

Name: _____ Class: _____ Date: _____

As we have seen, the Pythagorean Theorem is as follows:

$$A^2 + B^2 = C^2$$

This means that we can find the hypotenuse of a right-angled triangle if we know any of the two sides. If we know what the two legs of the triangle are, we can add the squares together to get the square of the hypotenuse. In order to get the side, you would take the square root of the added squares.

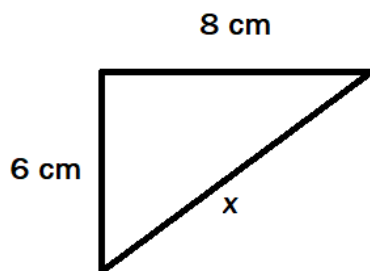
$$C = \sqrt{A^2 + B^2}$$

Similarly, if we are given the hypotenuse and another side, you can isolate for the other side as follows:

$$A = \sqrt{C^2 - B^2}$$

$$B = \sqrt{C^2 - A^2}$$

We did not use these in our unit but instead put it into the main formula and solved for the missing value. We did the same process though. Here is an example problem that you can solve with both methods:



$$C = \sqrt{A^2 + B^2}$$

$$A^2 + B^2 = C^2$$

Use the two methods on each of the following problems.

