

NAME _____

DATE _____

Module 13 Solving Quadratic Equations
of One Variable

Lesson 5 Solving Quadratic Equations
by the Quadratic Formula



**additional
practice**

Solve each quadratic equation using the quadratic formula.

1. $x^2 - 5x - 6 = 0$

2. $d^2 - 7d + 12 = 0$

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

4. $y^2 - 2y - 15 = 0$

5. $b^2 + 36 = 12b$

6. $4 + t^2 = -4t$

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

8. $5x^2 + x = 4$

9. $2x = -4x^2 + 12$

10. $15x^2 = 7x + 2$

11. $3x^2 = x + 2$

12. $19x + 4 = -12x^2$

13. $5x^2 + x + 1 = 0$

14. $-2x^2 + 5x - 4 = 0$

15. $2x^2 + 5x - 5 = 0$

16. $2b^2 + 3b - 1 = 0$

17. $-3t^2 - 5t + 3 = 0$

18. $5n^2 + 3 = 4n$



Use the discriminant to determine the number of solutions for each equation.
Then, solve the equation using the value of the discriminant.

19. $9c^2 + 5c = 2$

20. $x^2 = 3x + 8$

21. $11 = 2x^2 - x$

22. $4x^2 - 7x = 3$

23. $r^2 = 3r - 12$

24. $-7 = 5x - 4x^2$

