

**Solving Quadratic Equations**

Date \_\_\_\_\_

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

1)  $5x^2 + 9 = 509$

2)  $5p^2 - 1 = 319$

3)  $25r^2 + 9 = 10$

4)  $4x^2 - 2 = 34$

5)  $5 + 4m^2 = 14$

6)  $10n^2 + 9 = 169$

**Solve each equation with the quadratic formula.**

7)  $3x^2 - 75 = 0$

8)  $4b^2 - b - 7 = 0$

$$9) 4n^2 - 6 = 10$$

$$10) 4x^2 - 12x - 62 = 10$$

$$11) 7x^2 = 10$$

$$12) 9x^2 = 2$$

$$13) -x^2 - 92 = -6x^2 - 11 + 12x$$

$$14) 3a^2 + 8a - 60 = -3a$$