

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

$$x = \frac{-b}{2a}$$

$$x = \frac{-6}{2(-1)}$$

$$x = +3$$

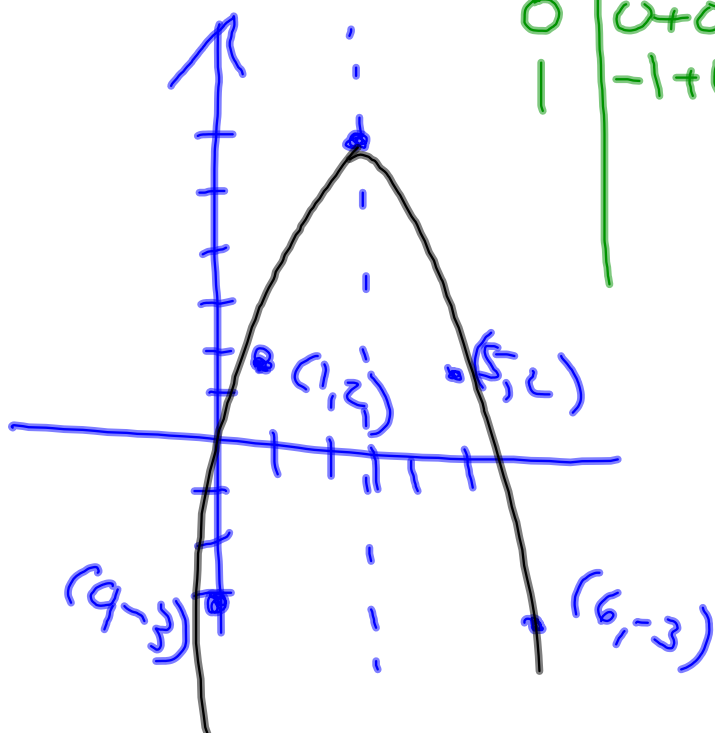
x	y
0	$0+0-3$
1	$-1+6-3$

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

$$y = -9 + 18 - 3$$

$$y = 6$$

$(3, 6)$ vertex



$$B-1) \quad y = x^2 + 4x + 3$$

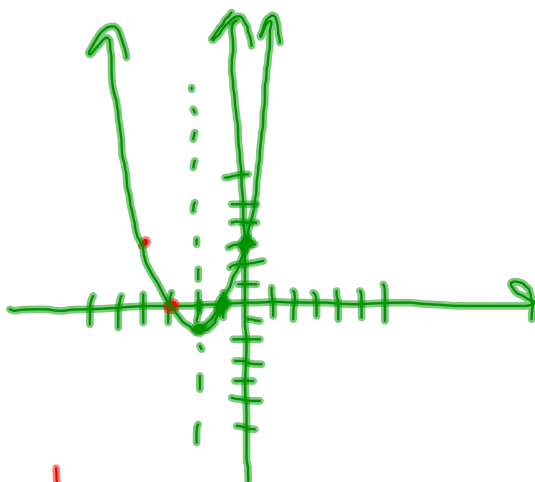
$$x = \frac{-4}{2(1)} = \frac{-4}{2} = -2$$

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

$$y = 4 - 8 + 3$$

$$y = -1$$

$$V(-2, -1)$$



x	$x^2 + 4x + 3$	y
0	$0 + 0 + 3$	3
-1	$1 - 4 + 3$	0

$$(-1) \quad Y = X^2 + 2X - 3$$

$$X = \frac{-2}{2(1)} = -1$$

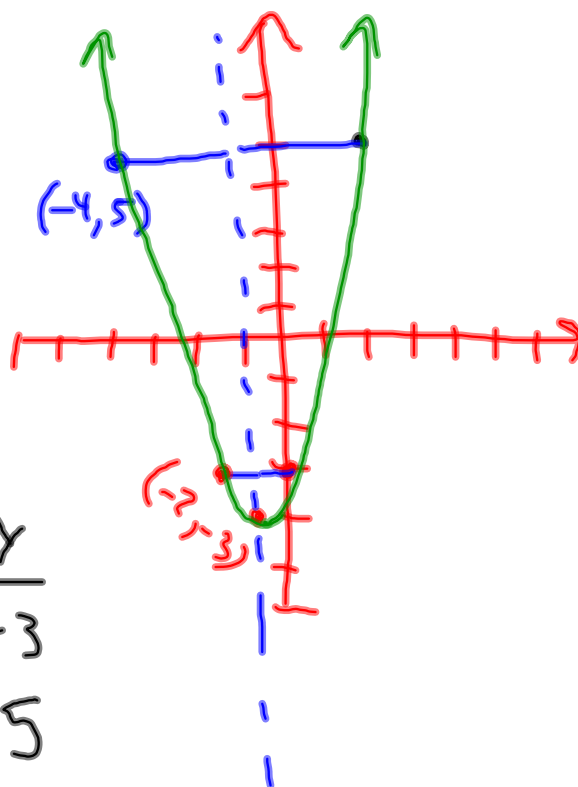
$$Y = (-1)^2 + 2(-1) - 3$$

$$Y = 1 - 2 - 3$$

$$Y = -4$$

$$V(-1, -4)$$

X	$X^2 + 2X - 3$	Y
0	$0 + 0 - 3$	-3
2	$4 + 4 - 3$	5



$$A-4) \quad y = -x^2 - 4x + 1$$

$$x = \frac{4}{2(-1)} = -2$$

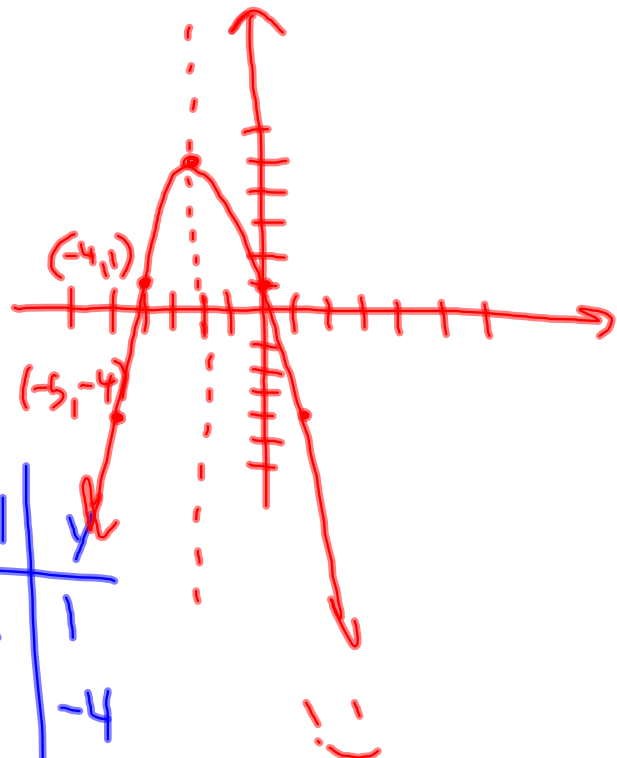
$$y = -(-2)^2 - 4(-2) + 1$$

$$y = -4 + 8 + 1$$

$$y = 5$$

$$(-2, 5)$$

x	$-x^2 - 4x + 1$	y
0	$0 - 0 + 1$	1
1	$-1 - 4 + 1$	-4



$$B-4) \quad y = x^2 + 4x - 2$$

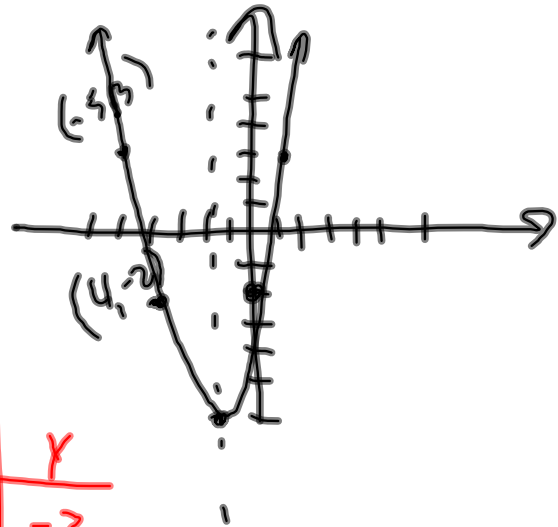
$$x = \frac{-4}{2(1)} = -2$$

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

$$y = 4 - 8 - 2$$

$$y = -6$$

$$(-2, -6)$$



x	$x^2 + 4x - 2$	y
0	$0 + 0 - 2$	-2
1	$1 + 4(1) - 2$	3