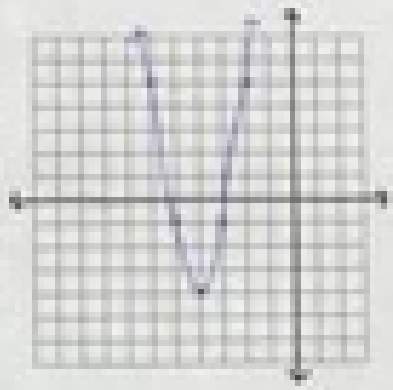
Graphing Quadratics in Vertex Form Worksheet Name: Key

*Graph the following. Solve for the vertex and at least four additional coordinates to fill in the table of values.

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

Vertex: $(-3, -3)$

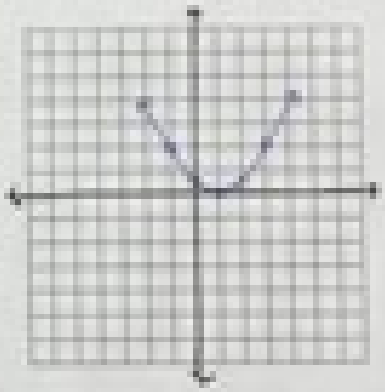
x	y
-4	5
-3	-1
-2	-3
-3	-1
-4	5



2. $f(x) = \frac{1}{2}(x - 1)^2$

Vertex: $(1, 0)$

x	y
-1	2
0	1/2
1	0
2	1/2
3	2



3. $g(x) = -\frac{1}{4}(x + 3)^2 - 4$

Vertex: $(-3, -4)$

x	y
-5	-5
-4	-4.25
-3	-4
-2	-4.25
-1	-5