

## 15.1 Homework

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation by taking square roots.**

1)  $9x^2 - 5 = 715$

2)  $2x^2 - 4 = -17$

**Solve each equation by completing the square.**

3)  $m^2 + 14m - 102 = -7$

**Factor each completely.**

4)  $x^2 + 2x - 24$

5)  $k^2 + 8k$

6)  $15r^2 - 100r - 160$

7)  $15r^2 + 10r$

**Solve each equation by factoring.**

8)  $r^2 - 5r = 24$

9)  $k^2 = -2k + 48$

## Answers to 15.1 Homework

1)  $\{4\sqrt{5}, -4\sqrt{5}\}$   
5)  $k(k+8)$   
9)  $\{6, -8\}$

2) No solution.

6)  $5(3r+4)(r-8)$

3)  $\{5, -19\}$

7)  $5r(3r+2)$

4)  $(x+6)(x-4)$

8)  $\{-3, 8\}$