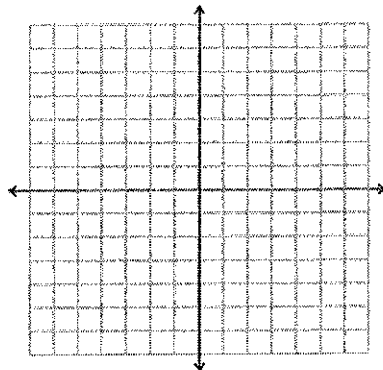


Graph each quadratic function. Complete all the necessary steps to be able to fill in the important characteristics.

1) $f(x) = (x + 1)(x - 1)$

x	y



x-int #1: _____

x-int #2: _____

AOS: _____

Vertex: _____

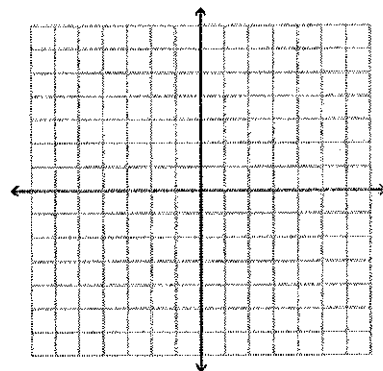
y-intercept: _____

Opens up or down? _____

Is vertex a max or min? _____

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

x	y



AOS: _____

Vertex: _____

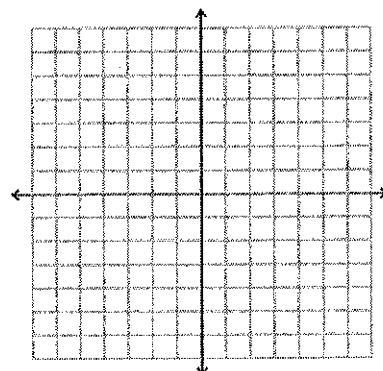
y-intercept: _____

Opens up or down? _____

Is vertex a max or min? _____

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

x	y



AOS: _____

Vertex: _____

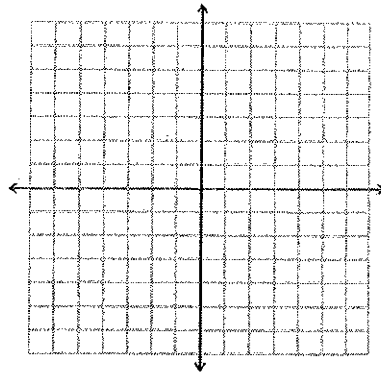
y-intercept: _____

Opens up or down? _____

Is vertex a max or min? _____

4) $h(x) = 2(x + 3)(x + 4)$

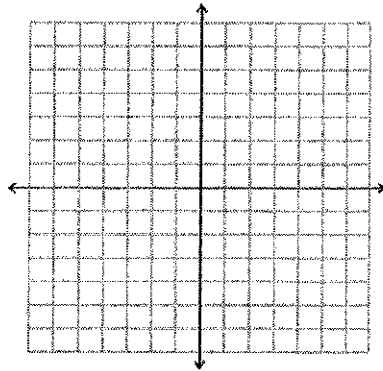
x	y



x-int #1: _____
 x-int #2: _____
 AOS: _____
 Vertex: _____
 y-intercept: _____
 Opens up or down? _____
 Is vertex a max or min? _____

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

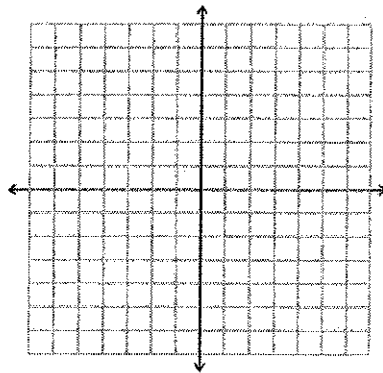
x	y



AOS: _____
 Vertex: _____
 y-intercept: _____
 Opens up or down? _____
 Is vertex a max or min? _____

6) $g(x) = 2x^2 + 6x$

x	y

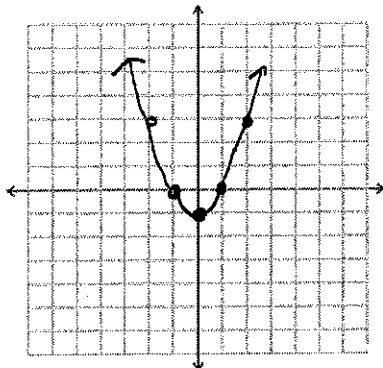


AOS: _____
 Vertex: _____
 y-intercept: _____
 Opens up or down? _____
 Is vertex a max or min? _____

Graph each quadratic function. Complete all the necessary steps to be able to fill in the important characteristics.

1) $f(x) = (x + 1)(x - 1)$

x	y
-2	+3
-1	0
0	-1
1	0
2	3



x-int #1: (-1, 0)

x-int #2: (1, 0)

AOS: $x = 0$

Vertex: (0, -1)

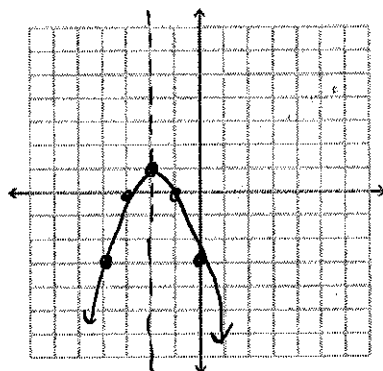
y-intercept: (0, -1)

Opens up or down? up

Is vertex a max or min? min

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

x	y
-4	-3
-3	0
-2	1
-1	0
0	-3



AOS: $x = -2$

Vertex: (-2, 1)

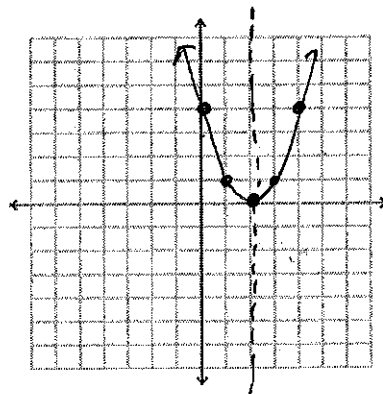
y-intercept: (0, -3)

Opens up or down? down

Is vertex a max or min? max

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

x	y
0	4
1	1
2	0
3	1
4	4



AOS: $x = 2$

Vertex: (2, 0)

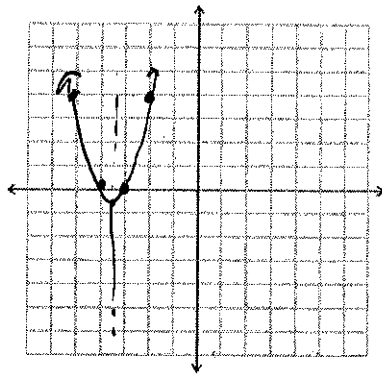
y-intercept: (0, 4)

Opens up or down? up

Is vertex a max or min? min

4) $h(x) = 2(x+3)(x+4)$

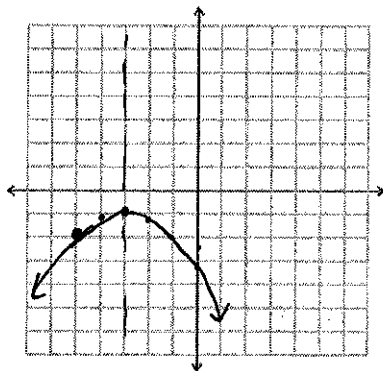
x	y
-6	12
-5	4
-4	0
-3	0
-2	4



x-int #1: $(-3, 0)$
 x-int #2: $(-4, 0)$
 AOS: $x = -3.5$
 Vertex: $(-3.5, -0.5)$
 y-intercept: $(0, 24)$
 Opens up or down? up
 Is vertex a max or min? min

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

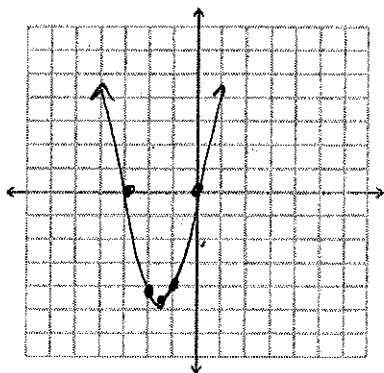
x	y
-5	-2
-4	-1.25
-3	-1
-2	-1.25
-1	-2



AOS: $x = -3$
 Vertex: $(-3, -1)$
 y-intercept: $(0, -3.25)$
 Opens up or down? down
 Is vertex a max or min? max

6) $g(x) = 2x^2 + 6x$
 $2x(x+3)$

x	y
-3	0
-2	-4
-1	-4
0	0
1	8



AOS: $x = -1.5$
 Vertex: $(-1.5, -4.5)$
 y-intercept: $(0, 0)$
 Opens up or down? up
 Is vertex a max or min? min