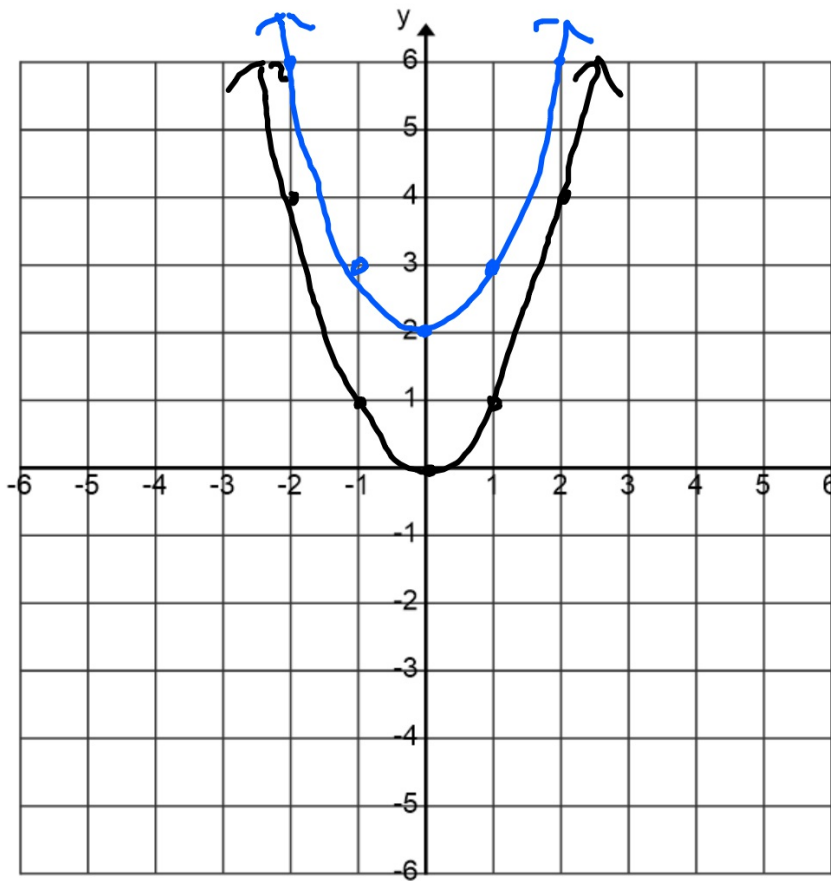


12-9-19 1<sup>st</sup> Trig

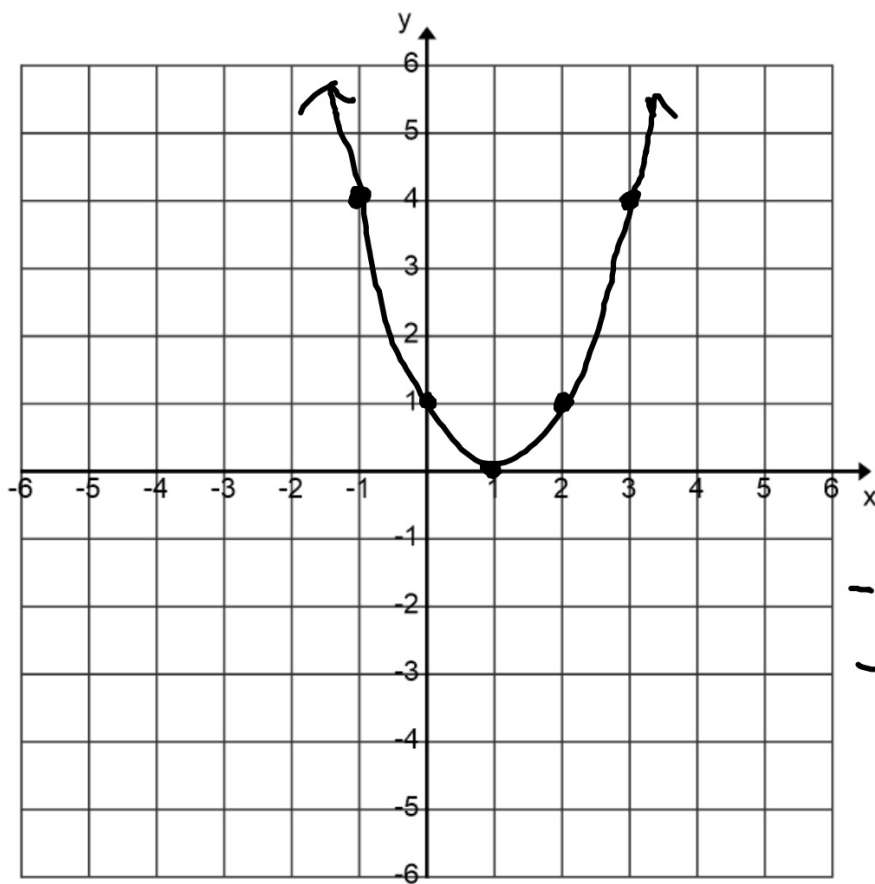


$$y = x^2$$

$$y = x^2 + 2$$

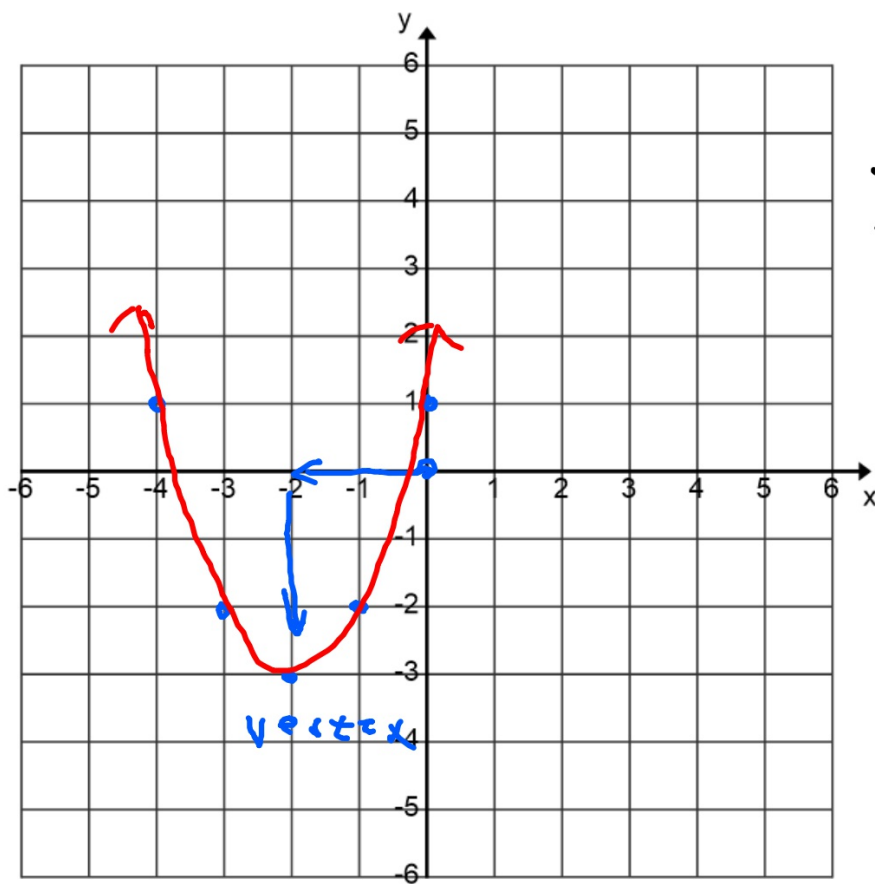
x	y
0	0
1	1
2	4
-1	1
-2	4

x	y
0	2
1	3
2	6
-1	3
-2	6



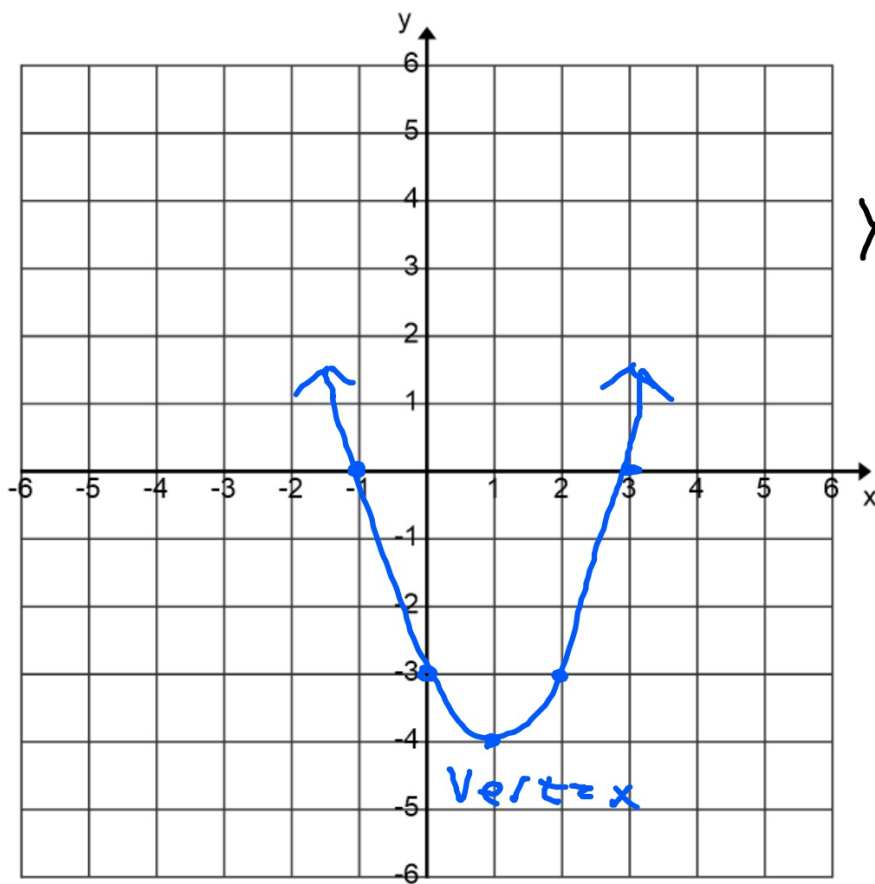
$$y = (x - 1)^2$$

x	y
0	1
1	0
2	1
-1	4
-2	9
3	4



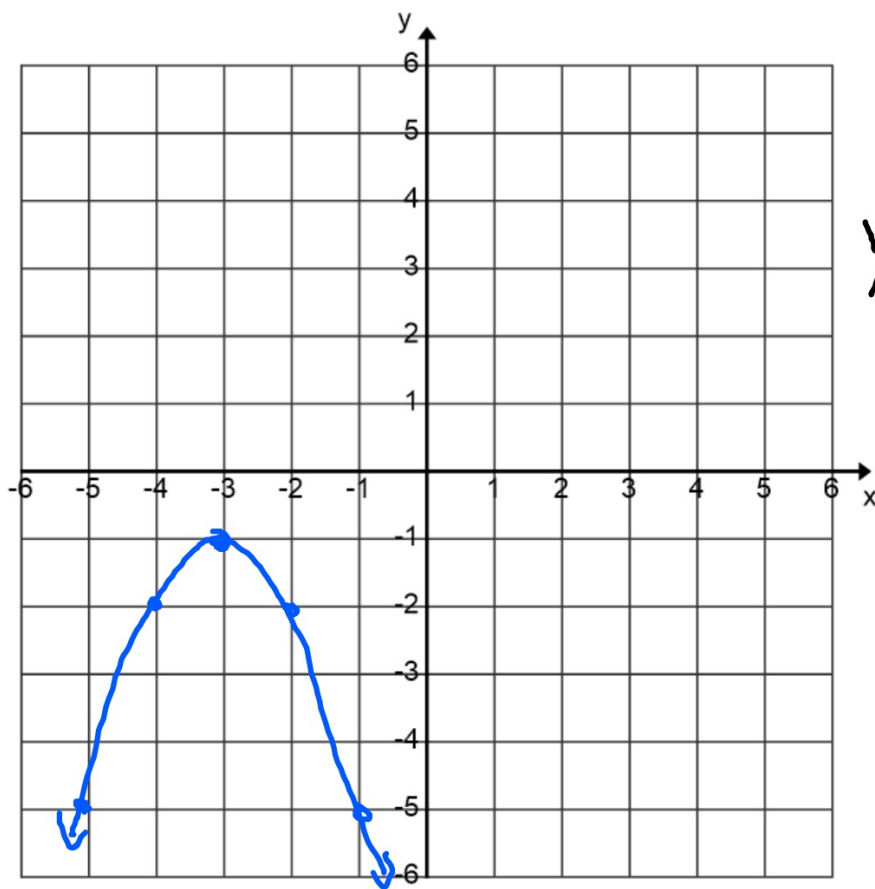
$$y = -(x+2)^2 - 3$$

left      up  
right     down



$$y = (x - 1)^2 - 4$$

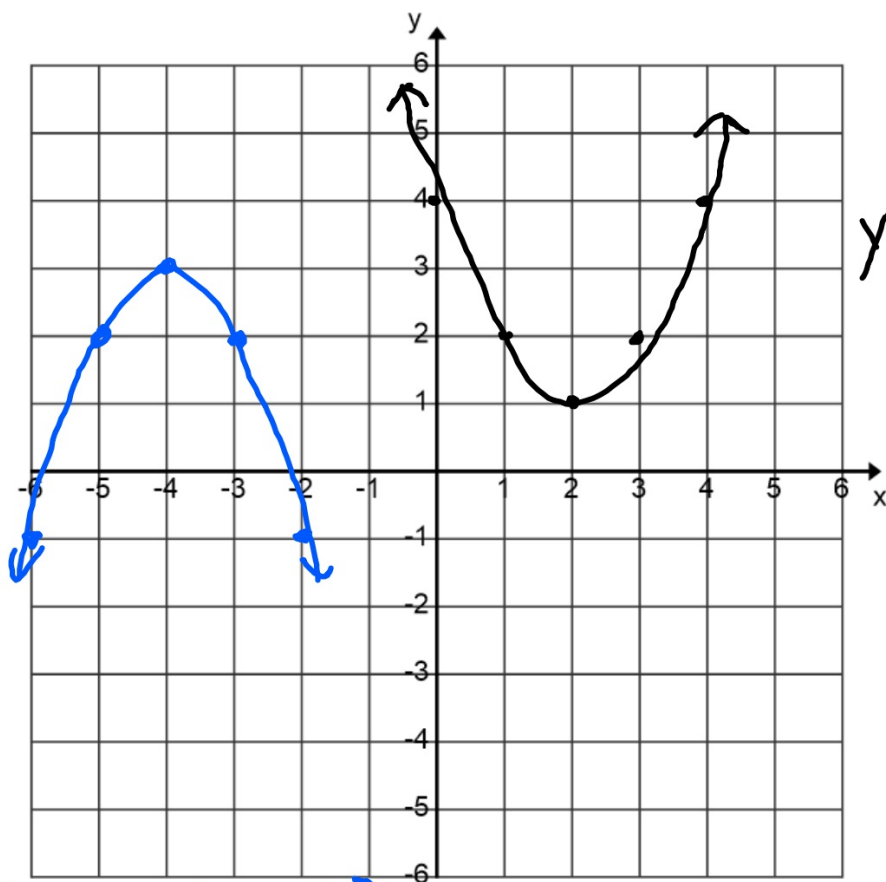
↑                      ↑  
right                down  
|                      4



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

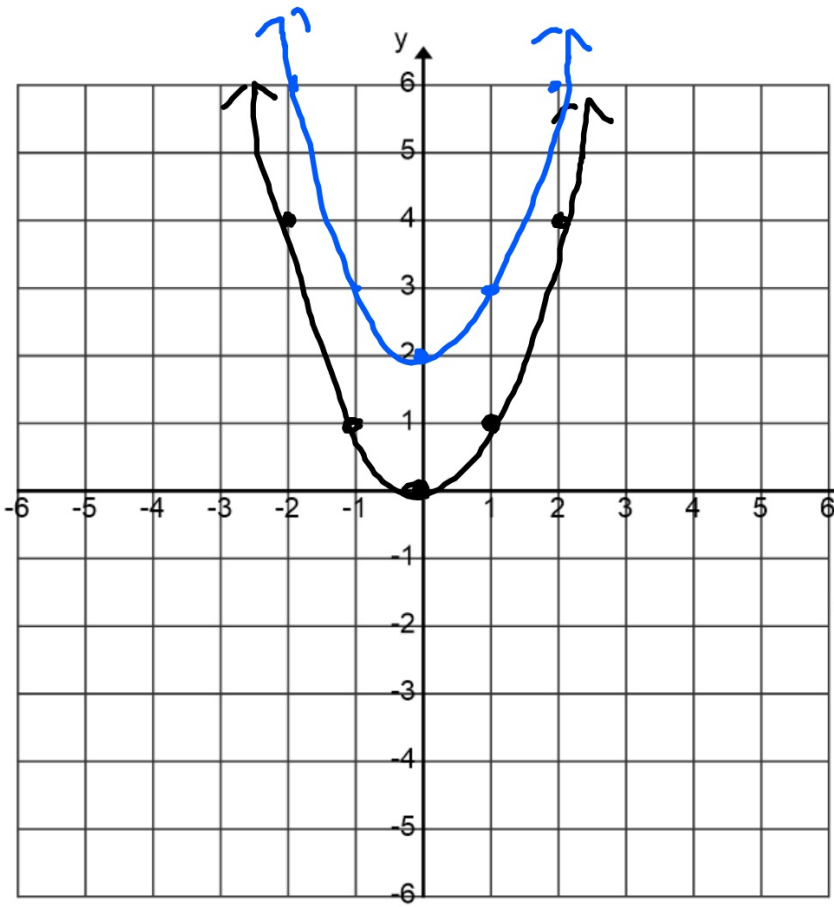
Vertex

$$(-3, -1)$$



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

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

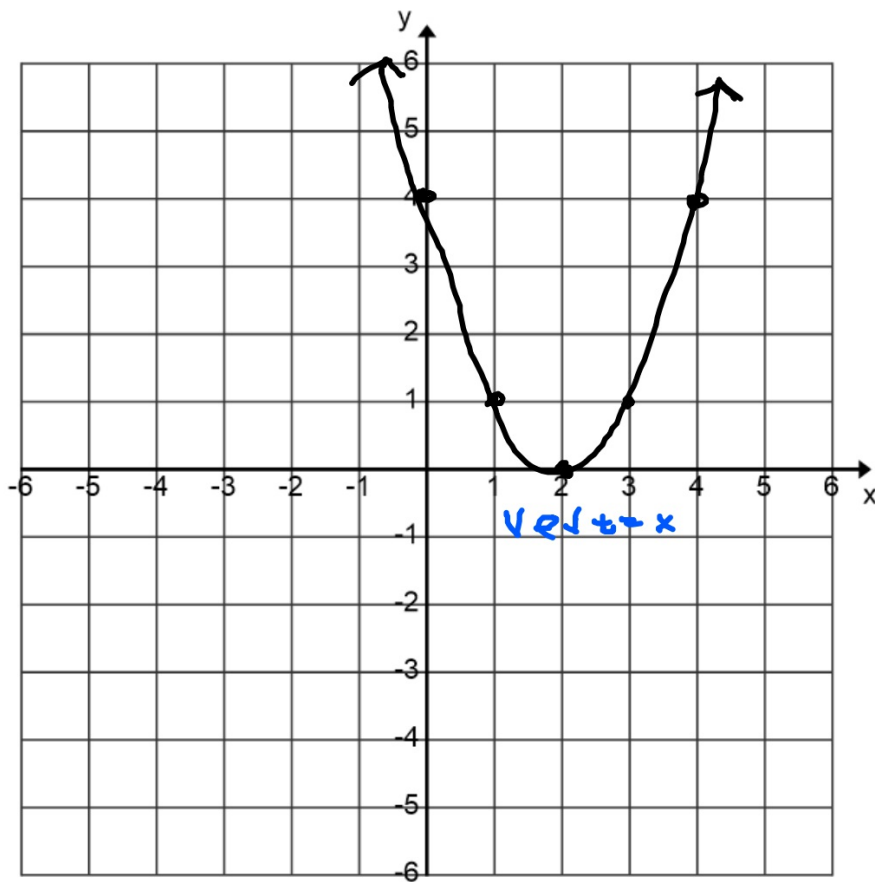


$$y = x^2$$

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

$$y = x^2 + 2$$

x	y
0	2
1	3
1	3
2	6
2	6



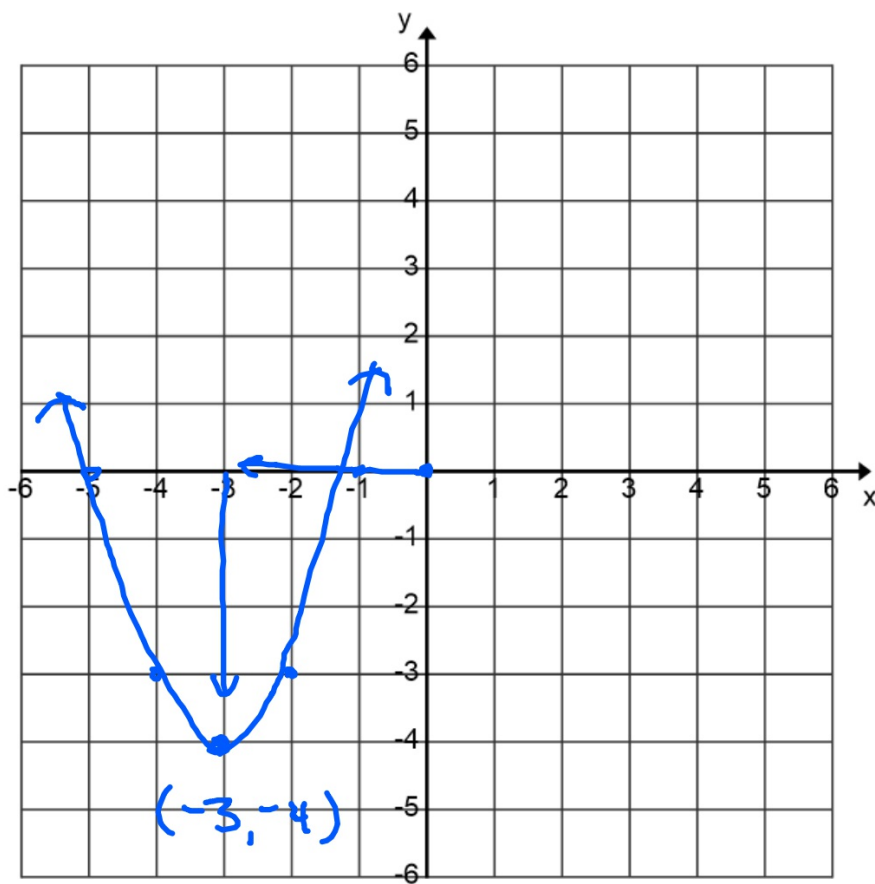
$$y = (x - 2)^2$$

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

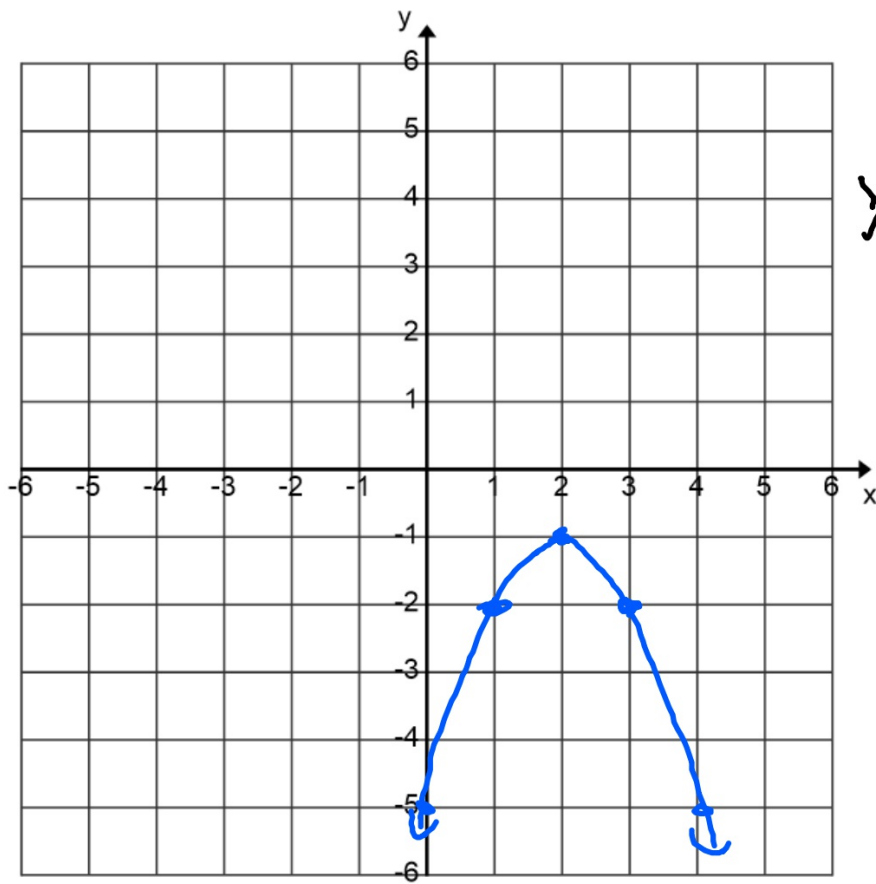
A blue arrow points from the word "right" to the constant term "2" in the equation  $y = (x - 2)^2$ .

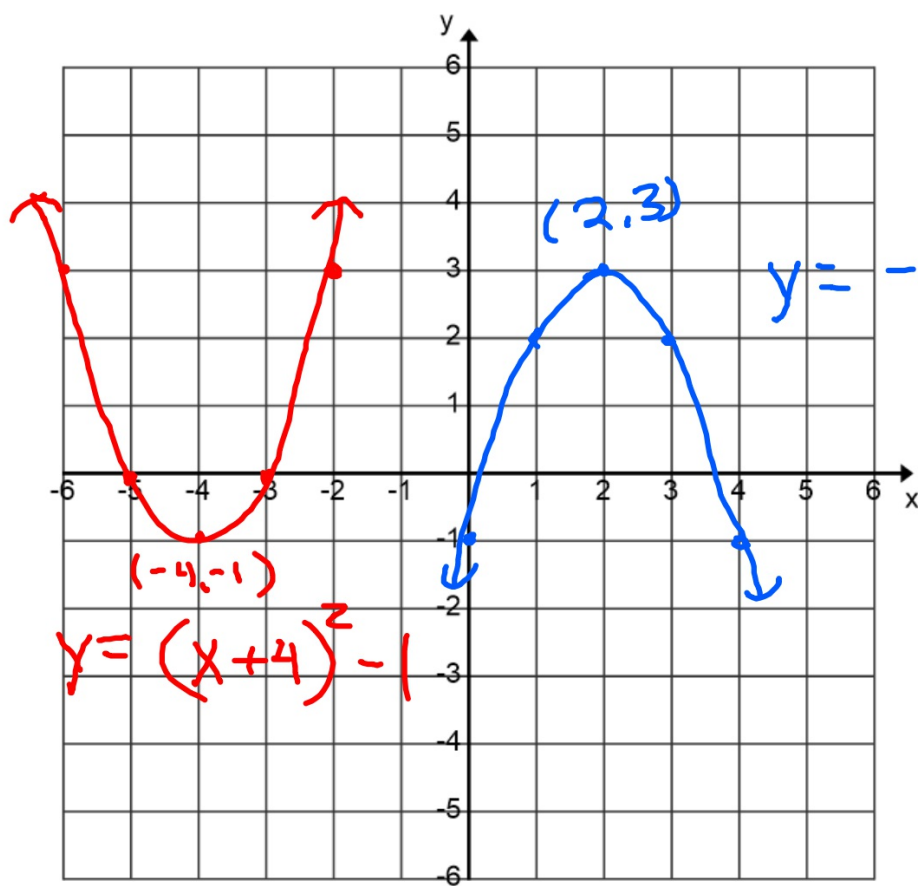


$$y = (x + 3)^2 - 4$$



$$y = -(x-2)^2 - 1$$



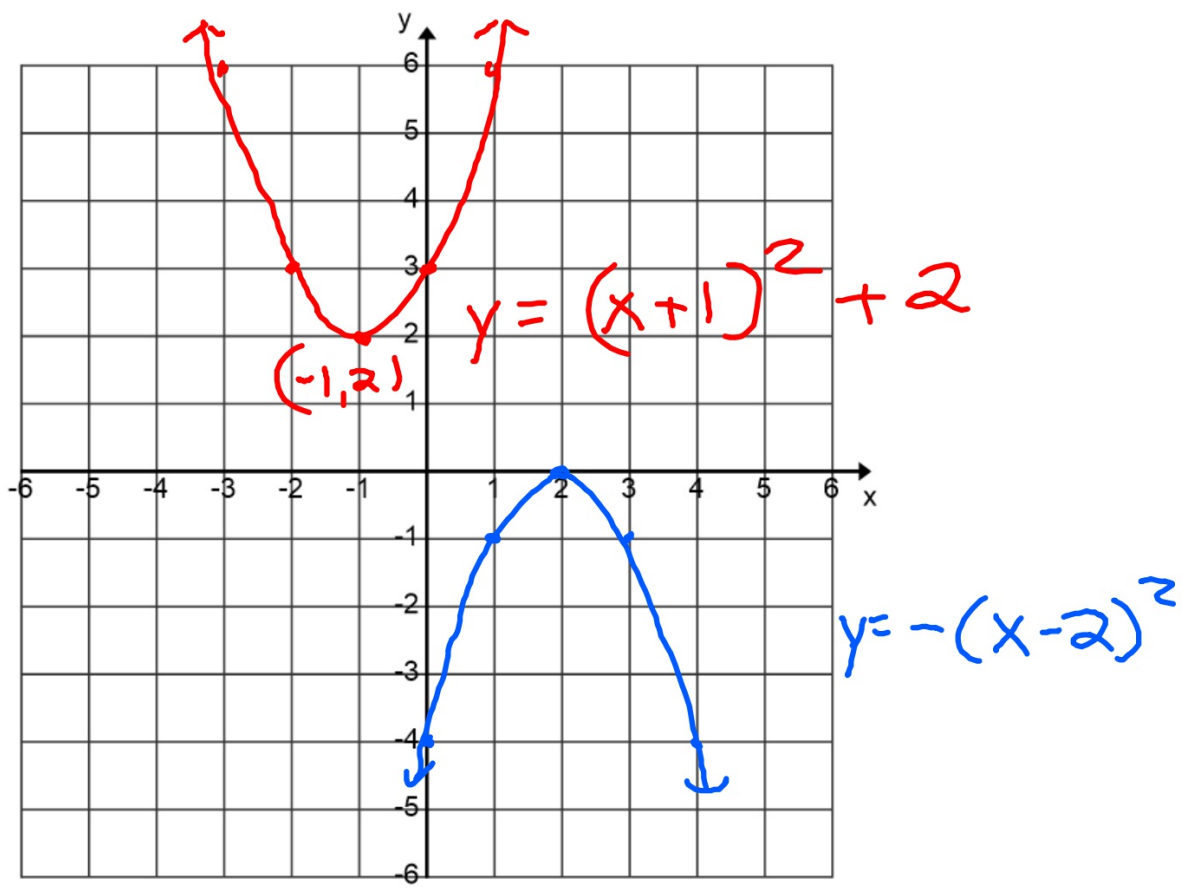


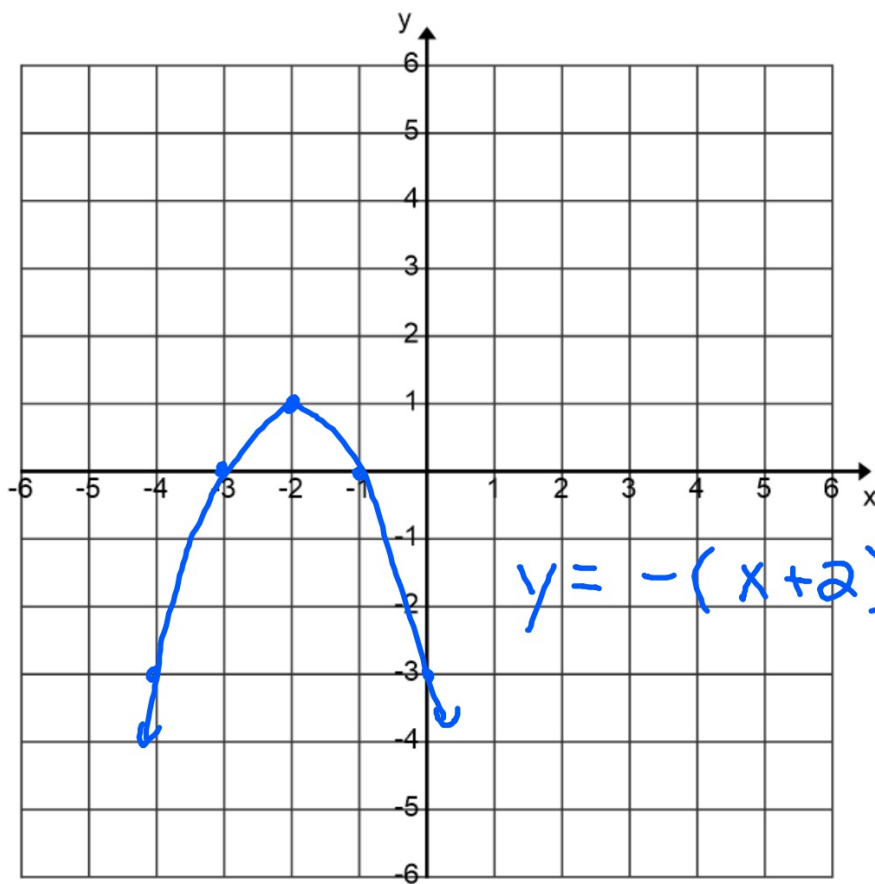
$(-4, -1)$

$$y = (x + 4)^2 - 1$$

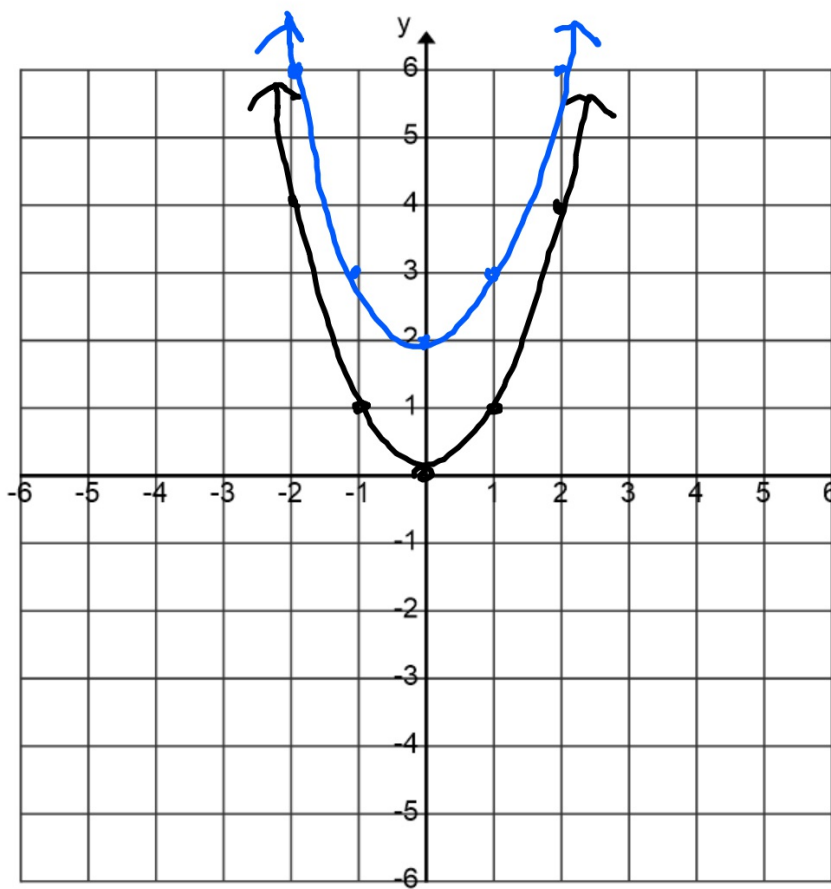
$(2, 3)$

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





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



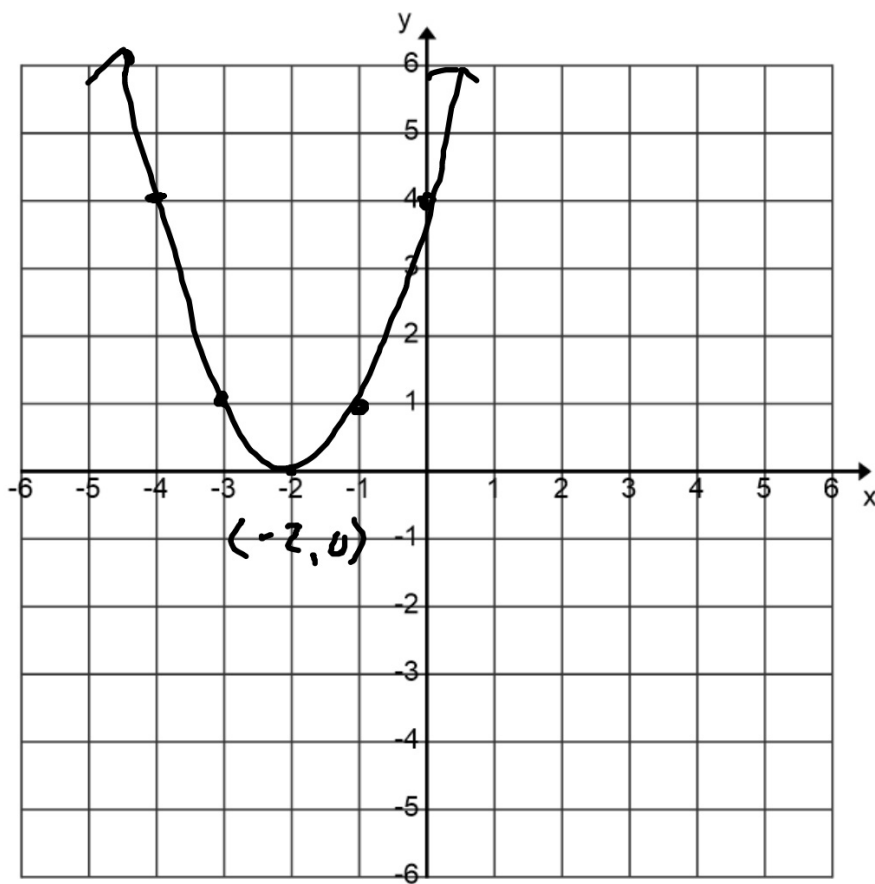
$$y = x^2$$

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

$$y = x^2 + 2$$

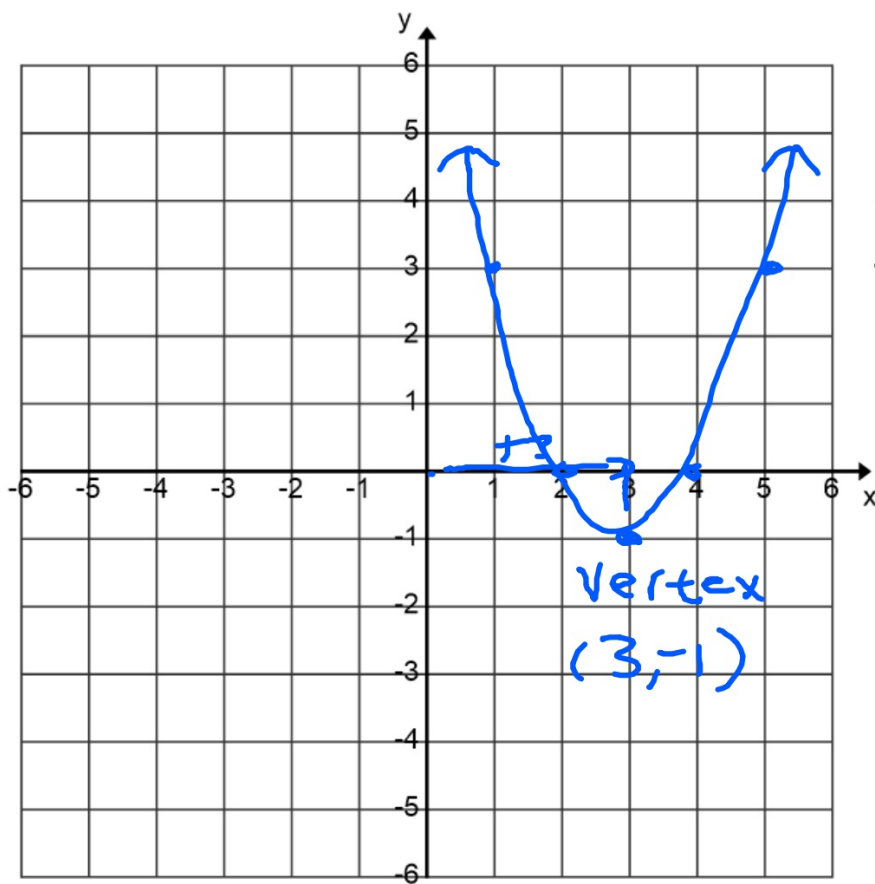
x	y
0	2
1	3
-1	3
2	6
-2	6

Губычкан



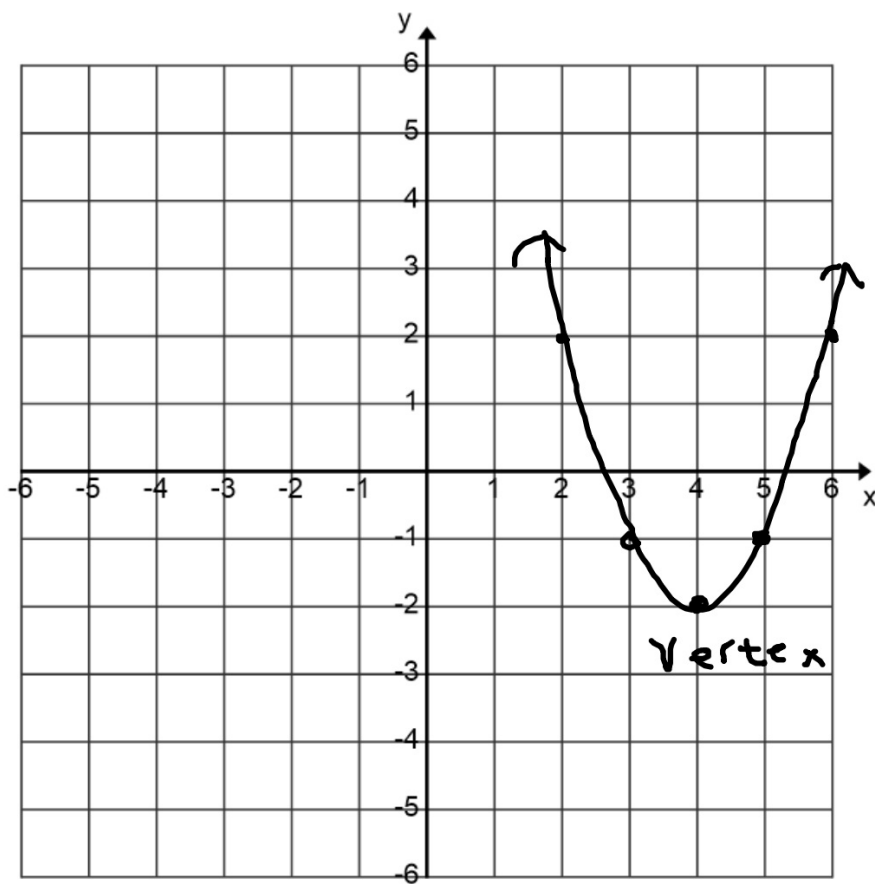
$$y = (x+2)^2$$

x	y
0	4
1	9
-1	1
-2	0
-3	1



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

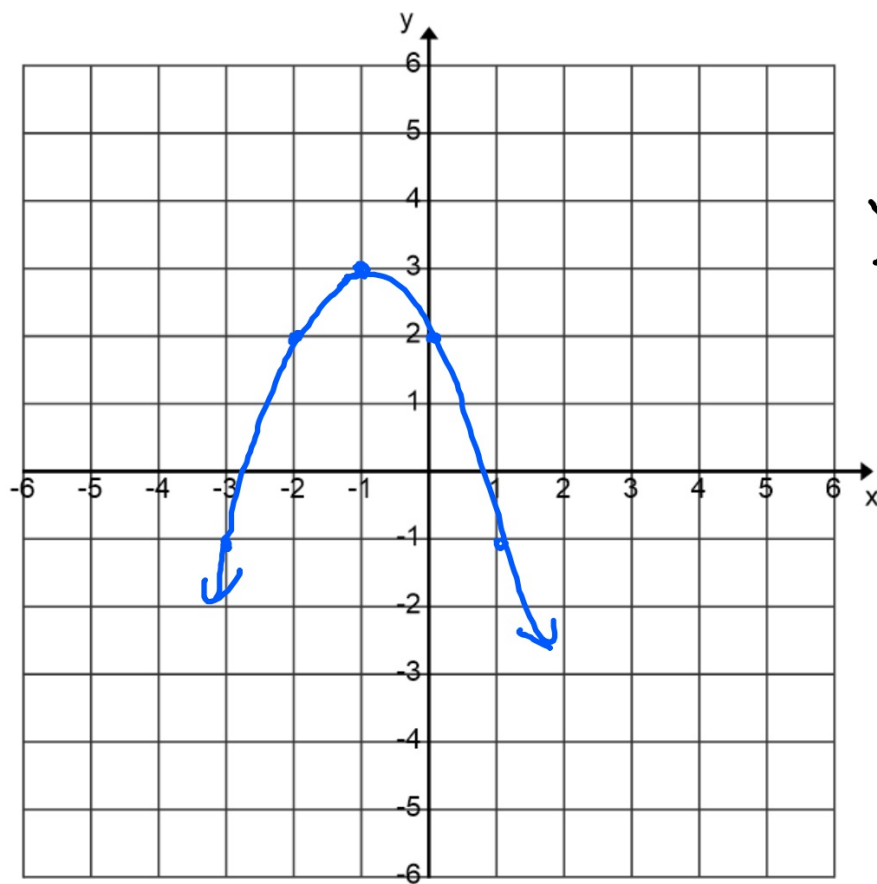




$$y = (x-4)^2 - 2$$

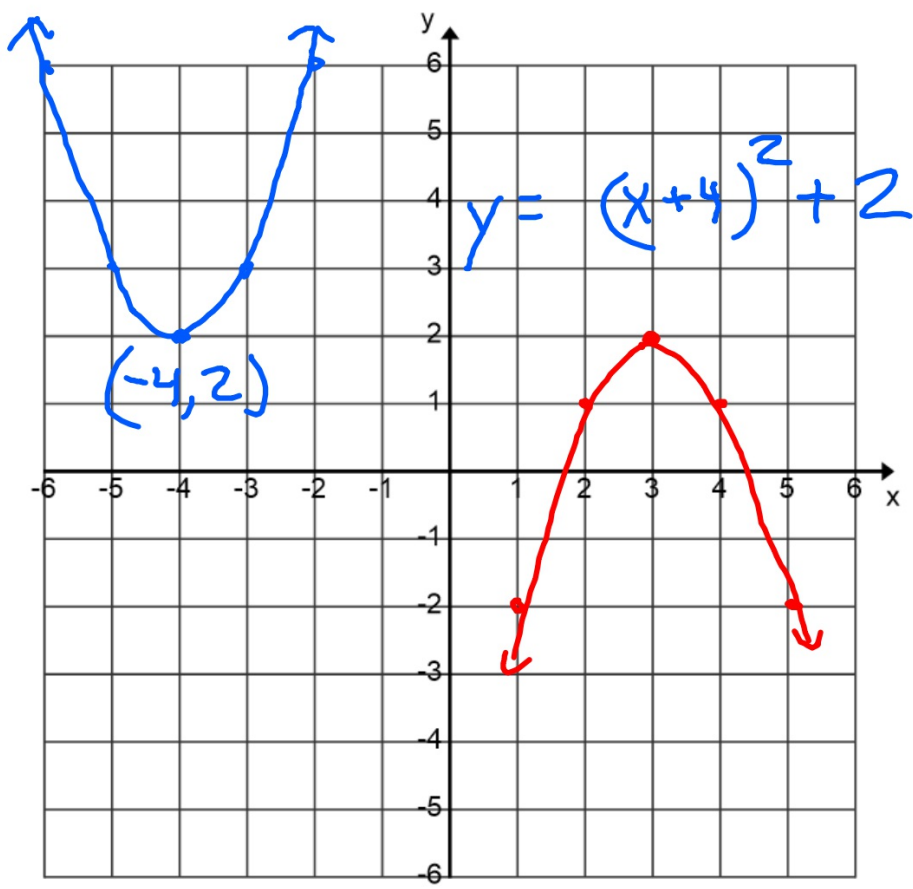
Vertex

(4, -2)

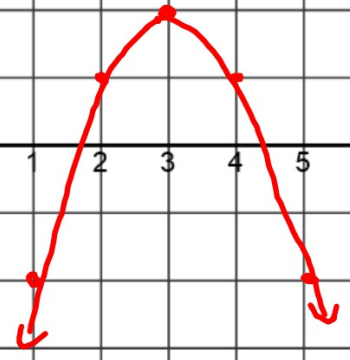


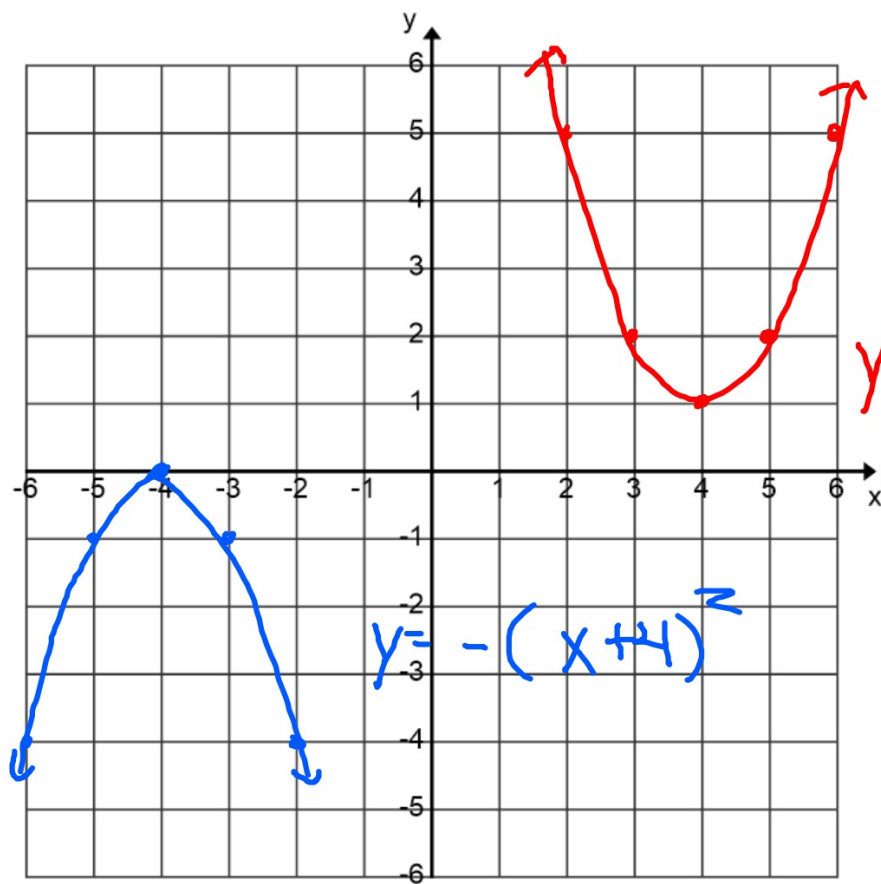
$$y = -(x+1)^2 + 3$$

Vertex  
 $(-1, 3)$



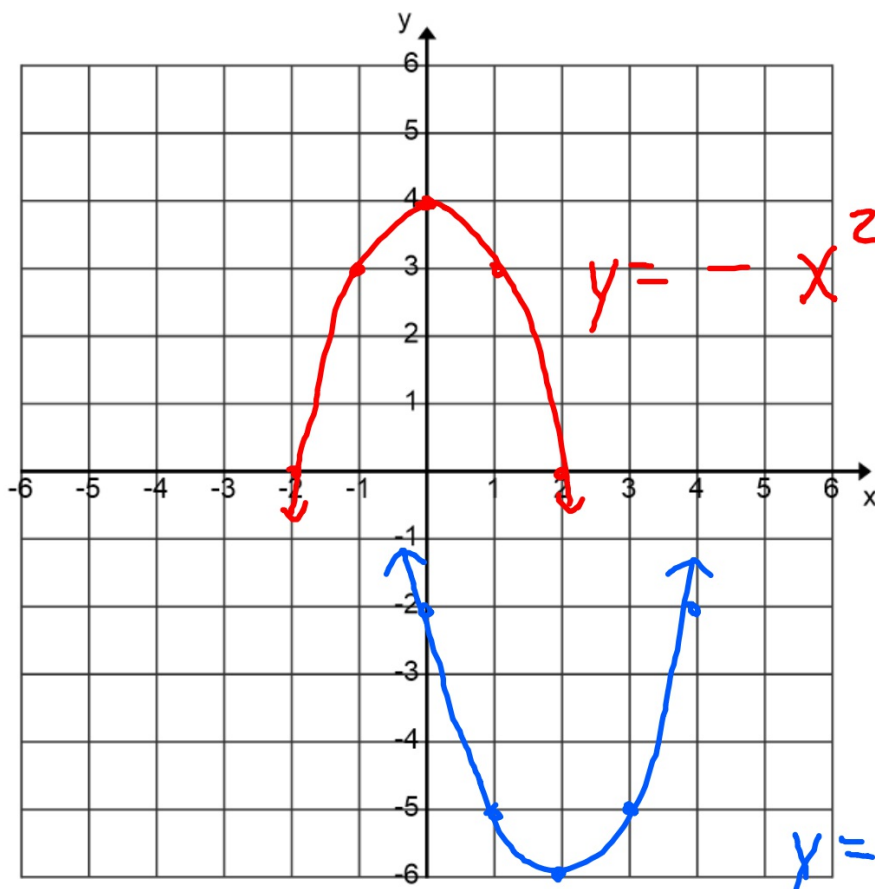
$$y = -(x-3)^2 + 2$$





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

$$y = (x-4)^2 + 1$$



$$y = -x^2 + 4$$

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