1/2/2022

537 $y = -x^2 - 4x + 3, \quad [-3; 0]$.

Determinare MAX e MIN ↑ intervallo della x

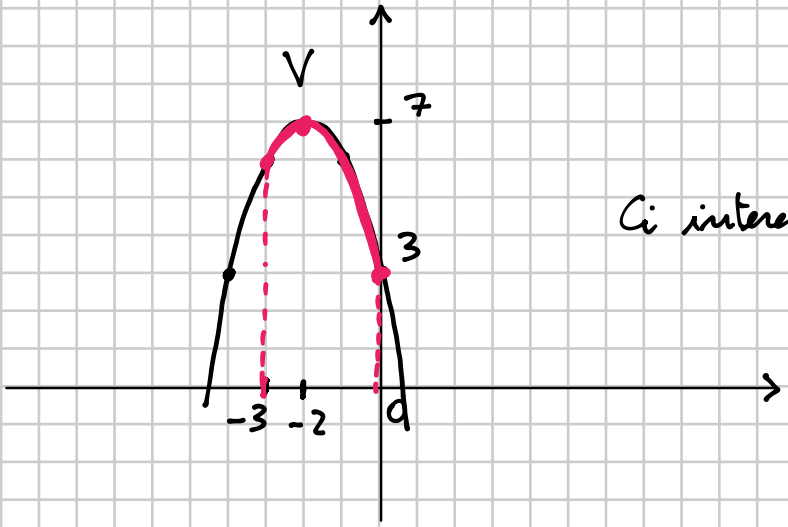
$x_V = -\frac{b}{2a} = -\frac{-4}{-2} = -2 \qquad y_V = -(-2)^2 - 4(-2) + 3 = -4 + 8 + 3 = 7$

$V(-2, 7)$

x	y
0	3
	0

$-x^2 - 4x + 3 = 0 \qquad x^2 + 4x - 3 = 0$ non conviene

x	y
-1	6
-3	6



Ci interessa la parabola solo da -3 a 0 (rosso)

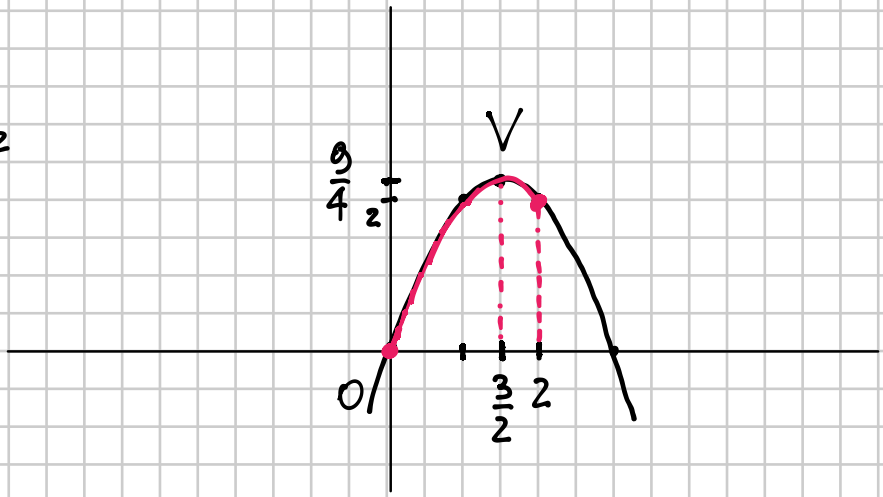
		VALORI
PUNTO DI MINIMO →	$x = 0$	$y = 3$ VALORE MIN.
PUNTO DI MASSIMO →	$x = -2$	$y = 7$ VALORE MAX

535 $y = -x^2 + 3x, \quad [0; 2]$. Determinare max e min.

$x_V = \frac{3}{2} \qquad y_V = -\left(\frac{3}{2}\right)^2 + 3 \cdot \frac{3}{2} = -\frac{9}{4} + \frac{9}{2} = \frac{9}{4} \qquad V\left(\frac{3}{2}, \frac{9}{4}\right)$

x	y
0	0
2	2
1	2

$y = -4 + 6 = 2$



$x_{MAX} = \frac{3}{2} \qquad y_{MAX} = \frac{9}{4}$

$x_{MIN} = 0 \qquad y_{MIN} = 0$