the _____. You can use **cross multiply** to solve for any of
these.

$$\frac{\%}{100\%} = \frac{\quad}{of"\_\_"}$$

1. **Finding the part**

   Example – The soccer team won 80% of 25 games they played this year. How many games
   did they win?

2. **Finding the whole**

   Example – In Ms. Lo's class, 18 students were on the honour roll. If this represents 60% of
   her students in total, how many students were there in total?

3. **Finding the percent**

   To find the percent, divide the _____ by the _____ to obtain the decimal equivalent
   and multiply by _____ to obtain the percent equivalent. You can also cross multiply.

   Example – Carl read 60 pages of 180 pages of his book for English class. What percent
   has he read so far?

<u>**Practice**</u>

1. When water freezes, its volume increases by approximately 10%. By how much does the volume of a 45 mL ice cube increase when it freezes?

2. A box of marbles fell on the floor and 30 of them fell out. This was 20% of the marbles in the box. How many marbles were originally in the box?

3. If 70% of a number is 63, find the number.   4. If 175% of 20 is what number?

4. Percent Increase/Decrease

To find percent increase or decrease, write the increase or decrease as a fraction of the _____ price. Then, multiply by 100.

1. The price of a carton of milk at the cafeteria increased from $0.90 to $1.20. What was the percent *increase* in price?

2. The price of pasta salad at the cafeteria decreased from $2.50 to $1.25. What was the percent *decrease* in price?