## Unit 8 Lesson 6 Cumulative Practice Problems

* 1. Find the lengths of the unlabeled sides.
	+ 
	+ 
	1. One segment is $n$ units long and the other is $p$ units long. Find the value of $n$ and $p$. (Each small grid square is 1 square unit.)
	+ 
	+ 
1. Use the areas of the two identical squares to explain why $5^{2}+12^{2}=13^{2}$ without doing any calculations.
* 
*
1. Find the exact value of each variable that represents a side length in a right triangle.
* 
*
1. Write each expression as a single power of 10.
	1. $10^{5}⋅10^{0}$
	2. $\frac{10^{9}}{10^{0}}$
* (From Unit 7, Lesson 4.)
1. Here is a scatter plot of weight vs. age for different Dobermans. The model, represented by $y=2.45x+1.22$, is graphed with the scatter plot. Here, $x$ represents age in weeks, and $y$ represents weight in pounds.
* 
	1. What does the slope mean in this situation?
	2. Based on this model, how heavy would you expect a newborn Doberman to be?
* (From Unit 5, Lesson 21.)



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