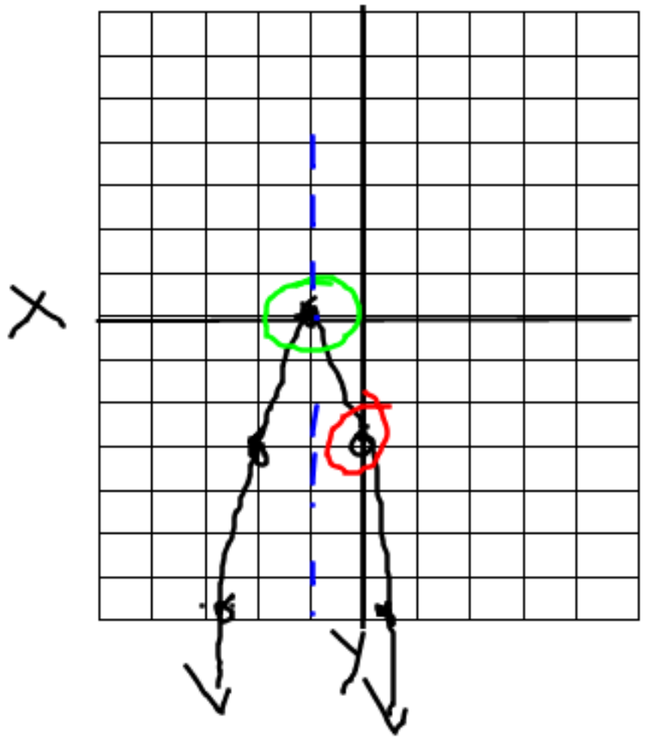
**Quadratics PRACTICE: Using the vertex form, $y = a(x - h)^2 + k$** Name: _____

Graph each equation using a method of your choice (technology, table of values, etc.)
Write the point that represents the vertex and y-intercept. Write the equation in standard form.
List the transformations specifically. Ex: stretch of 3 or vertical shift of -5.

vertex (-1, 0)
x int
-1
A o. S
x = -1

1) a) Graph $y = 3(x + 1)^2$

Y-int is ( 0, 3 ).




c) List the transformations:

L.S → one left
→ opens down
→ max.
→ shrink by 3

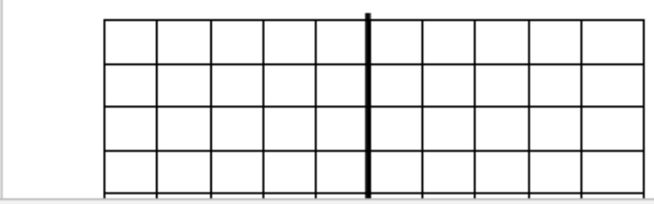
d) Re-write $y = 3(x + 1)^2$ in standard form

$y = -3(x+1)(x+1)$
$y = -3(x^2 + x + x + 1)$
$y = -3(x^2 + 2x + 1)$
$y = -3x^2 - 6x - 3$

2) a) Graph $y = -(x - 2)^2 + 6$

b) Vertex is (___, ___ ).

Y-int is ( ___, ___ ).



c) List the transformations: _____

_____.

d) Re-write $y = -(x - 2)^2 + 6$ in standard form