Algebra 2 Name: _____
Writing a Quadratic Function in Vertex Form NOTES Date: _____

Vertex Form:

Ex1. Write in Vertex Form (hint: you must complete the square).

A) $y = x^2 - 12x + 18$

STEP ONE:

STEP TWO:

STEP THREE:

STEP FOUR: write the vertex as an ordered pair (x, y)

B) $y = x^2 + 6x + 4$

STEP ONE:

STEP TWO:

STEP THREE:

STEP FOUR: write the vertex as an ordered pair (x, y)

REVIEW: How many ways can we solve a quadratic equation for x?

#1: solve by factoring. $x^2 - 4x - 12 = 0$

#2: solve by using a square root. $3x^2 + 20 = 2$

#3: solve by completing the square.
(we use this method when we
can't factor the trinomial)

$$x^2 + 6x - 95 = -4$$