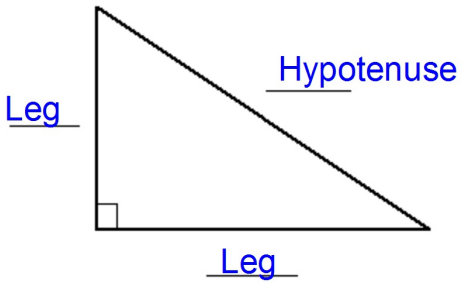
Leg Hypotenuse



The legs of a right triangle are:

- the sides that form the right angle.

The hypotenuse of a right triangle is:

- the longest side
- the side opposite the right angle

Pythagorean Theorem

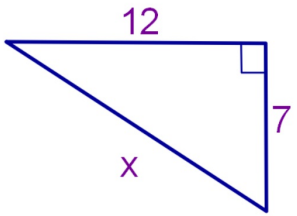
$a^2 + b^2 = c^2$

$Leg^2 + Leg^2 = Hypotenuse^2$

$144 + 49 = x^2$

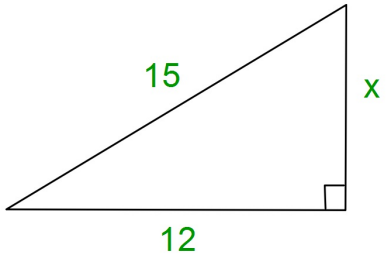
$\sqrt{193} = \sqrt{x^2}$

$x = 13.9$



Find the value of x. Round to a tenth if needed.

1. Find the exact value of x.



$12^2 + x = 15^2$

$225 - 144$

$-12 \quad -12$

$\sqrt{x^2} = \sqrt{81}$

$x = 9$

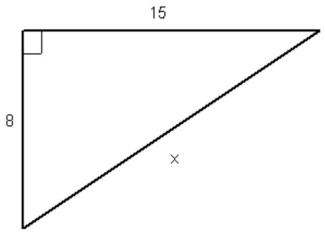
Find the exact value of x.

2. $x =$

$15^2 + 8^2 = x^2$

$225 + 64 = \sqrt{289}$

$x = 17$



Find the exact value of x.

3. $x =$

$196 = 144 + x^2$

$-144 \quad -144$

$\sqrt{52} = \sqrt{x^2}$

$\sqrt{4 \cdot 13}$

$2\sqrt{13} = x$