



Name _____ Date _____ Period _____

SOLVING QUADRATIC EQUATIONS WORKSHEET

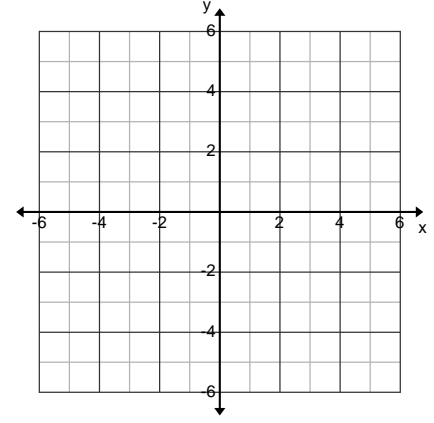
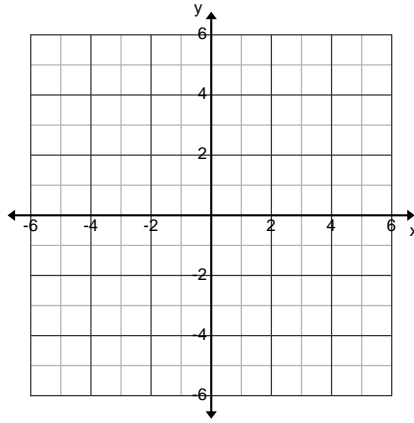
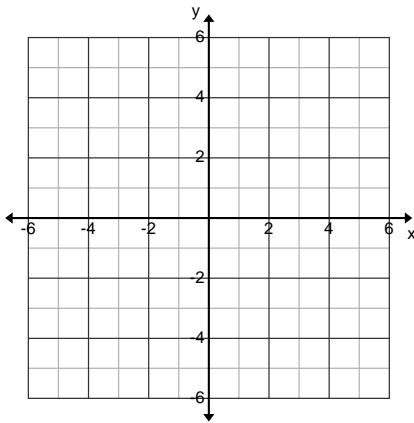
Solve each equation by using the indicated method.

Solve each equation by graphing.

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

2. $x^2 + 10x + 25 = 0$

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



Solve each equation by using the square root method.

4. $(x+3)^2 = 11$

5. $9x^2 - 6x + 1 = 8$

6. $x^2 + 10x + 25 = -16$

Solve by factoring.

7. $4x^2 = 11x$

8. $3x^2 + 13x = 10$

9. $4x^2 - 6 = -5x$

Solve by completing the square.

10. $x^2 + 19 = 14x$

11. $2x^2 - 2x = 6$

12. $x^2 - 8x - 65 = 0$

Solve by using the quadratic formula.

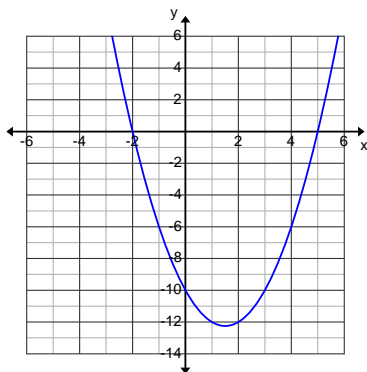
13. $4x^2 - 12x = 63$

14. $x^2 = 4x - 15$

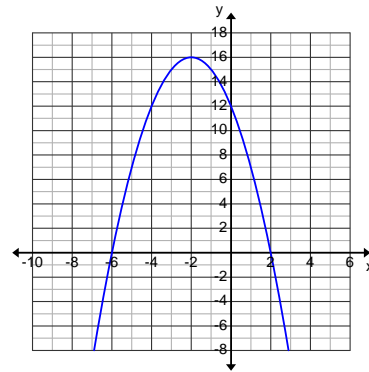
15. $4x^2 - 3x = 6$

Determine the solutions using the graphs below.

16. _____



17. _____



Find the value of the discriminant of each quadratic equation. Then describe the number of solutions.

18. $5x^2 = -6x + 1$

19. $2x^2 - 5x = -9$