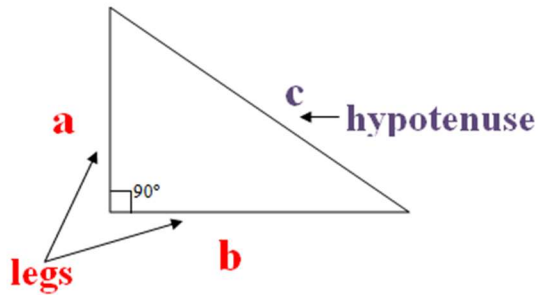


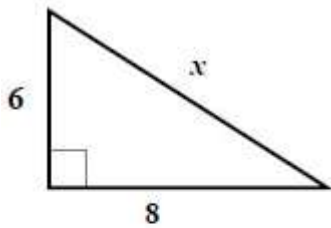
# Pythagorean Theorem

This defines a special relationship between the sides of a right triangle (a triangle that has one  $90^\circ$  angle).



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

The sum of the squares of the legs equals the square of the hypotenuse.



$$\begin{aligned} 6^2 + 8^2 &= x^2 \\ 36 + 64 &= x^2 \\ 100 &= x^2 \\ \sqrt{100} &= \sqrt{x^2} \\ x &= 10 \end{aligned}$$

