

**EXTRA PRACTICE 43****Solving Quadratic Equations Using the Quadratic Formula**

Use after Section 11.2

Name \_\_\_\_\_

Example: Solve  $3x^2 - 5x + 1 = 0$  using the quadratic formula.

$$3x^2 - 5x + 1 = 0$$

$$a = 3 \quad b = -5 \quad c = 1$$

$$x = \frac{-(-5) \pm \sqrt{(-5)^2 - 4(3)(1)}}{2(3)}$$

$$= \frac{5 \pm \sqrt{25 - 12}}{6} = \frac{5 \pm \sqrt{13}}{6}$$

$$\left[ \begin{array}{l} \text{Quadratic formula:} \\ x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \end{array} \right]$$

Solve.

1.  $x^2 - 3x = 4$  \_\_\_\_\_

2.  $y^2 - 6y = -8$  \_\_\_\_\_

3.  $x^2 = 10x - 25$  \_\_\_\_\_

4.  $2y^2 - 7y - 15 = 0$  \_\_\_\_\_

5.  $x^2 - 36 = 0$  \_\_\_\_\_

6.  $y^2 - 49 = 0$  \_\_\_\_\_

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

8.  $x^2 - 5x - 7 = 0$  \_\_\_\_\_

9.  $y^2 - 8y + 11 = 0$  \_\_\_\_\_

10.  $y^2 + 7y - 1 = 0$  \_\_\_\_\_

**EXTRA PRACTICE 43 (continued)**  
**Solving Quadratic Equations Using the Quadratic Formula**  
Use after Section 11.2

Name \_\_\_\_\_

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11.  $x^2 + 6x + 8 = 4$  \_\_\_\_\_

12.  $x^2 - 3x + 1 = 6$  \_\_\_\_\_

13.  $4x^2 + 7x + 2 = 0$  \_\_\_\_\_

14.  $5x^2 - 3x - 1 = 0$  \_\_\_\_\_

15.  $2x^2 - 3x = 3$  \_\_\_\_\_

16.  $6x^2 + 6x = 8$  \_\_\_\_\_

17.  $4y^2 - 6y - 1 = 0$  \_\_\_\_\_

18.  $2y^2 - 5y = -3$  \_\_\_\_\_

19.  $8x^2 = 200$  \_\_\_\_\_

20.  $9x^2 = 144$  \_\_\_\_\_