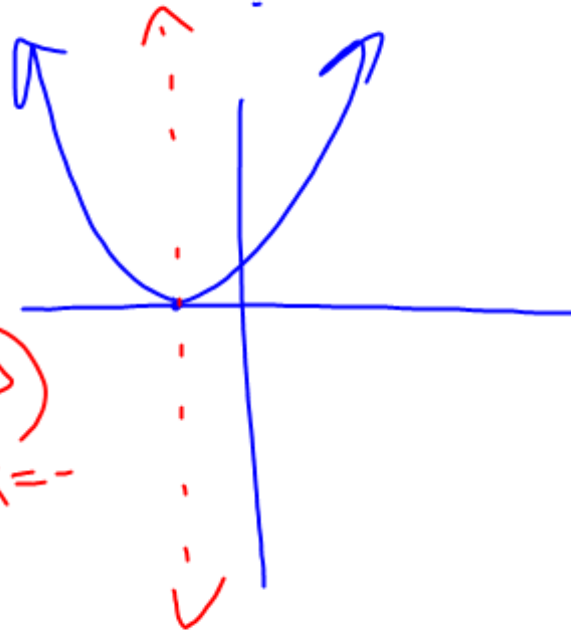


$$7. \quad 6x^2 + 6.$$

11. ?

v: (-1, 0)
A.O.S: x = -



5.2 Properties of Parabolas

①

$$y = -\frac{1}{2}x^2 + 2$$

(When your
SQ is in
Standard
Form)

$$x = \frac{-b}{2a} = \frac{0}{2(-\frac{1}{2})} = 0$$

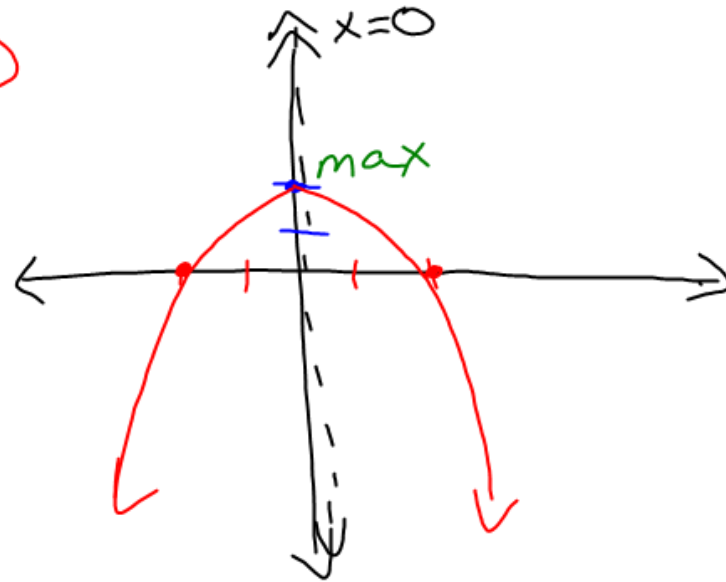
$$y = -\frac{1}{2}(0)^2 + 2$$

$$y = 2$$

Vertex: (0, 2)

↙ y-int: (0, 2)

x	y
-2	0
0	2
2	0



$$\textcircled{2} \quad y = x^2 - 2x - 3$$

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

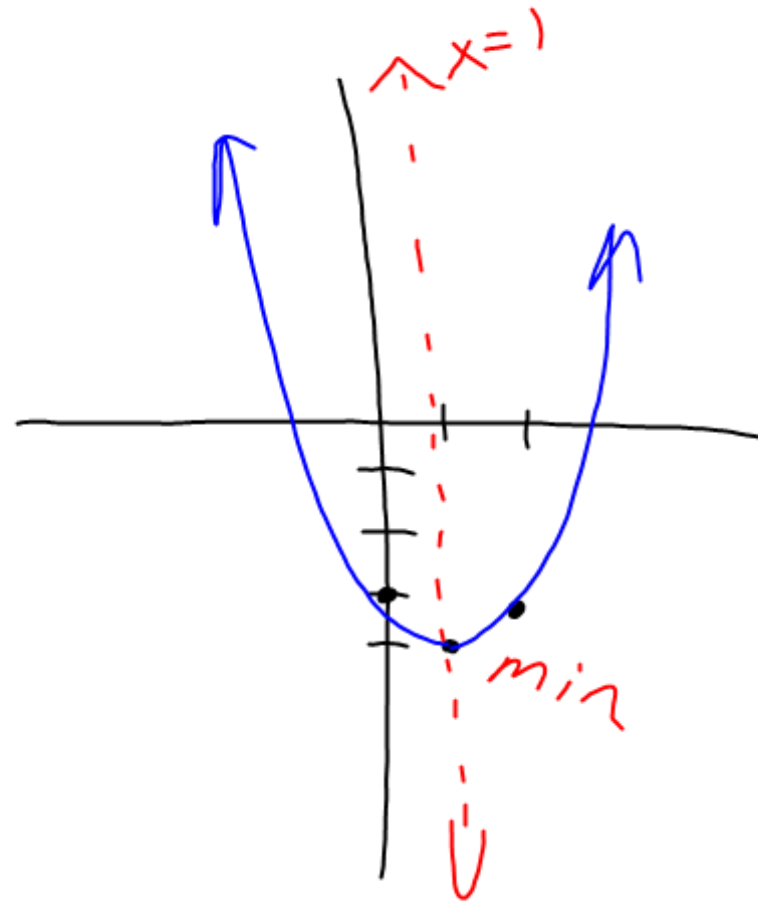
$$y = (1)^2 - 2(1) - 3$$

$$y = -4$$

$$\text{vertex: } (1, -4)$$

$$y\text{-int: } (0, -3)$$

x	y
0	-3
1	-4
2	-3



$$\textcircled{3} \quad y = 3x^2 + 12x + 8$$

$$x = \frac{-12}{2(3)} = \frac{-12}{6} = -2$$

$$y = 12 - 24 + 8$$

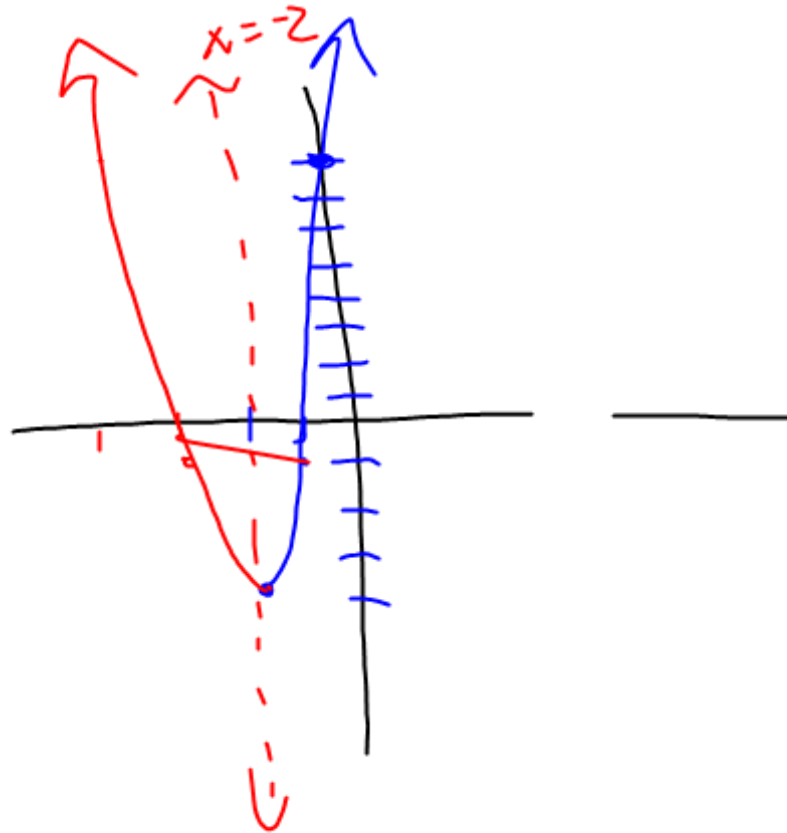
$$y = -4$$

$$V: (-2, -4)$$

$$y\text{-int: } (0, 8)$$

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

x	y
-4	8
-2	-4
0	8



HW
5.2