Name:

CCM6 Percent Problems with Proportions and Equations

Percent ratio that compares a number to 100

VIC #1 $\frac{\%}{100} = \frac{is \#}{of \#} OR \frac{\%}{100} = \frac{Part}{Whole}$

Steps for using Proportions:

- 1. Always write the percent over 100.
- 2. Write the "is" number over the "of" number
- 3. Substitute a variable for the unknown.
- 4. Solve the proportion for the missing value

Solve using a Proportion

- 1. 12 is 40% of what number? 30
- 2. 40 is what percent of 5? 800%
- 3. Find 60% of 85. **51**

Steps for using equations

- 1. Change all percents to DECIMALS.
- 2. Change the words "of" to a MULTIPLICATION SIGN and "is" to EQUAL SIGN.
- 3. Substitute a variable for the unknown
- 4. Solve the equation.

Solve using an equation:

- 1. 15 is 25% of what number? 60
- 2. What percent of 300 is 129? 43%
- 3. What is 95% of 40? 38

You Try:

Solve using a Proportion

- 1. 36 is 50% of what number? **72**
- 2. What percent of 80 is 20? **25%**
- 3. Find 35% of 120. 42

Solve using an equation:

- 1. 4 is 80% of what number? 5
- 2. 39 is what percent of 78? 50%
- 3. What is 55% of 985? **541.75**