**Practice B**

For use with pages 604–609

**Match the trinomial with a correct factorization.**

1. \(x^2 - 5x + 6\)  
   A. \((x - 2)(x - 2)\)

2. \(x^2 + 5x + 6\)  
   B. \((x - 3)(x + 2)\)

3. \(x^2 - x - 6\)  
   C. \((x - 3)(x - 3)\)

4. \(x^2 + x - 6\)  
   D. \((x - 3)(x - 2)\)

5. \(x^2 - 4x + 4\)  
   E. \((x + 3)(x + 2)\)

6. \(x^2 - 6x + 9\)  
   F. \((x + 3)(x - 2)\)

**Factor the trinomial.**

7. \(x^2 - 5x - 14\)

8. \(x^2 - 8x + 15\)

9. \(x^2 + 8x + 15\)

10. \(x^2 - 5x + 4\)

11. \(x^2 - x - 42\)

12. \(x^2 + 6x - 16\)

13. \(x^2 - 16x + 64\)

14. \(x^2 + 13x + 36\)

15. \(x^2 - 15x + 36\)

**Solve the equation by factoring.**

16. \(x^2 + 3x - 40 = 0\)

17. \(x^2 - 16x + 63 = 0\)

18. \(x^2 - 11x + 28 = 0\)

19. \(x^2 - 6x - 7 = 0\)

20. \(x^2 - 6x + 9 = 0\)

21. \(x^2 + 8x + 15 = 0\)

22. \(x^2 + x = 6\)

23. \(x^2 + 11x = 12\)

24. \(x^2 - 3x = 28\)

25. \(x^2 - 7 = -6x\)

26. \(x^2 - 8 = -7x\)

27. \(x^2 - 4x - 8 = 4\)

**Tell whether the quadratic expression can be factored with integer coefficients. If it can, find the factors.**

28. \(x^2 + 17x + 60\)

29. \(x^2 - 15x + 48\)

30. \(x^2 - 5x - 36\)

31. \(x^2 + 13x + 30\)

32. \(x^2 + 11x + 30\)

33. \(x^2 + 8x - 40\)

**Area of a Circle**  In Exercises 34 and 35, use the following information.

The area of a circle is given by \(A = \pi(x^2 - 20x + 100)\).

34. Use factoring to find an expression for the radius of the circle.

35. If the area of the circle is 16\(\pi\) square feet, what is the value of \(x\)?