Quadratic Function (Vertex Form) Quiz A

Name: Key

1.) Write a quadratic equation in vertex form if a = 3, h = -5 and k = 3.

$y = 3(x+5)^2 + 3$

2.) Identify the vertex of the quadratic function: $y = -2(x + 4)^2 - 3$

$(-4, -3)$

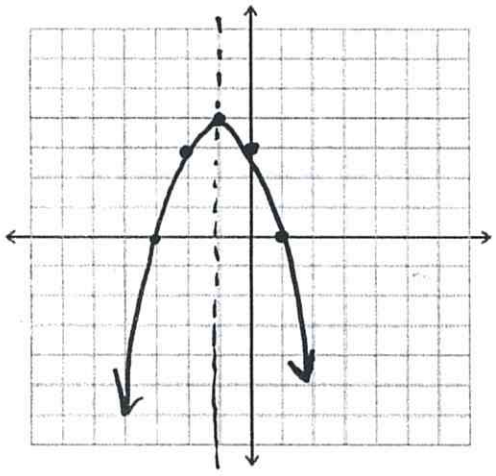
What does the (-2) in the equation represent

$a = -2$, so parabola opens down. Vertex is a maximum.

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

$y = -(x + 1)^2 + 4$

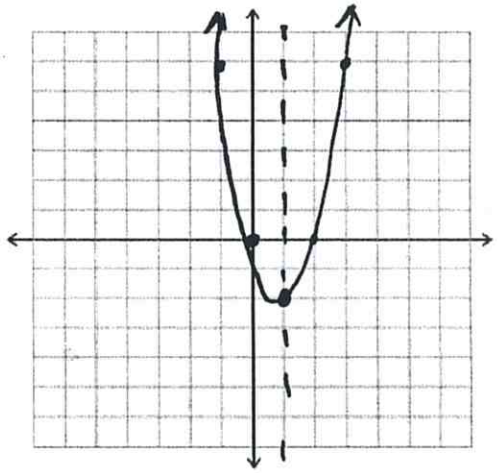
x	y
0	3
1	0



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

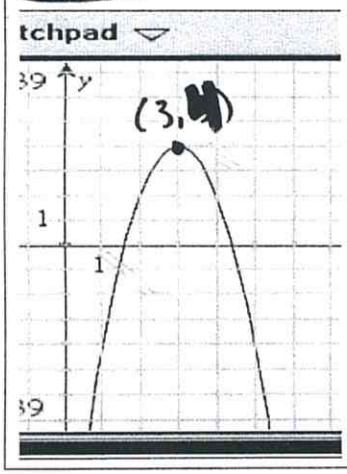
$y = 2(x - 1)^2 - 2$

x	y
0	0
-1	6



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

a = -2



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

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

a = 1

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