Finding the "Percent of" a Number
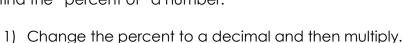
Percent means out of 100.

In math **"of"** means multiply.

To find the "percent of" a number:

1) Change the percent to a decimal and then multiply.

2) **OR** Turn the percent into a fraction and then multiply.

100% means 1 whole. Therefore 100% of 85 is 85. That's just like changing 100% to its equivalent decimal, 1, and multiplying by 85. If you have less than 100% of a number, the solution is less than the original number.

Example:

Find 75% of 36.

OPTION 1 (Change the percent to a decimal)	OPTION 2 (Change the percent to a fraction)
.75 x 36 450 2250 27.00	$$\frac{75}{100} \cdot \frac{36}{1} = \frac{3}{4} \cdot \frac{\cancel{36}^{9}}{1} = 27$$
Therefore, 75% of 36 is 27.	

TIP: Always, always, always check your answer to see if it is reasonable. (Does it make sense?) 75% is less than 100% so 27 should be less than 36. 75% is greater than 50% so 27 should be greater than half of 36, which is 18. If those things are true, you are probably on the right track!

For each problem below, circle the ONLY reasonable answer based on what you know.

Problem	Circle the ONLY reasonable answer			
90% of 40	9	36	17	57
25% of 72	18	54	2.5	70
50% of 1600	56	16	1650	800
110% of 55	1.5	115	60.5	25
5% of 80	58	4	804	85

Find the "percent of" for each of the problems below.

1) 50% of 12

2) 20% of 45

3) 15% of 100

4) 5% of 40

5) 150% of 92

6) 25% of 90

7) 100% of 183

8) Eddie's mystery number is 45% of 200. What is his mystery number?