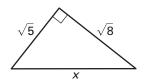
Practice C

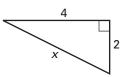
For use with pages 535-541

Find the unknown side length. Simplify answers that are radicals. Tell whether the side lengths form a Pythagorean triple.

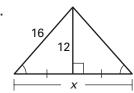
1.



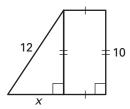
2



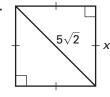
3.



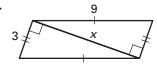
4



5.



6.



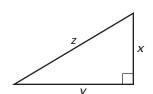
Find the missing length so that x, y, and z are Pythagorean triples.

7.
$$x = 6, y = 8$$

8.
$$y = 24, z = 26$$

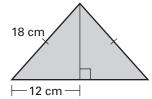
9.
$$x = 16, y = 30$$

10.
$$x = 24, z = 51$$

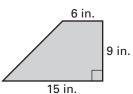


Find the area of the figure. Round decimal answers to the nearest tenth.

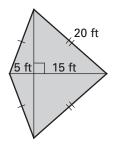
11.



12.



13.



- **14.** A standard doorway measures 6 feet 8 inches by 3 feet. What is the largest dimension that will fit through the doorway without bending?
- **15.** Use the Pythagorean Theorem and the diagram at the right to show $AB = \sqrt{(x_2 x_1)^2 + (y_2 y_1)^2}$. That is, show the distance formula is true.
- **16.** Solve for *x* in the partial spiral shown at the right.

