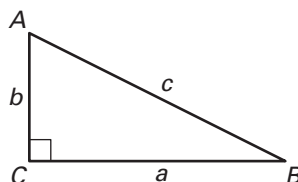


Practice B

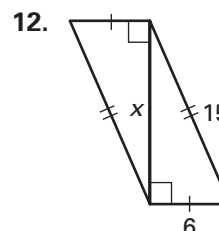
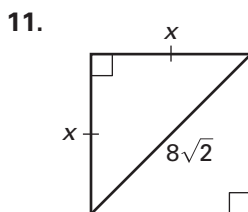
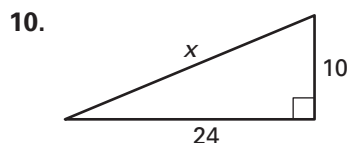
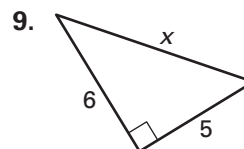
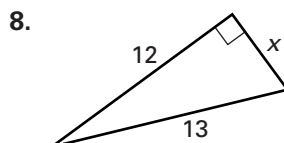
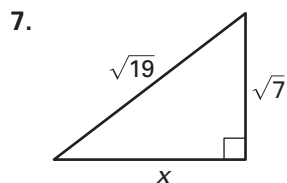
For use with pages 535–541

Use $\triangle ABC$ to determine if the equation is *true* or *false*.

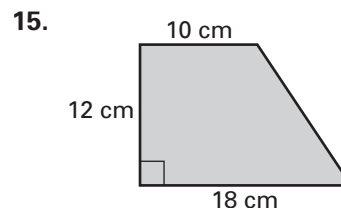
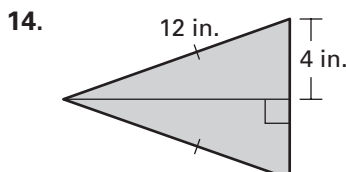
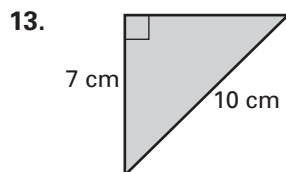
- $b^2 + a^2 = c^2$
- $c^2 - a^2 = b^2$
- $b^2 - c^2 = a^2$
- $c^2 = a^2 - b^2$
- $c^2 = b^2 + a^2$
- $a^2 = c^2 - b^2$



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

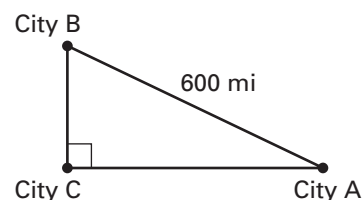


Find the area of the figure. Round decimal answers to the nearest tenth.



Solve. Round your answer to the nearest tenth.

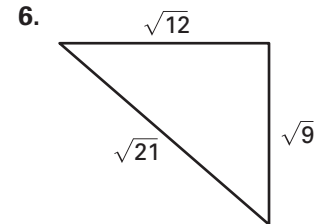
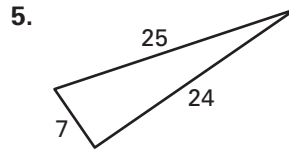
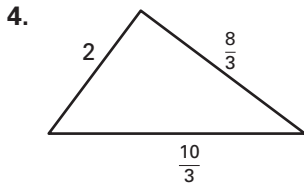
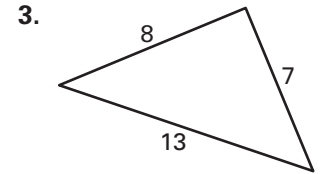
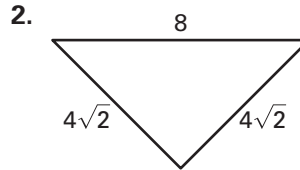
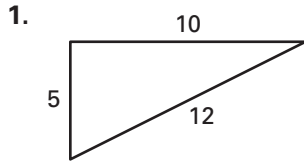
- A smaller commuter airline flies to three cities whose locations form the vertices of a right triangle. The total flight distance (from city A to city B to city C and back to city A) is 1400 miles. It is 600 miles between the two cities that are furthest apart. Find the other two distances between cities.
- Each base on a standard baseball diamond lies 90 feet from the next. Find the distance the catcher must throw a baseball from 3 feet behind home plate to second base.



Practice B

For use with pages 543–549

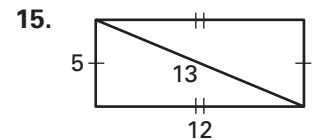
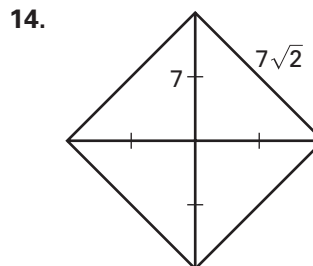
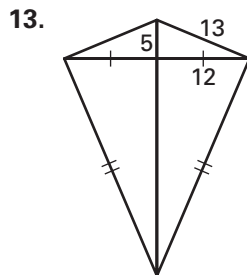
Tell whether the triangle is a right triangle.



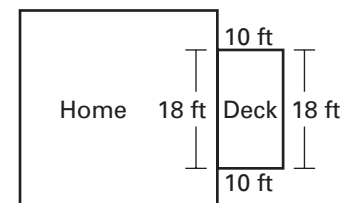
Decide whether the numbers can represent the side lengths of a triangle. If they can, classify the triangle as *right*, *acute*, or *obtuse*.

- | | | |
|----------------|--------------------------|----------------|
| 7. 5, 12, 13 | 8. $\sqrt{8}$, 4, 6 | 9. 20, 21, 28 |
| 10. 15, 36, 39 | 11. $\sqrt{13}$, 10, 12 | 12. 14, 48, 50 |

Classify the quadrilateral. Explain how you can prove that the quadrilateral is that type.



16. **Deck** A contractor is building a deck adjacent to a home as shown. How can he be sure that the deck is square (the corners are right angles) when he lost his t-square and only has a tape measure? Explain your reasoning.



Roof In Exercises 17 and 18, use the diagram and the following information.

The slope of the roof is $\frac{5}{12}$. The height of the roof is 15 feet.

17. What is the length from gutter to peak of the roof?
18. If a row of shingles is 5 inches high, how many rows of shingles are needed for one side of the roof?

