

Math 092
Quiz 8.6

For each of the following, graph the function by hand, label the vertex, and draw the axis of symmetry.

a) $g(x) = -(x+1)^2 + 3$

$a = -1$

$h = -1$

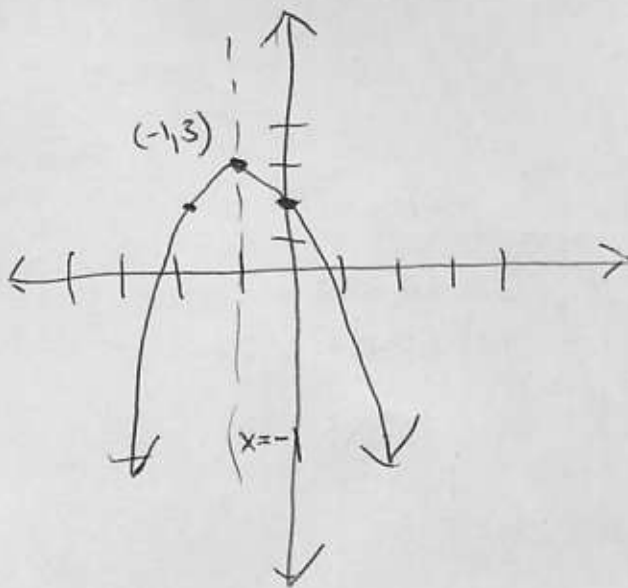
$k = 3$

x	y	f(x)
-1	3	$-(-1+1)^2 + 3$
0	2	$-(0+1)^2 + 3$
-2	2	$-(-2+1)^2 + 3$

Vertex $(-1, 3)$

axis of symmetry:

$x = -1$



b) $g(x) = (x-2)^2$

$h=2$

$c=1$

$k=0$

Vertex = $(2, 0)$

axis of symmetry = $x=2$

x	y	f(x)
2	0	$(2-2)^2$
1	1	$(1-2)^2$
3	1	$(3-2)^2$

