

FUNZIONI DEFINITE "A TRATTI" (o "PER CASI")

$$f(x) = \begin{cases} x^2 - x & \text{se } x \geq 0 \\ x & \text{se } x < 0 \end{cases}$$

$$f: \mathbb{R} \rightarrow \mathbb{R}$$

$$f(1) = 1^2 - 1 = 0$$

$$f(2) = 2^2 - 2 = 2$$

$$f(3) = 3^2 - 3 = 6$$

$$f(-3) = -3$$

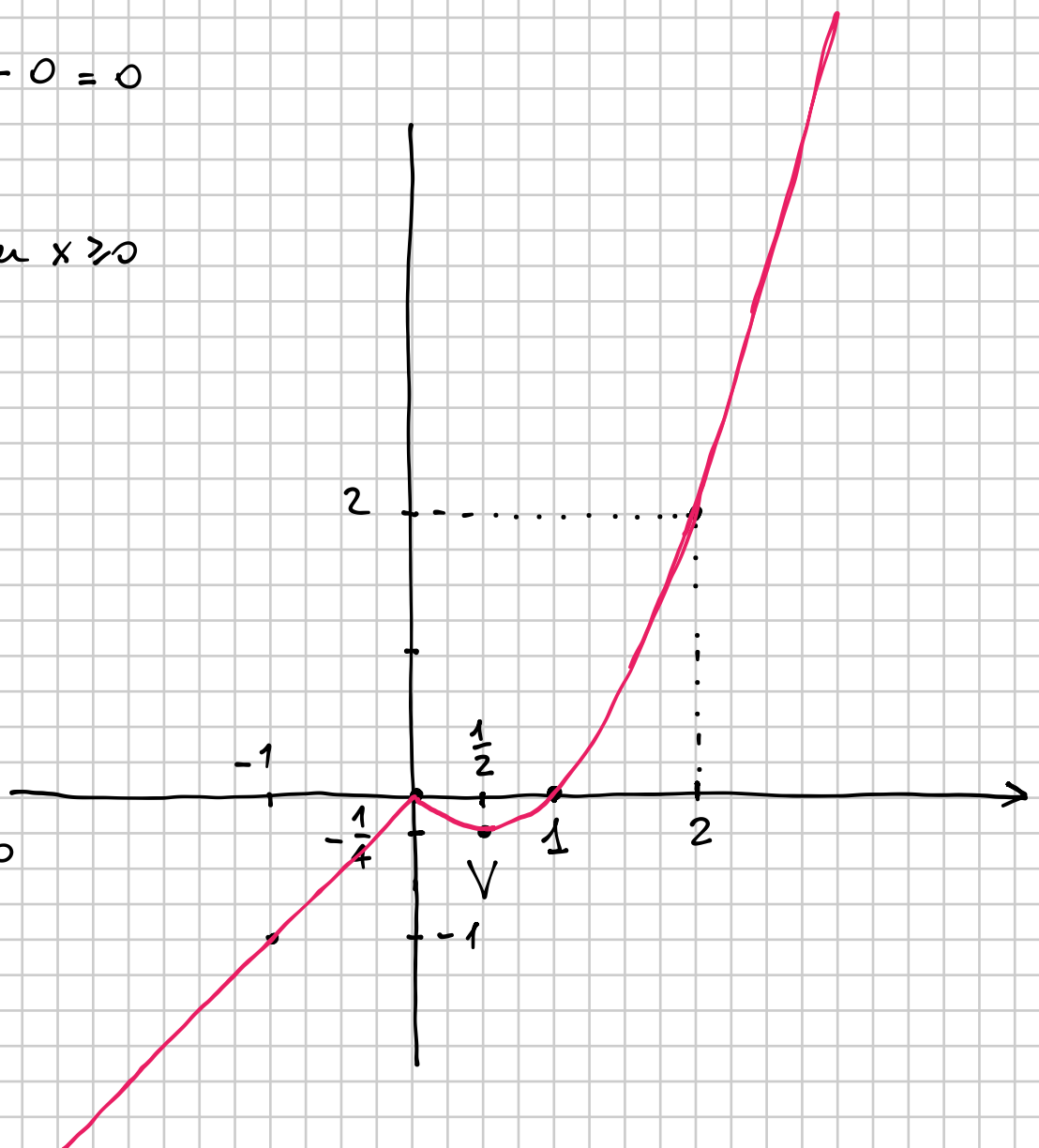
$$f(0) = 0^2 - 0 = 0$$

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

$$y = x^2 - x \quad \text{per } x \geq 0$$

$$V\left(\frac{1}{2}, -\frac{1}{4}\right)$$

x	y
0	0
1	0
2	2

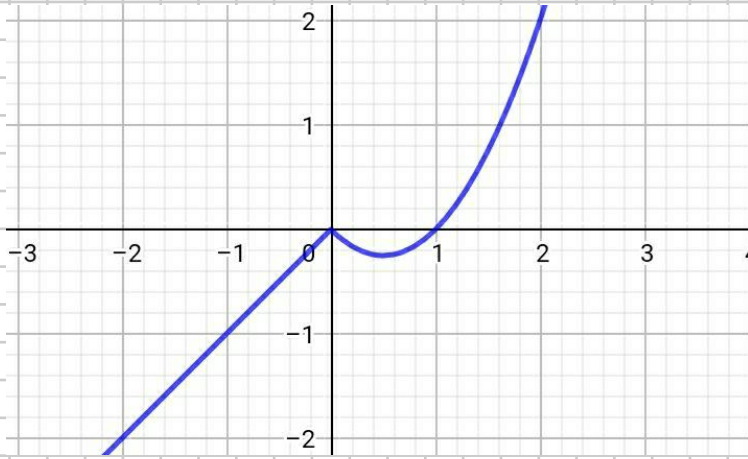


$$y = x \quad \text{per } x < 0$$

x	y
0	0
-1	-1

COMANDO GEOGEBRA

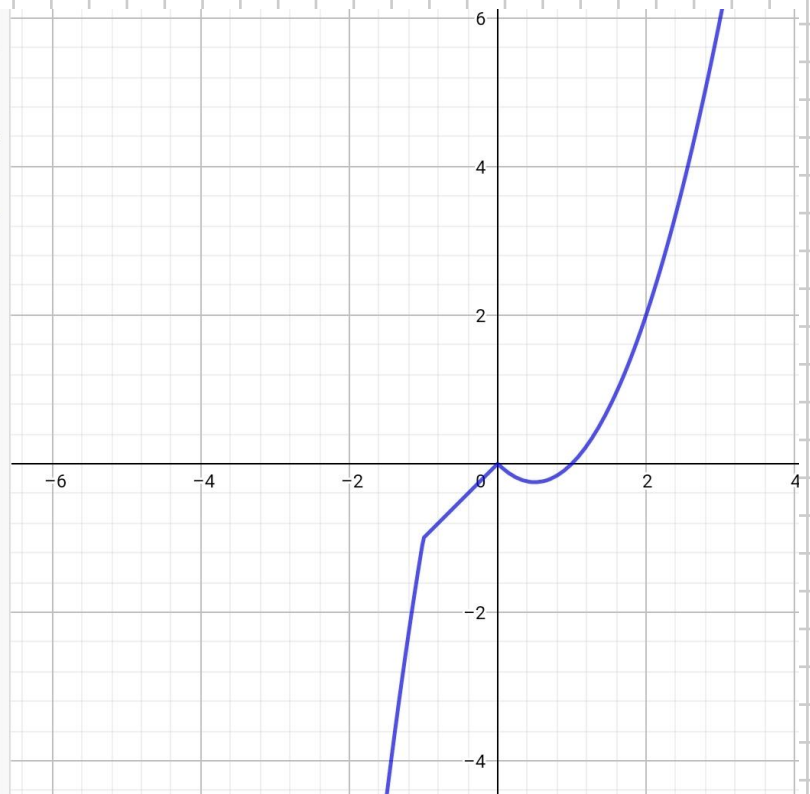
SE $(x \geq 0, x^2 - x, x < 0, x)$ oppure SE $(x \geq 0, x^2 - x, x)$



SE $(x \geq 0, x^2 - x, -1 < x < 0, x, x \leq -1, -2x^2 + 2x + 3)$

$$f(x) = \begin{cases} x^2 - x & : x \geq 0 \\ x & : -1 < x < 0 \\ -2x^2 + 2x + 3 & : x \leq -1 \end{cases}$$

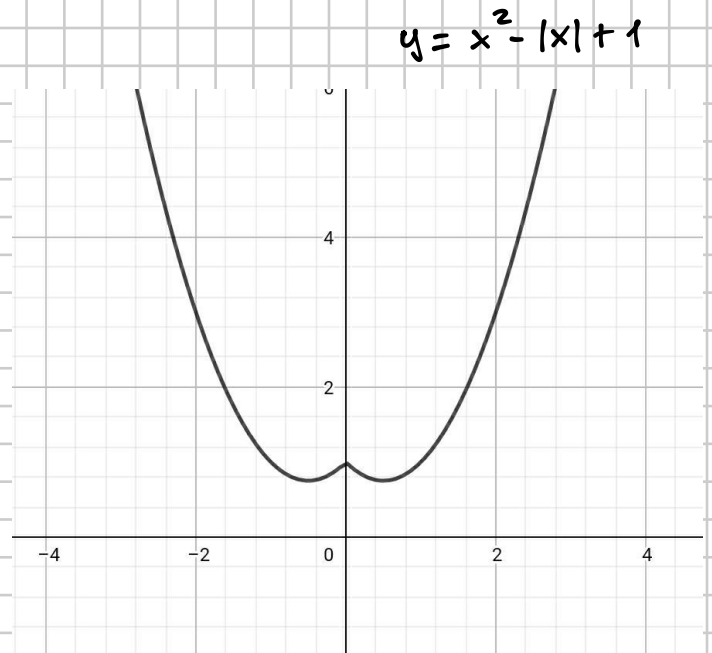
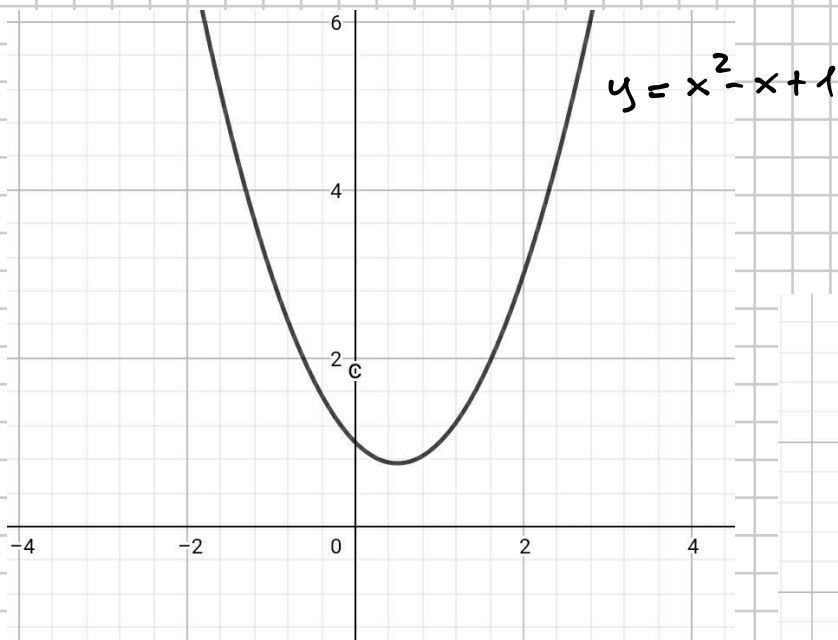
Inserimento...



$$y = x^2 - |x| + 1$$

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

2) ricopio simmetricamente
rispetto all'asse y



$$y = x^2 - |x| + 1 = \begin{cases} x^2 - x + 1 & \text{se } x \geq 0 \\ x^2 + x + 1 & \text{se } x < 0 \end{cases}$$

SE $(x \geq 0, x^2 - x + 1, x < 0, x^2 + x + 1)$

