**Lesson 8: Notes and Practice**

***Solve Percent Problems***

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| ***Find the missing part:*** | ***Find the missing percent:*** | ***Find the missing whole (or total):*** |
| *What is 20% of 25?* | *What percent of 30 is 15?* | *12 is 10% of what number?* |
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| In a **percent proportion,** one ratio compares a part to the whole. The other ratio is the equivalent percent written as a fraction with a denominator of 100. |

**Example 1 Example 2**

**What percent of 25 is 18? What is 60% of 300?**

Percent proportion Percent proportion

x4

x4

×4

Write the proportion. Write the proportion.

x3

÷3

= Since 25 × 4 = 100, multiply 18 by 4.  = Since 300 ÷ 3 = 100,

then multiply 60 by 3.

72 = *n p* = 180

So, 18 is 72% of 25 So, **180** is 60% of 300.

**Example 3**

**60 is 40 % of what number?**

Percent proportion

Write the proportion. So, 60 x 100 = 6000.

Then 6000 ÷ 40 = 150.

*w* = 150

= Cross multiply 60 x 100. Then divide by 40. Therefore, 40% of **150** is 60.

**Exercises**

**Write a proportion and solve each problem.**

**1.** 60 is 20% of what number **2.** Peyton spent 60% of her allowance to buy a

TV. If the TV cost $300, how much money

did she have?

**3.** 75 is 15% of what number? **4.** 40% of what number is 4?

**5.** 9 is 36% of what number? **6.** 12 is what percent of 25?