

7.3

THE PYTHAGOREAN THEOREM

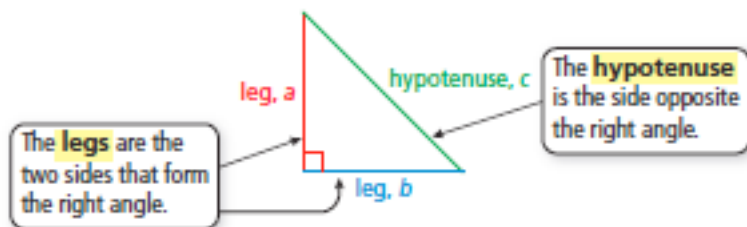
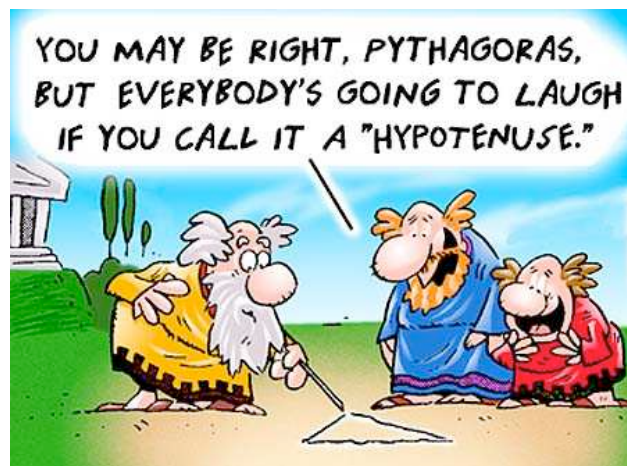
Notesheet

Name: _____ Mod: _____ Date: _____



In a right triangle, the sides that form the right angle are called _____.

The side opposite the right angle (which is always the _____ side) is called the _____.



The Pythagorean Theorem:

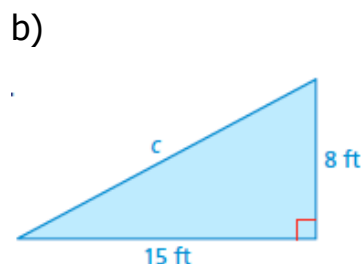
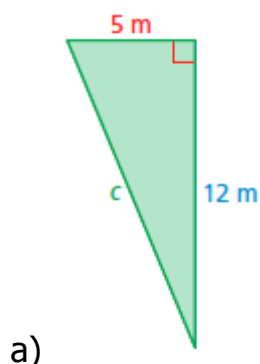
For any right triangle, the sum of the squares of the lengths of the legs equals the square of the length of the hypotenuse.

In algebra language, this means _____

* _____ is always the _____

Example 1: Finding the Length of a Hypotenuse

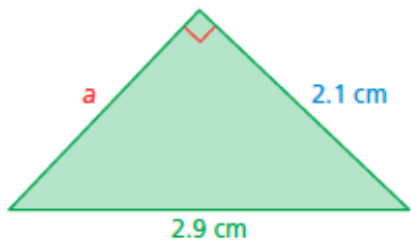
Find the length of the hypotenuse of the triangle.



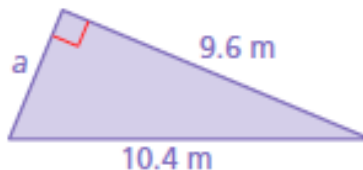
Example 2: Finding the Length of a Leg

Find the missing length of the triangle.

a)



b)



The Wizard of Oz and Pythagoras

In the movie “The Wizard of Oz,” the Scarecrow desperately wants a brain. In the very end, many people think he says the Pythagorean Theorem to prove his intelligence, but he actually says something different that sounds similar.

1. Do your best to write down what the Scarecrow says. (He talks fast!)

2. What was the difference about what he said compared to the Pythagorean Theorem?

3. Do you think the writers did this on purpose? Why or why not?
