

HW: green text p. 519
 #5 10, 13, 15, & 18

10.) $y = x^2 - 6x + 8$ ($0 \leq x \leq 6$)

$x = \frac{-b}{2a} = \frac{-(-6)}{2(1)} = 3$ intervals for x

axis of symmetry

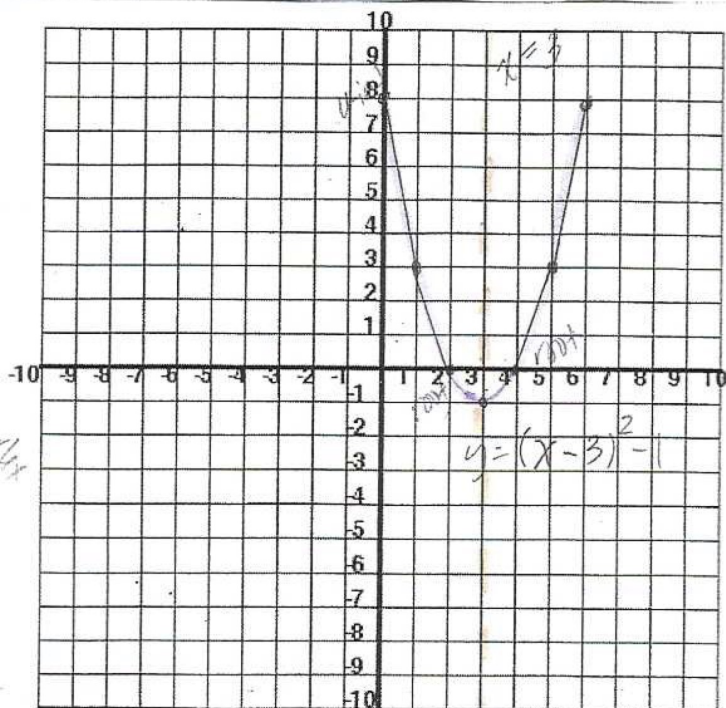
$a = 1$

$b = -6$

$c = 8$

x	y
0	8
1	3
2	0
3	-1
4	0
5	3
6	8

root → (2, 0)
 axis of sym. → x = 3
 root ← (4, 0)



13.) $y = -x^2 - 2x + 3$ ($-4 \leq x \leq 2$)

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

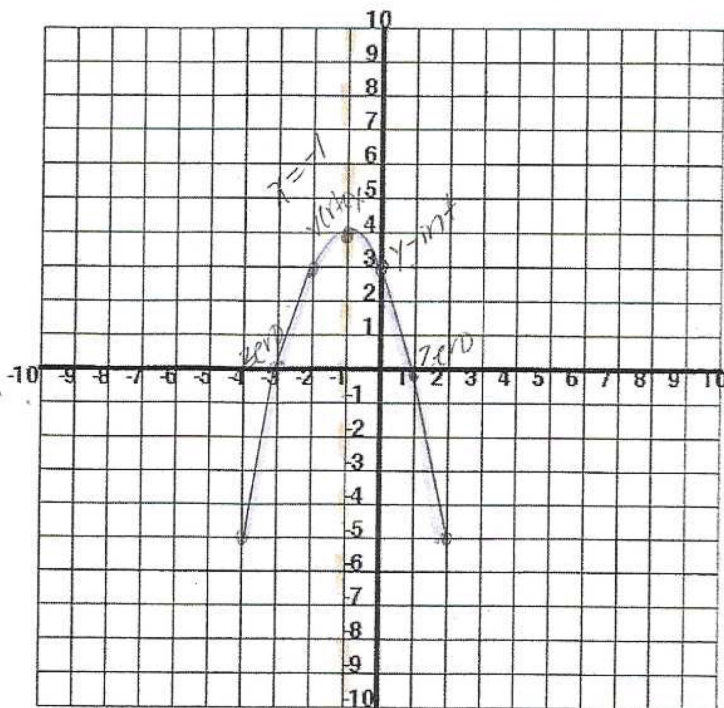
$x = \frac{-(-2)}{2(-1)}$

$x = -1$

$x = -1$

x	y
-4	-5
-3	0
-2	3
-1	4
0	3
1	0
2	-5

axis of sym → x = -1



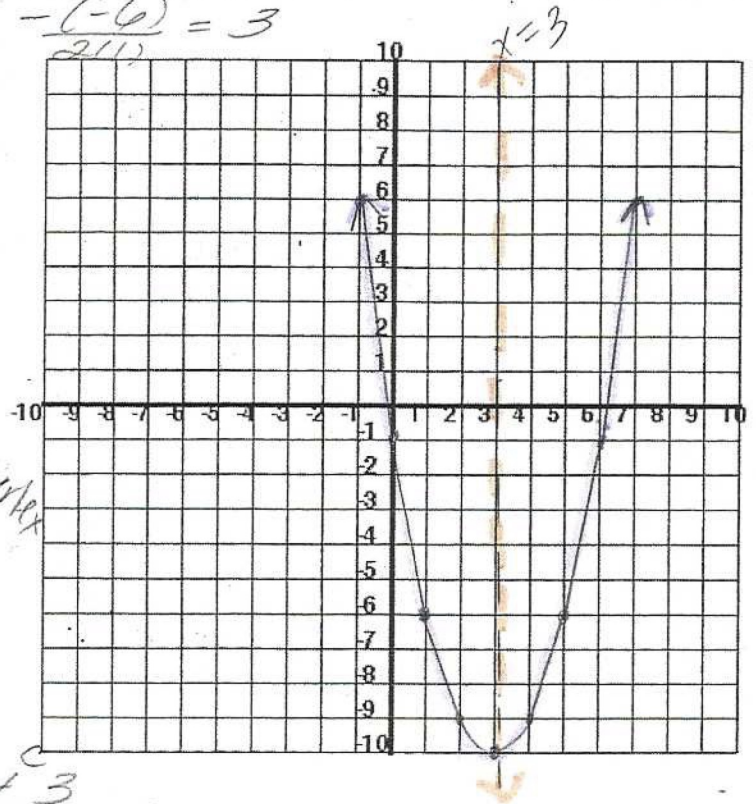
$$15.) y = x^2 - 6x - 1$$

$$x = \frac{-b}{2a} = \frac{-(-6)}{2(1)} = 3$$

$$x = 3$$

x	y
0	-1
1	-6
2	-9
3	-10
4	-9
5	-6
6	-1

axis of
sym



$$18.) y = x^2 + 4x + 3$$

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

$$x = -2$$

x	y
-5	8
-4	3
-3	0
-2	-1
-1	0
0	3
1	8

axis
of
sym

