Name _____ Date _____

LESSON 11.4

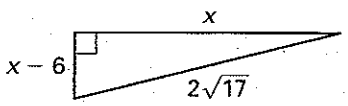
LESSON 11.4 Practice B

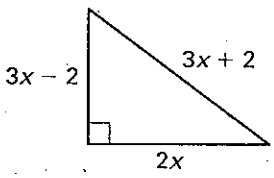
For use with pages 736–742

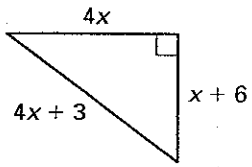
Let *a* and *b* represent the lengths of the legs of a right triangle, and let *c* represent the length of the hypotenuse. Find the unknown length.

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

LESSON 11.2 Practice B

For use with pages 718–726

Simplify the expression.

1. $\sqrt{200}$
2. $\sqrt{45}$
3. $\sqrt{112}$
4. $\sqrt{400d}$
5. $\sqrt{9y^2}$
6. $\sqrt{25n^3}$
7. $\sqrt{3} \cdot \sqrt{21}$
8. $\sqrt{20} \cdot \sqrt{15}$
9. $\sqrt{10x} \cdot \sqrt{2x}$
10. $\sqrt{\frac{16}{81}}$
11. $\sqrt{\frac{5}{49}}$
12. $\sqrt{\frac{x^2}{144}}$

Simplify the expression by rationalizing the denominator.

13. $\frac{4}{\sqrt{5}}$
14. $\sqrt{\frac{3}{50}}$
15. $\sqrt{\frac{9}{75}}$
16. $\frac{2}{\sqrt{p}}$
17. $\frac{1}{\sqrt{3y}}$
18. $\frac{9}{\sqrt{2x}}$