## **Practice 5-5**

**Quadratic Equations** 

Solve each equation by factoring, by taking square roots, or by graphing. When necessary, round your answer to the nearest hundredth.

1. 
$$x^2 - 18x - 40 = 0$$

**4.** 
$$x^2 - 6x - 7 = 0$$

7. 
$$x^2 - 1 = 0$$

**10.** 
$$6x^2 + 9 = -55x$$

**13.** 
$$2x^2 + x - 10 = 0$$

**16.** 
$$3x^2 + 1 = -4x$$

**19.** 
$$-2x^2 - x + 1 = 0$$

**22.** 
$$x^2 + 6 = -7x$$

**25.** 
$$3x^2 - 7x + 2 = 0$$

**28.** 
$$x^2 - 144 = 0$$

**31.** 
$$7x^2 + 6x - 1 = 0$$

**34.** 
$$7x^2 + 1 = -8x$$

**37.** 
$$x^2 - 8x + 7 = 0$$

**40.** 
$$x^2 + 3 = 4x$$

**43.** 
$$(x + 7)^2 = \frac{49}{16}$$

**46.** 
$$4x^2 + 2 = -9x$$

**49.** 
$$9x^2 + 10x = -1$$

**52.** 
$$11x^2 - 1 = -10x$$

**55.** 
$$25x^2 - 9 = 0$$

**58.** 
$$x^2 + 11 = -12x$$

**61.** 
$$4x^2 - 11x = 3$$

**64.** 
$$x^2 + 8x = -12$$

**67.** 
$$x^2 = x + 6$$

**70.** 
$$3x^2 + 4x = 6$$

**73.** 
$$x^2 + 5x + 4 = 0$$

**2.** 
$$16x^2 = 56x$$

**5.** 
$$x^2 - 49 = 0$$

**8.** 
$$x^2 - 3x - 4 = 0$$

**11.** 
$$(x + 5)^2 = 36$$

**14.** 
$$-4x^2 + 3x = -1$$

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

**20.** 
$$3x^2 + 5x = 2$$

**23.** 
$$6x^2 + 18x = 0$$

**26.** 
$$2x^2 - 3x = -1$$

**29.** 
$$4x^2 + 2 = 6x$$

**32.** 
$$2x^2 - 6x = -4$$

**35.** 
$$x^2 + 9 = -10x$$

**38.** 
$$x^2 - 16 = 0$$

**41.** 
$$2x^2 + 6 = -7x$$

**44.** 
$$9x^2 - 8x = 1$$

**47.** 
$$3x^2 + 4 = 8x$$

**50.** 
$$2x^2 + 9x + 4 = 0$$

**53.** 
$$4x^2 = 1$$

**56.** 
$$2x^2 + 11x = 6$$

**59.** 
$$6x^2 + 2 = 13x$$

**62.** 
$$8x^2 + 6x + 1 = 0$$

**65.** 
$$x^2 + 6x = 40$$

**68.** 
$$x^2 + 2x - 6 = 0$$

**71.** 
$$7x^2 - 105 = 0$$

**74.** 
$$x^2 + 36 = -13x$$

3. 
$$5x^2 = 15x$$

**6.** 
$$x^2 + 2x + 1 = 0$$

**9.** 
$$x^2 + 9x^2 + 20 = 0$$

**12.** 
$$2x^2 - 3x = 0$$

**15.** 
$$5x^2 - 6x + 1 = 0$$

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

**21.** 
$$x^2 - 6x = -8$$

**24.** 
$$2x^2 + 5 = 11x$$

**27.** 
$$2x^2 - x = 6$$

**30.** 
$$5x^2 + 2 = -7x$$

**33.** 
$$11x^2 - 12x + 1 = 0$$

**36.** 
$$(x-2)^2 = 18$$

**39.** 
$$x^2 + 6x = -8$$

**42.** 
$$6x^2 + 2 = 7x$$

**45.** 
$$10x^2 + 7x + 1 = 0$$

**48.** 
$$4x^2 + 5 + 9x = 0$$

**51.** 
$$2x^2 + 6x = -4$$

**54.** 
$$6x^2 = 12x$$

**57.** 
$$8x^2 - 6x + 1 = 0$$

**60.** 
$$x^2 = 121$$

**63.** 
$$x^2 + 9x + 8 = 0$$

**66.** 
$$2x^2 = 8$$

**69.** 
$$x^2 - 12 = 0$$

**72.** 
$$16x^2 = 81$$

**75.** 
$$x^2 + 6 = 5x$$