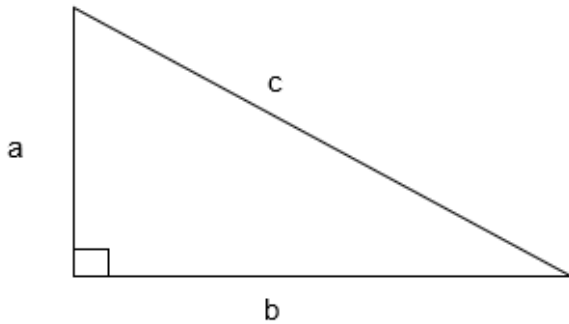


Pythagoras's Theorem is used to find the length of the sides of a right-angle triangle.



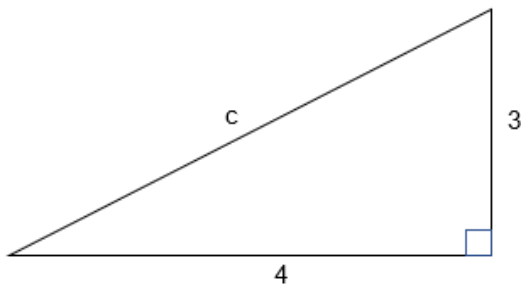
The theorem states that for a right-angle triangle with side lengths a, b and c:

$$a^2 + b^2 = c^2$$

a and b are the two shorter sides, and c is always the longest side, which is the one opposite the right angle.

This allows us to find one of a, b, or c given two other side lengths.

For example:



What is the length of c?

Using Pythagoras's Theorem:

$$4^2 + 3^2 = c^2, \text{ which give us } c^2 = 16 + 9 = 25, \text{ therefore } c = \sqrt{25} = 5$$



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