Name: $\qquad$
CCM6 Percent Problems with Proportions and Equations

| Percent | ratio that compares a number to 100 |
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VIC \#1 $\frac{\%}{100}=\frac{\text { is \# }}{\text { of \# }}$ OR $\frac{\%}{100}=\frac{\text { Part }}{\text { Whole }}$

| Steps for | 1. Always write the percent over 100. <br> using |
| :---: | :--- |
| 2. Write the "is" number over the "of" number |  |
| Proportions: | 3. Substitute a variable for the unknown. <br> 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 | 1. Change all percents to DECIMALS. <br> using |
| :---: | :--- |
| equations | 2. Change the words "of" to a MULTIPLICATION SIGN and "is" to EQUAL SIGN. <br> 3. Substitute a variable for the unknown <br> 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
