

Name: \_\_\_\_\_

Date \_\_\_\_\_

Topic: Completing the Square - Worksheet 1

CONVERT TO  
VERTEX FORM  
AND FIND  
THE VERTEX

1.  $x^2 + 8x - 6 = y$

2.  $x^2 + 6x + 9 = y$

3.  $2x^2 - 20x - 64 = y$

4.  $x^2 + 16x + 24 = y$

5.  $x^2 + 4x + 10 = y$   
 $x^2 + 4x + 4 + 10 - 4 = y$   
 $(x + 2)^2 + 6 = y$   
 Vertex  $(-2, 6)$

6.  $x^2 + 8x + 7 = y$

7.  $x^2 + 24x - 16 = y$

8.  $x^2 + 4x - 3 = y$

What values would be placed in the boxes to create perfect square trinomials?

9.  $x^2 + 16x + \square$

10.  $x^2 - 3x + \square$

