

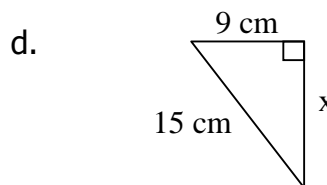
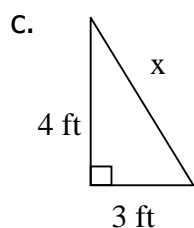
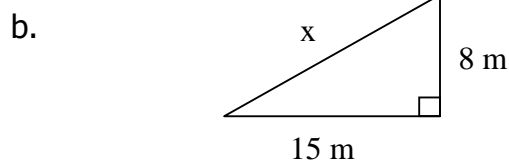
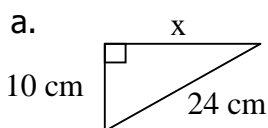
# Pythagorean Theorem

Accelerated 7<sup>th</sup> Grade Math

Name: \_\_\_\_\_

1. Write the Pythagorean Theorem. What does each letter stand for?

2. Find the missing lengths in each right triangle.



3. A right triangle has legs a and b and hypotenuse c. Find each missing length.

a.  $a = 12, c = 20, b = ?$

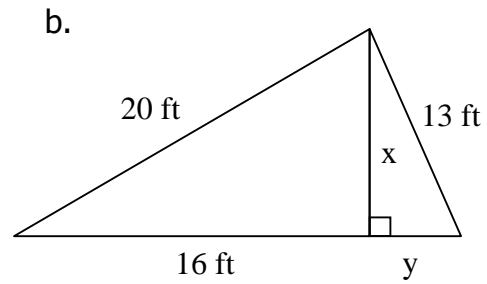
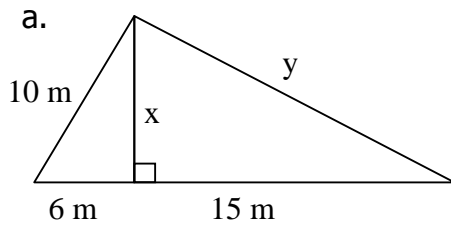
b.  $a = 14, b = 48, c = ?$

c.  $b = 2.4, c = 4, a = ?$

d.  $a = 39, c = 89, b = ?$

4. A major league baseball diamond is a square that is 90 feet on each side. When a runner on first tries to steal second base, the catcher has to throw the ball from home plate to second base. How far is that throw? Show your work.

5. Find  $x$  and  $y$ . Show your work.



6. Find the area of each triangle. First you must find the height  $h$ .

$$\text{Area of a triangle} = \frac{1}{2} \bullet \text{base} \bullet \text{height}$$

