Quadratic Function (Vertex Form) Quiz C

Name: Key

1.) Write a quadratic equation in vertex form if a = -8, h = 3 and k = 4.

$y = -8(x-3)^2 + 4$

2.) Identify the vertex of the quadratic function: $y = -1(x + 3)^2$

$(-3, 0)$

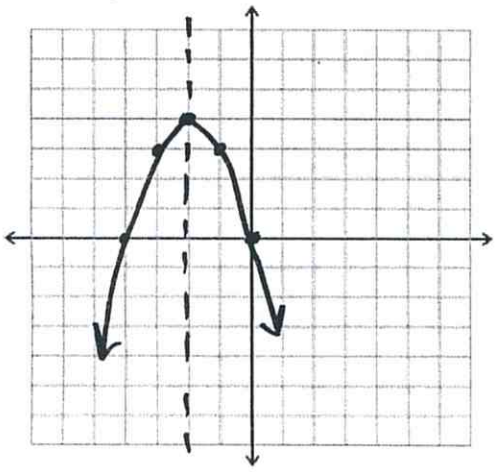
What does the (-1) in the equation represent

a = -1, so parabola opens down. Vertex is a maximum.

3.) Graph the equation. Label the vertex and axis of symmetry. Show your table of values.

$y = -(x + 2)^2 + 4$

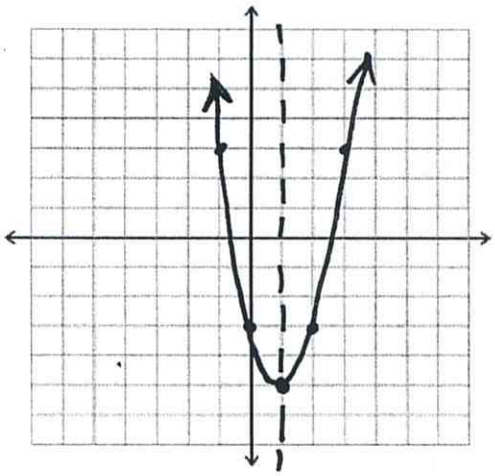
x	y
-1	3
0	0



4.) Graph the equation. Label the vertex and axis of symmetry. Show your table of values.

$y = 2(x - 1)^2 - 5$

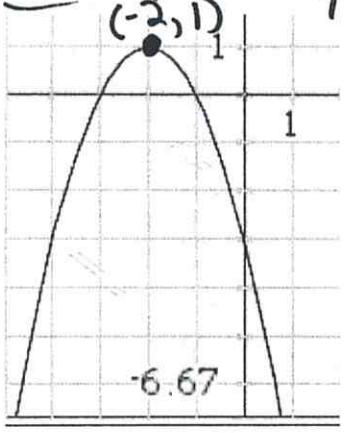
x	y
0	-3
1	3



5.) Use the graph and the given equation to find a quadratic equation in vertex form.

a = -1 h k (-2, 1)

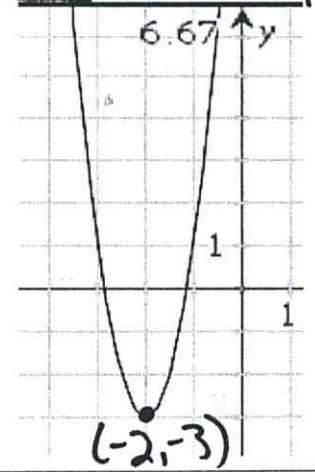
$y = -1(x+2)^2 + 1$



6.) Use the graph and the given equation to find a quadratic equation in vertex form.

a = 4

$y = 4(x+2)^2 - 3$



(-2, -3)

h k