

Name:

Date:

Period:

Solve the equation using the Quadratic Formula. Round your solutions to the nearest tenth, if necessary.

1. $x^2 - 10x + 16 = 0$

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

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

4. $x^2 + 6x = -13$

5. $-3x^2 + 5x - 1 = -7$

6. $-4x^2 + 8x + 12 = 6$

7. A square pool has a side length of x feet. A uniform border around the pool is 1 foot wide. The total area of the pool and the border is 361 square feet. What is the area of the pool?

Determine the number of real solutions of the equation.

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

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

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

Find the number of x -intercepts of the graph of the function.

11. $y = -x^2 + 4x + 3$

12. $y = x^2 + 14x + 49$

13. $y = -x^2 - 8x - 18$

Solve the equation using any method. Explain your choice of method.

14. $x^2 - 4x + 4 = 16$

15. $x^2 - 8x + 7 = 0$

16. $3x^2 + x - 5 = 0$