

## Learning Activity – Section 3.5 – Solving Quadratic Equations by Using the Square Root Property

Names: \_\_\_\_\_  
\_\_\_\_\_

Solve each equation by using the square root property, and write each solution set.

1.  $3x^2 - 7 = 83$

2.  $(2x + 3)^2 - 108 = 0$

3.  $(6x - 1)^2 - 25 = 675$

4.  $2x^2 - 196 = 0$

Determine the value of  $n$  so that the trinomial is a perfect square trinomial. Then, factor the result.

5.  $x^2 + 18x + n$

6.  $x^2 - \frac{4}{5}x + n$

Solve by completing the square and applying the square root property. Write each solution set.

7.  $3x^2 - 42x + 60 = 0$

8.  $5x^2 + 15x = 35$

9.  $2x^2 + 4 = -7x$

10.  $9x^2 - 36x + 5 = 0$