

Answer 6

If the hypotenuse of a right triangle is 10 inches long and one of its legs is 5 inches long, how long is the other leg?

Use the Pythagorean Theorem:

$$10^2 = 5^2 + x^2$$

$$100 = 25 + x^2$$

$$x^2 = 75 \quad x = \sqrt{75} \quad x = \sqrt{25 * 3} \quad x = 5\sqrt{3}$$