

## Solving Quadratic Equations

Solve using the quadratic formula.

1.  $x^2 - 7x = 44$

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

\_\_\_\_\_  
3.  $x^2 - 225 = 0$

\_\_\_\_\_  
4.  $8x^2 + 6x - 5 = 0$

Find the number of real solutions of each equation using the discriminant.

5.  $3x^2 + 10x + 6 = 0$

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

7.  $4x^2 + 4x + 1 = 0$

Solve using any method. Explain why you chose the method you used.

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

9.  $2x^2 + 3x - 20 = 0$

10.  $3x^2 - 108 = 0$

11.  $9x^2 - 12x + 4 = 0$

12.  $4x^2 = 64$

13.  $4(x - 3)^2 = 25$

Name \_\_\_\_\_ Date \_\_\_\_\_ Class \_\_\_\_\_

14.  $x^2 - 3x - 28 = 0$

15.  $x^2 - x = 6$

16.  $2x^2 - 4x - 3 = 0$

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

18.  $\frac{1}{2}x^2 = \frac{1}{8}$

19.  $2x^2 - 15x - 8 = 0$

