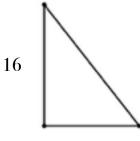
## Geometry Lesson- The Pythagorean Theorem

The Pythagorean Theorem:

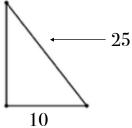
Ex 1- A right triangle has legs of length 16 and 30. Find the length of the hypotenuse.



30

Source: https://commons.wikimedia.org/wiki/File:Triangle-right.svg

Ex 2- A right triangle has a hypotenuse of length 25 and a leg of length 10. Find the length of the other leg.



Ex 3- Simplify each square root using prime factorization trees. (a)  $\sqrt{8}$ 

(b)  $\sqrt{75}$ 

(c)  $\sqrt{108}$ 

Ex 4- Find the value of x in each triangle. Leave your answer in simplest radical form.

