

Algebra II  
Quadratics Homework #2

Name \_\_\_\_\_

Show all work in the space provided.

1. Find and plot the vertex, axis of symmetry, and y intercept. Then, graph the function.

a.  $y = x^2 + 2x + 1$

b.  $y = 3x^2 - 6x + 4$

c.  $y = 2(x + 1)^2 - 3$

2. Find the vertex, axis of symmetry, y-intercept, domain, range and maximum/minimum. Sketch the function.

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

b.  $y = -\frac{1}{4}(x+2)^2 + 1$

3. What is the vertex of the graph of the function  $y = 3(x+2)^2 - 5$  ?

a.  $(2, -5)$       b.  $(-2, -5)$       c.  $(-5, 2)$       d.  $(5, -2)$