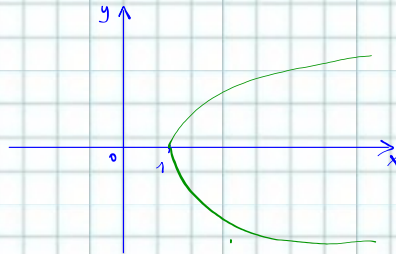


$$f(x): y = \sqrt{x-1} \quad D_f = \{x \in \mathbb{R} / x-1 \geq 0\} = \{x \in \mathbb{R} / x \geq 1\} = [1; +\infty)$$

$$CD_f = \{y \in \mathbb{R} / y \geq 0\} = [0; +\infty)$$

$$g(x): y^2 = x-1 \Rightarrow x = y^2 + 1$$



$$y = |x| \quad |x| = \begin{cases} x & \text{se } x \geq 0 \\ -x & \text{se } x < 0 \end{cases}$$

$$y = |x| - 1 = \begin{cases} x-1 & \text{per } x \geq 0 \\ -x-1 & \text{per } x < 0 \end{cases}$$

N160

$$f_a: y = \frac{x+4}{a-x} \quad \text{trovare } a \text{ per cui } D = \{x \in \mathbb{R} / x \neq 2\}$$

$$D_{f_a} = \{x \in \mathbb{R} / a-x \neq 0\} = \{x \in \mathbb{R} / x \neq a\}$$

$$a = -2$$

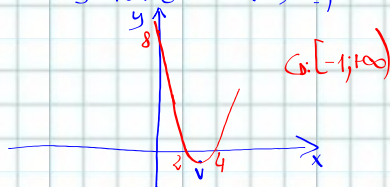
N168

$$y = x^2 - 6x + 8$$

$$3 - 18 + 8$$

$$V \left(\frac{-b}{2a}, \frac{-\Delta}{4a} \right)$$

$$(3; -1)$$



$$x^2 - 6x + 8 = 0$$

$$x_{1,2} = \frac{3 \pm \sqrt{9-8}}{1} = 3 \pm 1$$

$$x_1 = 4, x_2 = 2$$

$$y = 2x^2 - 1 \quad D = \mathbb{R} \quad CD = [-1; +\infty)$$

$$y_1 = y_2 \Rightarrow f(x_1) = f(x_2)$$

$$y_1 = 2x_1^2 - 1 \quad y_1 \neq y_2 \Rightarrow 2x_1^2 - 1 = 2x_2^2 - 1$$

$$y_2 = 2x_2^2 - 1 \quad 2x_1^2 = 2x_2^2 \Rightarrow x_1^2 = x_2^2$$

