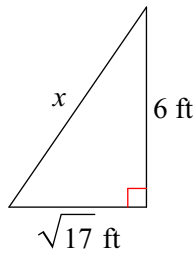


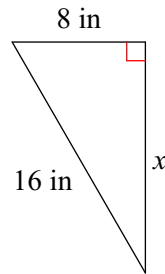
WS 1.3C - Pythagorean Theorem and Distance Formula

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

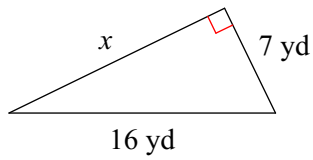
1)



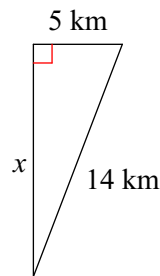
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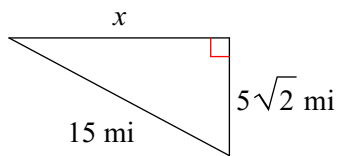
3)



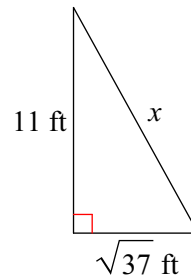
4)



5)



6)



Find the distance between each pair of points. Leave your answer in simplest radical form.

7)  $(-2, -1), (-4, 3)$

8)  $(-7, 4), (-7, -3)$

9)  $(5, 5), (4, -6)$

10)  $(0, 6), (-8, -4)$

11)  $(-2, 3), (2, 5)$

12)  $(-4, -2), (-6, -2)$

13) Mr. Smog just bought a new HDTV. The screen is 48 inches wide and 27 inches tall. Find the length of its diagonal. Round to the nearest tenth, if necessary.

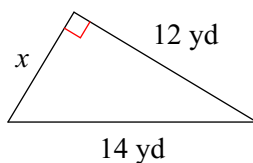
14) An 18-foot ladder is leaned against a wall. If the base of the ladder is 7 feet from the wall, how high up on the wall does the ladder reach. Round your answer to the nearest tenth, if necessary.

15) John left home and walked 8 blocks west. Then, he turned and walked 6 blocks north. If he were to walk in a direct path back home, how many blocks would that be? Round your answer to the nearest tenth, if necessary.

16) The lawn in front of Kermit Middle School is in the shape of a rectangle 30 yards long and 16 yards wide. How far is it to walk diagonally across the lawn rather than along the sides? Round your answer to the nearest tenth, if necessary.

**Find the area of each triangle. Leave your answer in simplest radical form. (Reminder:  $A = (1/2)\text{base} \times \text{height}$ )**

17)



18)

