Pythagorean Theorem
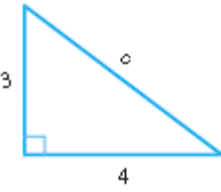
Vocabulary

Hypotenuse	The side opposite the right angle in a right triangle, labeled 'c' in this picture.
Pythagorean Theorem	The sum of the squares of each of the two legs of a right triangle equals the square of the hypotenuse: $a^2 + b^2 = c^2$
Perfect Triples	Three numbers that satisfy the Pythagorean Theorem. Example: 5, 12, and 13 since $5^2 + 12^2 = 13^2$ or $25 + 144 = 169$

TRY:

Use the Pythagorean Theorem to find the answer to the following questions.

If a = 6 and b = 8, what is c?

If c = 17 and b = 15, what is a?

If one side of a right triangle is 7" and the other side is 5", approximately how many inches is the hypotenuse?