

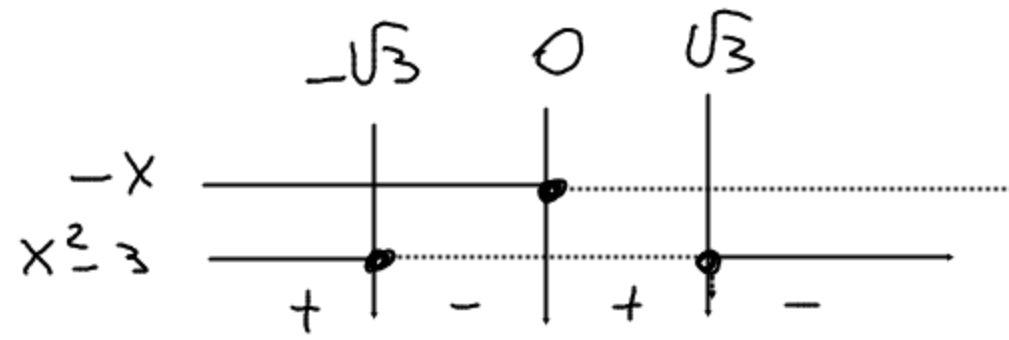
$$y = -x^3 + 3x$$

$$D = \mathbb{R}$$

$$D = \{ \forall x \in \mathbb{R} \}$$

$$D = ]-\infty; +\infty[$$

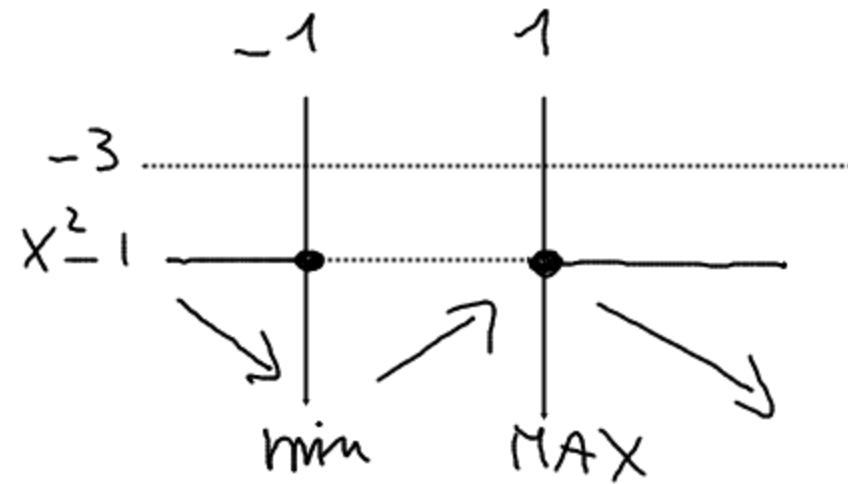
$$y = -x(x^2 - 3)$$



intersezioni con gli assi cartesiani:  $(-\sqrt{3}; 0)$   $(0; 0)$   $(\sqrt{3}; 0)$

$$y' = -3x^2 + 3$$

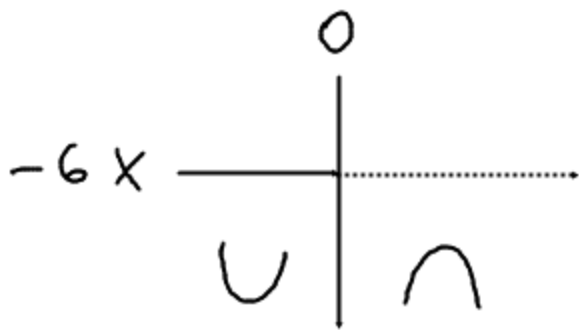
$$y' = -3(x^2 - 1)$$



$$y_{\min} = f(-1) = -(-1)^3 + 3(-1) = +1 - 3 = -2 \Rightarrow \min(-1; -2)$$

$$y_{\max} = f(1) = -(1)^3 + 3(1) = -1 + 3 = 2 \Rightarrow \max(1; 2)$$

$$y'' = -6x$$



$$y_F = f(0) = 0$$

$$F(0; 0)$$

