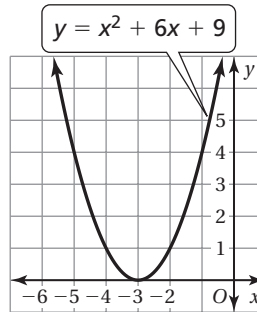
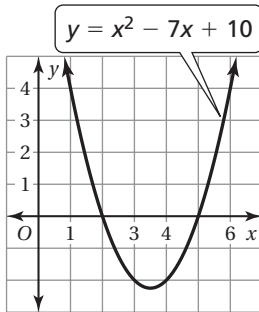


9.1 Practice A

Determine the solution(s) of the equation. Check your solution(s).

1. $x^2 - 7x + 10 = 0$

2. $x^2 + 6x + 9 = 0$



Solve the equation by graphing. Check your solution(s).

3. $x^2 + 5x = 0$

4. $x^2 + 3x - 4 = 0$

5. $x^2 - 8x + 16 = 0$

6. $x^2 + 3x + 6 = 0$

7. $x^2 + 5x + 6 = 0$

8. $x^2 - 4x + 4 = 0$

9. The profit y (in thousands of dollars) of selling bedroom sets can be modeled by $y = -x^2 + 8x$, where x is the number of bedroom sets sold in a day.

- Interpret the x -intercepts of the graph of the equation.
- How many bedroom sets must be sold in a day in order to make no profit?

Rewrite the equation in standard form. Then solve the equation by graphing. Check your solution(s) with a graphing calculator.

10. $x^2 = 6x - 9$

11. $x^2 = 3x - 5$

12. $x^2 = x + 12$

Solve the equation by using Method 2 from Example 3. Check your solution(s).

13. $x^2 = 4x - 7$

14. $1 - 2x = -x^2$

15. $3x + 4 = x^2$

16. A baseball player throws a baseball with an upward velocity of 16 feet per second. The release point is 4 feet above the ground. The function $h = -16t^2 + 16t + 4$ gives the height h of the baseball after t seconds.

- How long is the ball in the air if no one catches it?
- How long does the ball remain above 4 feet?