LESSON 11.4

Practice B
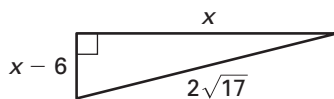
For use with pages 736–742

LESSON 11.4

Let *a* and *b* represent the lengths of the legs of a right triangle, and let *c* represent the length of the hypotenuse. Find the unknown length.
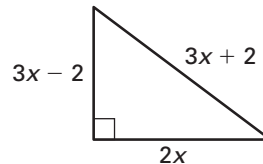
1. $a = 1, b = 5$

2. $b = 4, c = 9$

3. $a = 6, b = 6$

4. $b = 7, c = 12$

5. $a = 2, b = 8$

6. $a = 6, b = 30$

7. $a = 4, b = 15$

8. $b = 7, c = 11$

9. $a = 10, b = 20$

10. $a = 30, b = 40$

11. $a = 15, c = 25$

12. $a = 11, b = 22$
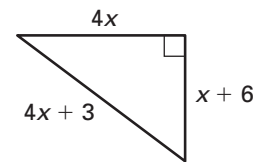
**Find the unknown lengths.**

13.

14.

15.

16. A right triangle has one leg that is 3 inches longer than the other leg. The hypotenuse is $\sqrt{65}$ inches. Find the lengths of the legs.

Tell whether the triangle with the given side lengths is a right triangle.

17. 4, 5, 6

18. 15, 20, 25

19. 9, 15, 20

20. Shuffleboard The playing bed of a shuffleboard table is in the shape of a rectangle. If the playing bed measures 154 inches by 20 inches, what is the length of the diagonal from one corner of the playing bed to the opposite corner? Round your answer to the nearest inch.
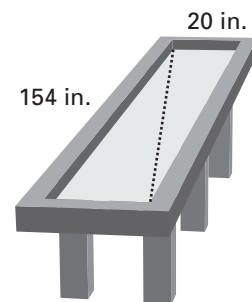
21. Indirect Measurement You are trying to determine the distance across a pond. You put posts into the ground at *A*, *B*, and *C* so that angle *B* is a right angle. You measure and find that the length of *AB* is 18 feet and the length of *CB* is 28 feet. How wide is the pond from *A* to *C*? Round your answer to the nearest foot.
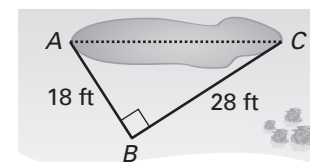
22. Badminton You are setting up a badminton net. To keep each pole standing straight, you use two ropes and two stakes as shown. How long is each piece of rope? Round your answer to the nearest tenth.