

1.) Write a quadratic equation in vertex form if $a = 1$, $h = -7$ and $k = 2$.

$$y = 1(x + 7)^2 + 2$$

2.) Identify the vertex of the quadratic function: $y = -4(x + 1)^2 - 1$

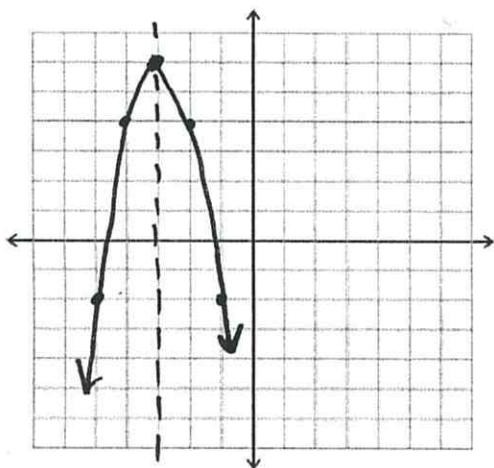
$$(-1, -1)$$

What does the (-4) in the equation represent
 $a = -4$, so parabola opens down.
Vertex is a maximum.

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

$$y = -2(x + 3)^2 + 6$$

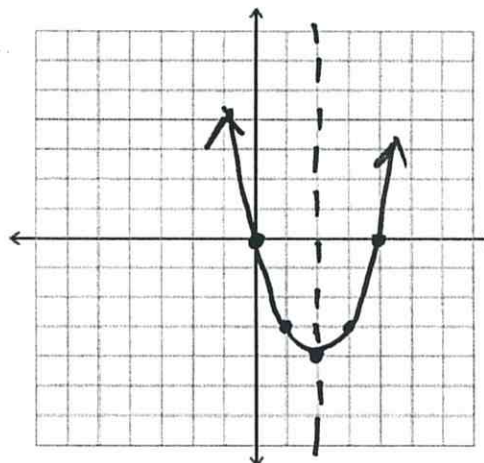
x	y
-4	4
-5	-2



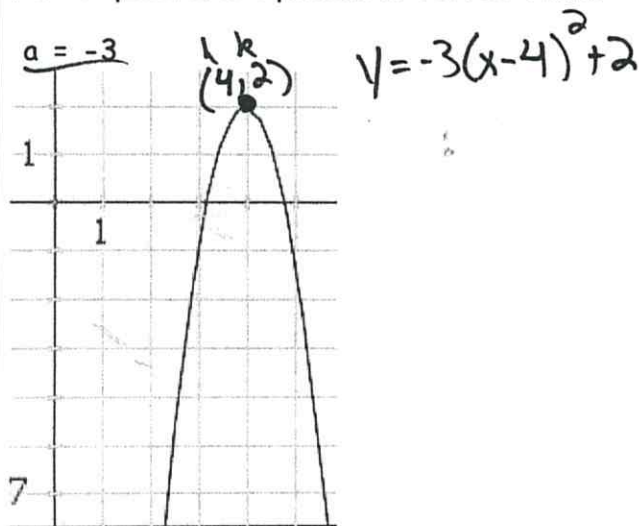
4.) Graph the equation. Label the vertex and axis of symmetry. Show your table of values.

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

x	y
1	-3
0	0



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



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

