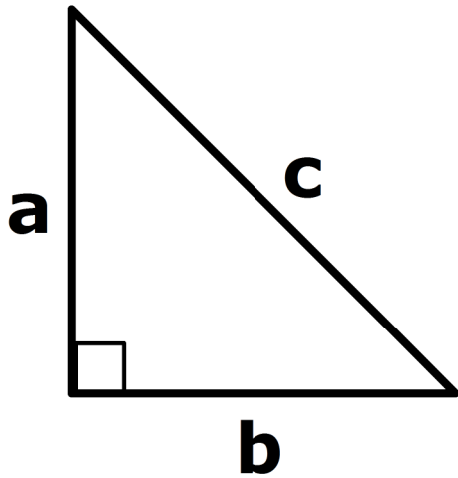
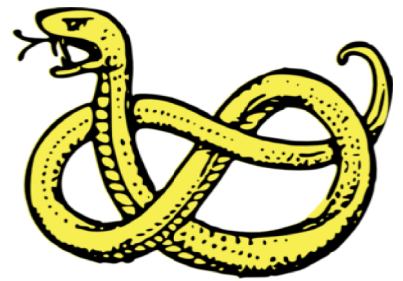


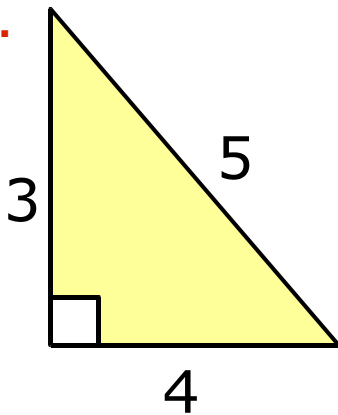
Pythagorean Theorem

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



The longest side of a right triangle, where one of the angles is 90 degrees, is called the *hypotenuse* (c). The **Pythagorean Theorem** states that the square of the hypotenuse is equal to the sum of the squares of the other two sides (a) and (b).

Ex.



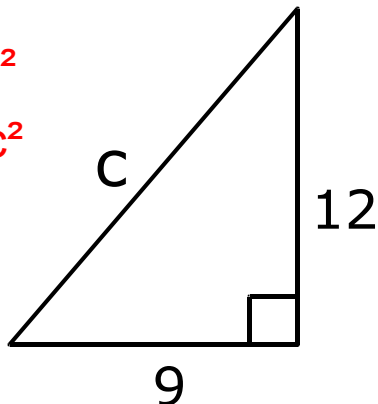
$$3^2 + 4^2 = 5^2$$
$$9 + 16 = 25$$

ANSWERS

Solve for 'c' using the Pythagorean Theorem.

1.

$$9^2 + 12^2 = c^2$$
$$81 + 144 = c^2$$
$$225 = c^2$$
$$15 = c$$



2.

$$12^2 + 16^2 = c^2$$
$$144 + 256 = c^2$$
$$400 = c^2$$
$$20 = c$$

