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## 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 $\boldsymbol{x}, \boldsymbol{y}$, and $\boldsymbol{z}$ 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 $A B=\sqrt{\left(x_{2}-x_{1}\right)^{2}+\left(y_{2}-y_{1}\right)^{2}}$. That is, show the distance formula is true.
16. Solve for $x$ in the partial spiral shown at the right.



