

LESSON
9.3**Practice A**

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

Write the equation in standard form.

1. $x^2 + 3x = -12$

2. $x^2 - 8x = 14$

3. $x^2 = 9x - 1$

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

5. $14 - x^2 = 3x$

6. $\frac{1}{2}x^2 = -3x - 7$

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

7. $x^2 + 36 = 0$; -6

8. $100 - x^2 = 0$; -10

9. $0 = x^2 + 6x + 5$; -1

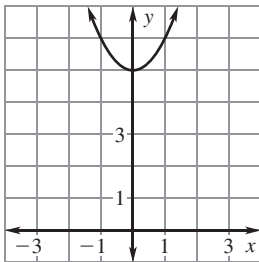
10. $x^2 - 5x + 6 = 0$; 2

11. $-x^2 + 4x - 4 = 0$; 4

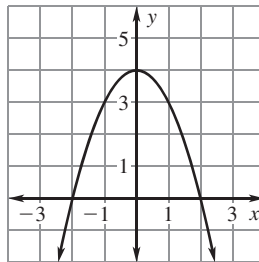
12. $0 = -x^2 + 8x + 3$; 8

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

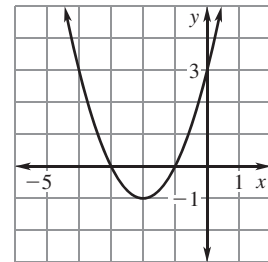
13. $x^2 + 5 = 0$



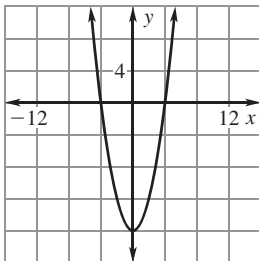
14. $-x^2 + 4 = 0$



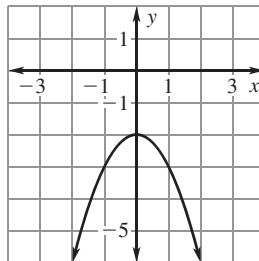
15. $x^2 + 4x + 3 = 0$



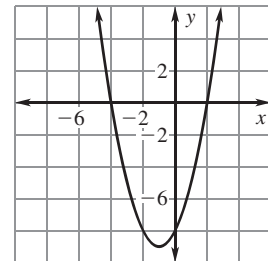
16. $x^2 - 16 = 0$



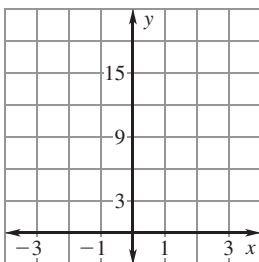
17. $x^2 - 2 = 0$



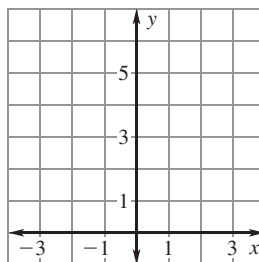
18. $x^2 + 2x - 8 = 0$

**Solve the equation by graphing.**

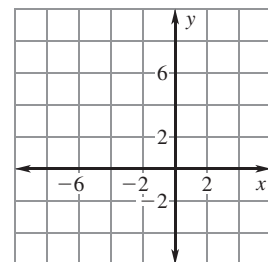
19. $8x^2 + 2x + 3 = 0$



20. $2x^2 + 3x + 1 = 0$



21. $\frac{1}{2}x^2 + 4x + 6 = 0$

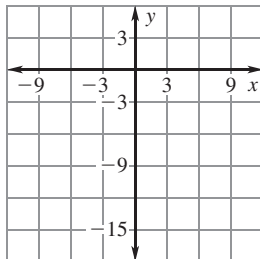


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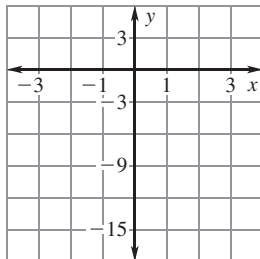
Practice A

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

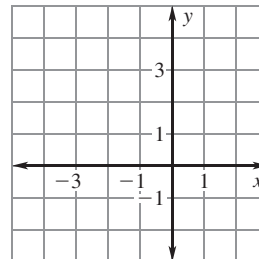
22. $x^2 - 2x - 15 = 0$



23. $-2x^2 + x - 3 = 0$

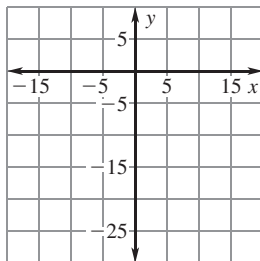


24. $-x^2 - 2x + 3 = 0$

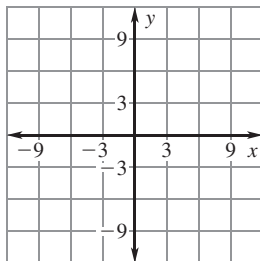


Find the zeros of the function by graphing the function.

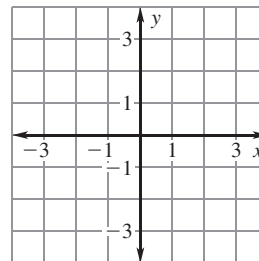
25. $f(x) = x^2 - 25$



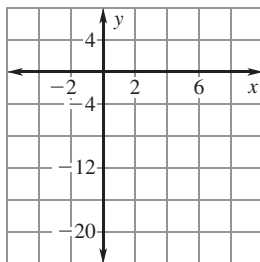
26. $f(x) = -x^2 + 9$



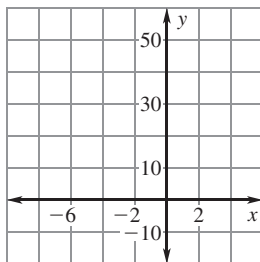
27. $f(x) = 2x^2 + 4x$



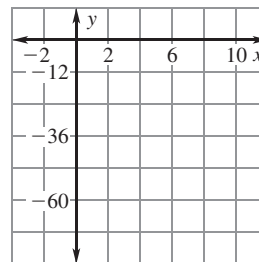
28. $f(x) = x^2 - 4x - 12$



29. $f(x) = -x^2 - 3x + 40$



30. $f(x) = 3x^2 - 30x$



31. Plate Cover A plate cover made of netting has a cross section in the shape of a parabola. The cross section can be modeled by the function $y = -0.1875x^2 + 3x$ where x is the width of the cover (in inches) and y is the height of the cover (in inches).

- Graph the function.
- Find the domain and range of the function in this situation.
- How wide is the cover?
- How tall is the cover?

