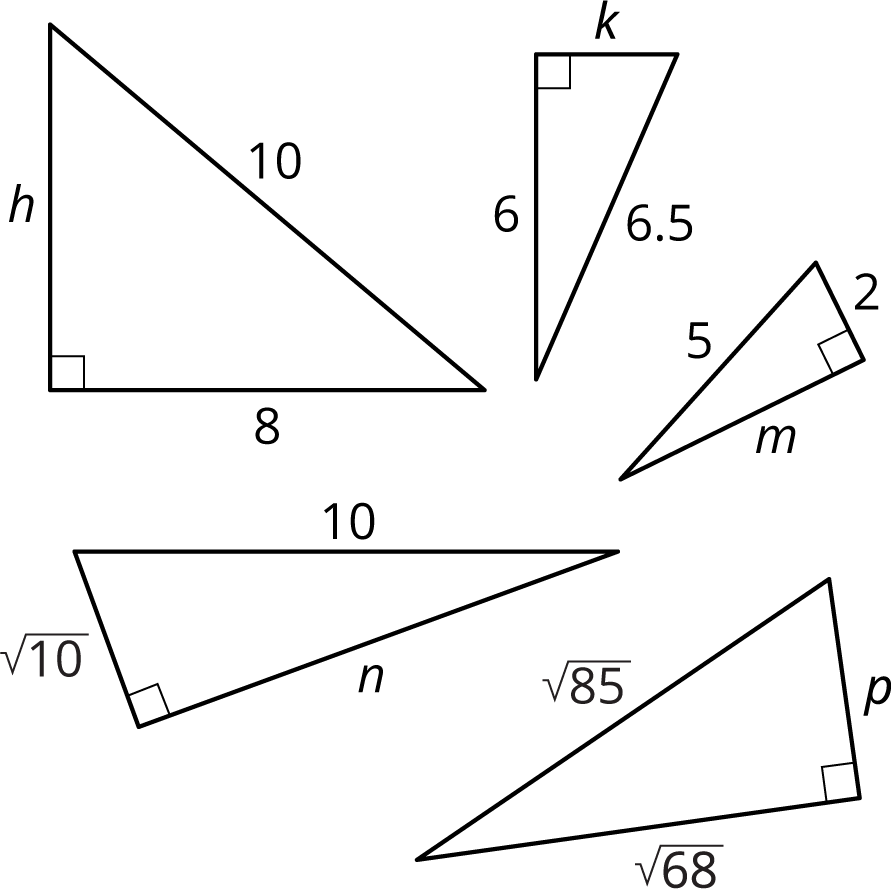
## Unit 8 Lesson 8 Cumulative Practice Problems

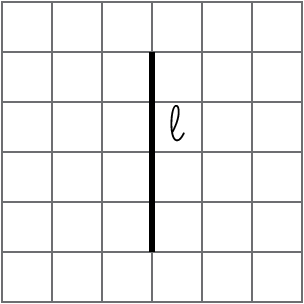
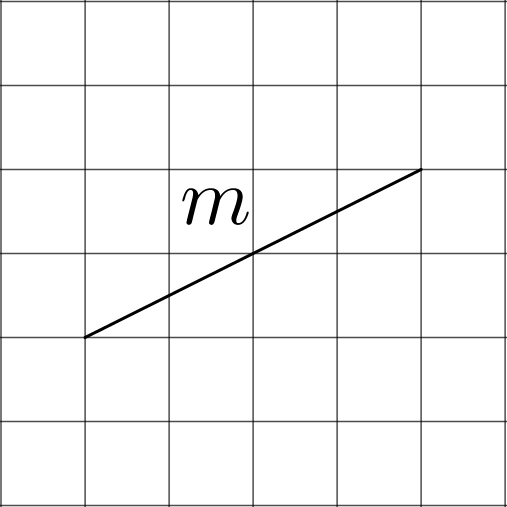
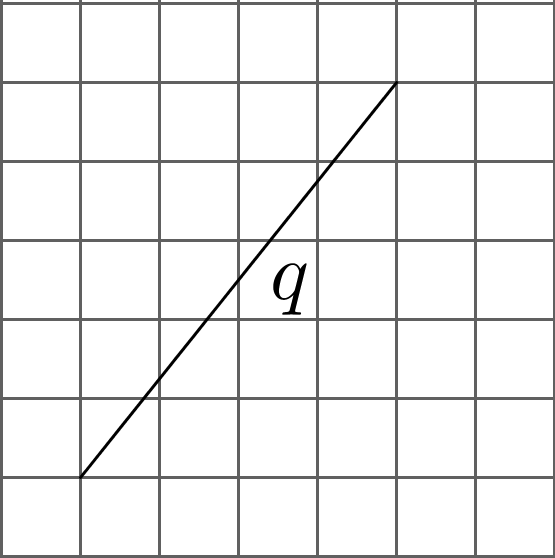
1. Find the exact value of each variable that represents a side length in a right triangle.

* 

1. A right triangle has side lengths of , , and units. The longest side has a length of units. Complete each equation to show three relations among , , and .

* (From Unit 8, Lesson 7.)

1. What is the exact length of each line segment? Explain or show your reasoning. (Each grid square represents 1 square unit.)

* a.
* b.
* c.
* 
* 
* 
* (From Unit 8, Lesson 7.)

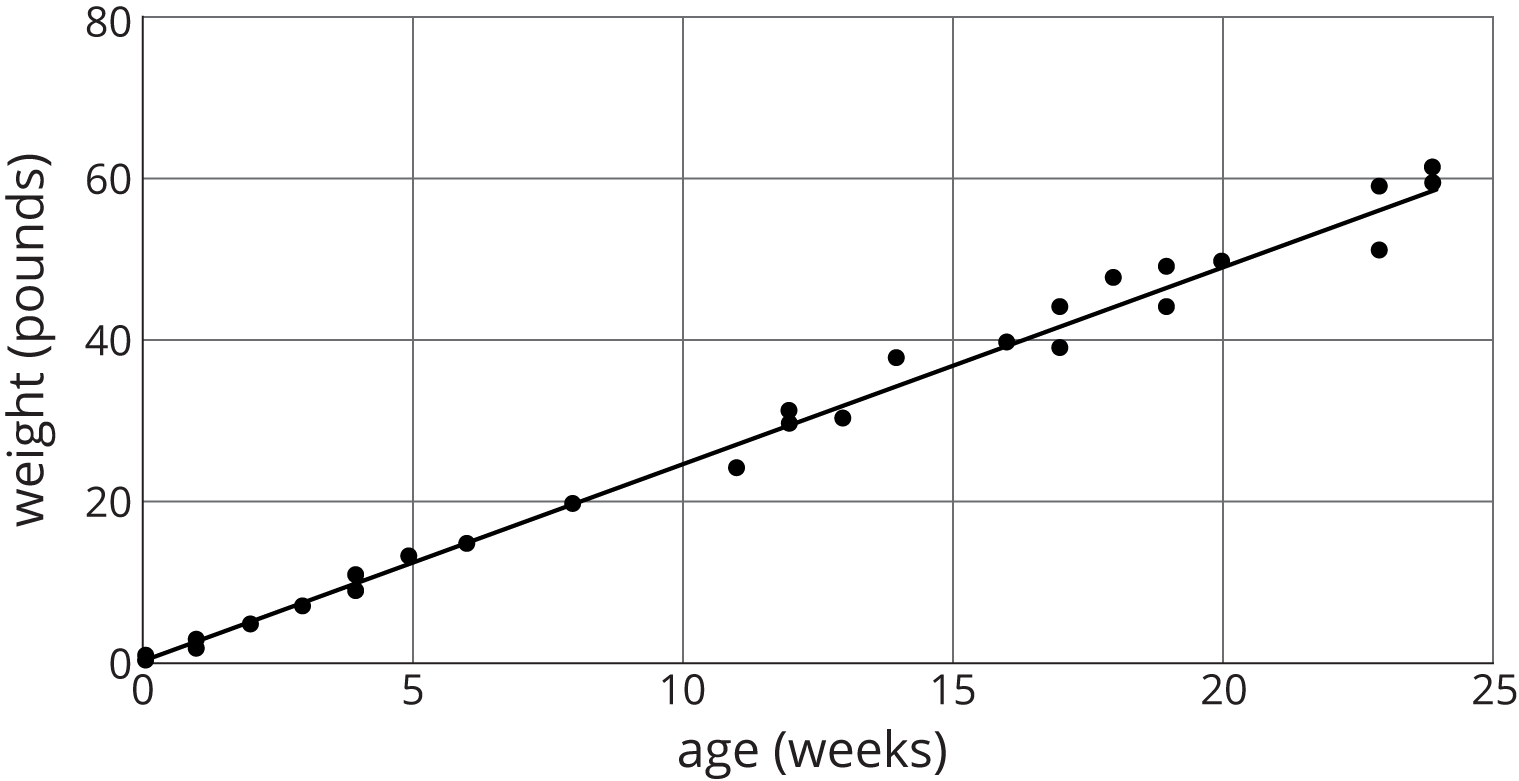
1. In 2015, there were roughly high school football players and professional football players in the United States. About how many times more high school football players are there? Explain how you know.

* (From Unit 7, Lesson 15.)

1. Evaluate:

* (From Unit 7, Lesson 6.)

1. Here is a scatter plot of weight vs. age for different Dobermans. The model, represented by , is graphed with the scatter plot. Here, represents age in weeks, and 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 6, Lesson 6.)



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