

Factor the quadratic.

1. $x^2 - 14x - 15$

2. $3x^2 + 2x - 8$

3. $5x^2 + 10x$

4. $x^2 - 9$

Solve by factoring.

5. $x^2 + 3x - 10 = 0$

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

7. $5x^2 + 4x - 12 = 0$

8. $2x^2 - 50 = 0$

Solve each equation by taking the square root.

9. $3x^2 = 27$

10. $x^2 - 4 = 21$

11. $(x + 8)^2 = 32$

12. $3(x - 2)^2 + 4 = 52$

Solve each equation by completing the square.

13.

$$x^2 - 6x + 4 = 0$$

14.

$$3x^2 + 12x = -9$$

15. Solve by using the quadratic formula.

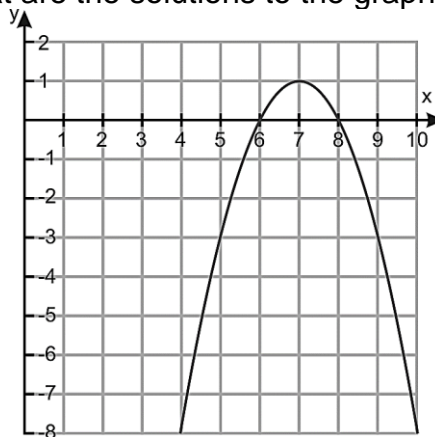
$$7x^2 + 5x - 1 = 0$$

16. Solve using any method.

$$x^2 - 4x - 12 = 0$$

17. Are 1 and -6 roots to the quadratic function $f(x) = 2x^2 + 5x - 7$?

18. What are the solutions to the graph?



19. *Error Analysis:* Find and circle the error. Then give the correct answer.

1. Solve the equation by completing the square.

$$x^2 - 8x + 12 = 0$$

$$x^2 - 8x = 12$$

$$x^2 - 8x + 16 = 12$$

$$(x - 4)^2 = 28$$

$$x - 4 = \sqrt{28}$$

$$x = 4 \pm 2\sqrt{7}$$

Algebra 1 Solving Quadratics Review Continued

Solving by factoring.	
1. $x^2 - 9x + 12 = -2$	2. $x^2 + 5x + 6 = 2$
3. $2x^2 + 7x - 15 = 0$	4. $3x^2 - x - 10 = 0$
5. $r^2 - 4 = 0$	6. $x^2 - 36 = 0$
7. $3x^2 - 9x = 0$	8. $n^2 + n = 0$
Solving by taking the square.	
9. $3x^2 - 1 = 29$	10. $4x^2 + 5 = 21$

$$11. \frac{1}{2}(x - 6)^2 - 8 = 0$$

$$12. 3(x + 1)^2 = 27$$

Solve by completing the square.

$$13. x^2 + 18x + 37 = 0$$

$$14. v^2 - 4v - 77 = 0$$

$$15. n^2 + 20n + 99 = 0$$

$$16. n^2 - 4n + 2 = 0$$

Solve using the quadratic formula.

$$17. 2k^2 + 8k + 6 = 0$$

$$18. 3m^2 + m - 7 = 0$$