

**LESSON 9.3 Practice B**

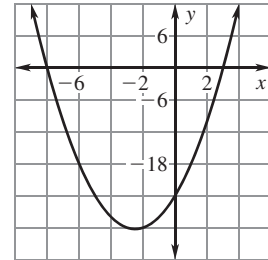
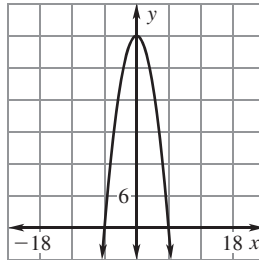
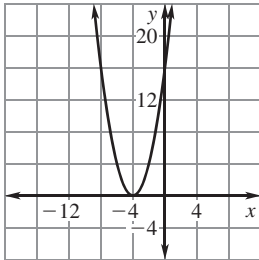
For use with the lesson "Solve Quadratic Equations by Graphing"

**Determine whether the given value is a solution of the equation.**

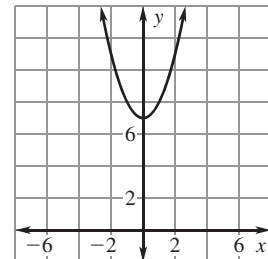
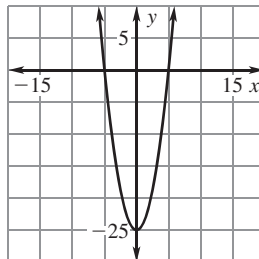
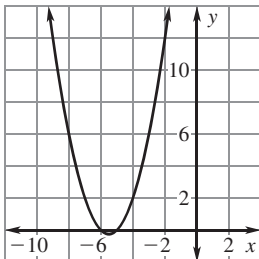
- 1.  $x^2 - 2x + 15 = 0$ ; 3
- 2.  $x^2 - 4x - 12 = 0$ ; 2
- 3.  $-x^2 - 5x - 6 = 0$ ; 3
- 4.  $x^2 + 3x - 4 = 0$ ; 1
- 5.  $2x^2 + 9x - 5 = 0$ ; -2
- 6.  $3x^2 - 5x - 2 = 0$ ; 2

**Use the graph to find the solutions of the given equation.**

- 7.  $x^2 + 8x + 16 = 0$
- 8.  $-x^2 + 36 = 0$
- 9.  $x^2 + 5x - 24 = 0$

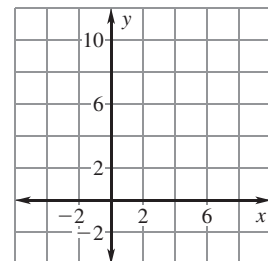
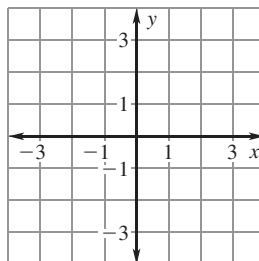
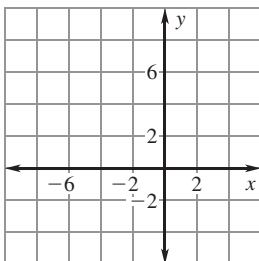


- 10.  $x^2 + 11x + 30 = 0$
- 11.  $x^2 - 25 = 0$
- 12.  $x^2 + 7 = 0$

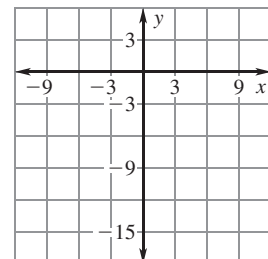
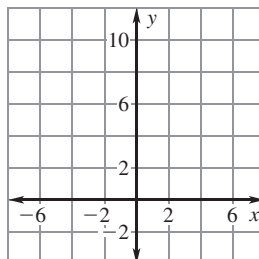
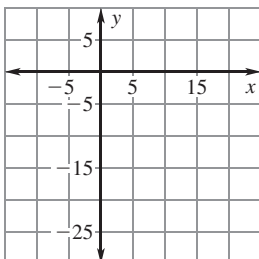


**Solve the equation by graphing.**

- 13.  $-x^2 - 6x = 0$
- 14.  $2x^2 = 2$
- 15.  $x^2 - 7x + 10 = 0$



- 16.  $x^2 = 10x$
- 17.  $x^2 - 6x + 9 = 0$
- 18.  $-x^2 + 9x = 18$



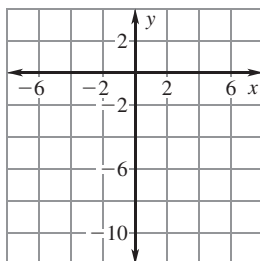
**LESSON**  
**9.3**

**Practice B**

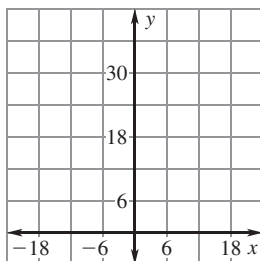
For use with the lesson "Solve Quadratic Equations by Graphing"

**Find the zeros of the function by graphing.**

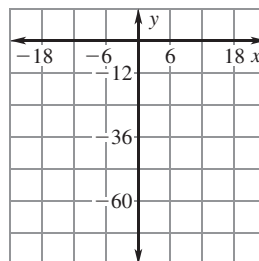
19.  $f(x) = -x^2 - 5x - 10$



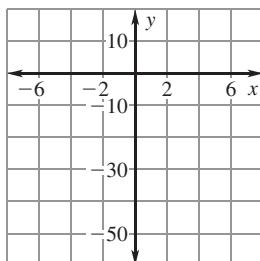
20.  $f(x) = x^2 + 12x + 36$



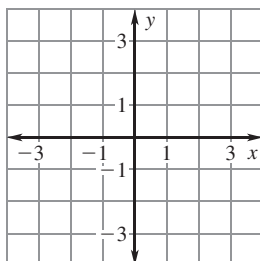
21.  $f(x) = 2x^2 + 24x$



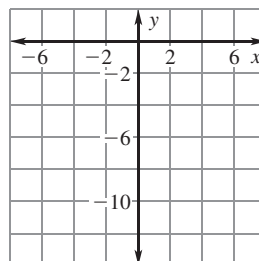
22.  $f(x) = x^2 - 49$



23.  $f(x) = -x^2 + 1$

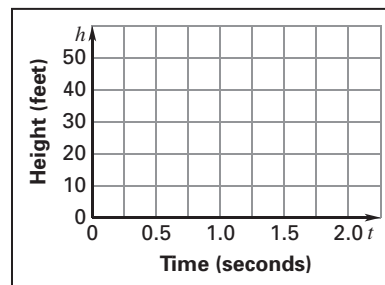


24.  $f(x) = 3x^2 + 12x$



25. **Stunt Double** A movie stunt double jumps from the top of a building 50 feet above the ground onto a pad on the ground below. The stunt double jumps with an initial vertical velocity of 10 feet per second.

- Write and graph a function that models the height  $h$  (in feet) of the stunt double  $t$  seconds after she jumps.
- How long does it take the stunt double to reach the ground?



26. **Wastebasket** You throw a wad of used paper towards a wastebasket from a height of about 1.3 feet above the floor with an initial vertical velocity of 3 feet per second.

- Write and graph a function that models the height  $h$  (in feet) of the paper  $t$  seconds after it is thrown.
- If you miss the wastebasket and the paper hits the floor, how long does it take for the ball of paper to reach the floor?
- If the ball of paper hits the rim of the wastebasket one-half foot above the ground, how long was the ball in the air?

