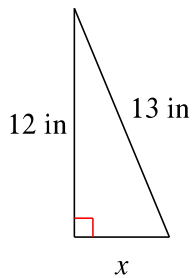


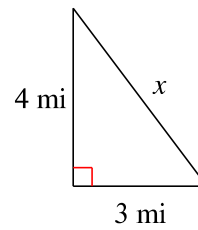
## The Pythagorean Theorem and Its Converse

Find the missing side of each triangle. Round your answers to the nearest tenth if necessary.

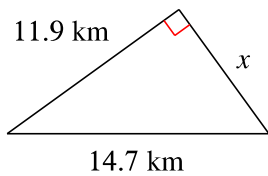
1)



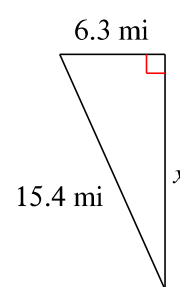
2)



3)

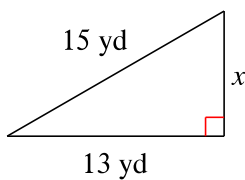


4)

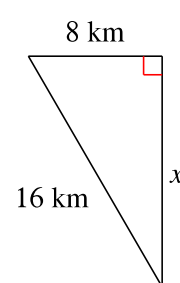


Find the missing side of each triangle. Leave your answers in simplest radical form.

5)



6)



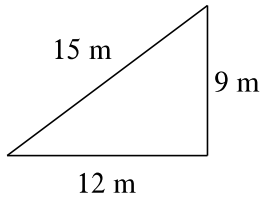
Find the missing side of each right triangle. Side  $c$  is the hypotenuse. Sides  $a$  and  $b$  are the legs. Leave your answers in simplest radical form.

7)  $a = 11$  m,  $c = 15$  m

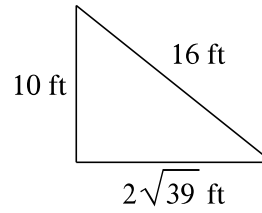
8)  $b = \sqrt{6}$  yd,  $c = 4$  yd

**State if each triangle is a right triangle.**

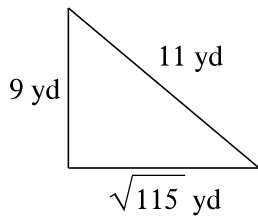
9)



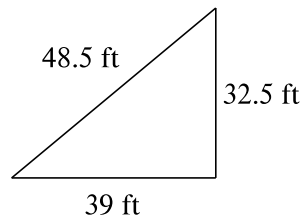
10)



11)



12)



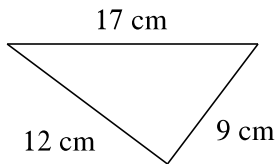
**State if the three sides lengths form a right triangle.**

13) 10 cm, 49.5 cm, 50.5 cm

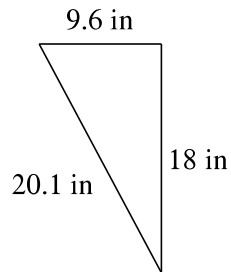
14) 9 in, 12 in, 15 in

**State if each triangle is acute, obtuse, or right.**

15)



16)



**State if the three side lengths form an acute, obtuse, or right triangle.**

17) 6 mi,  $2\sqrt{55}$  mi, 17 mi

18) 4.8 km, 28.6 km, 29 km