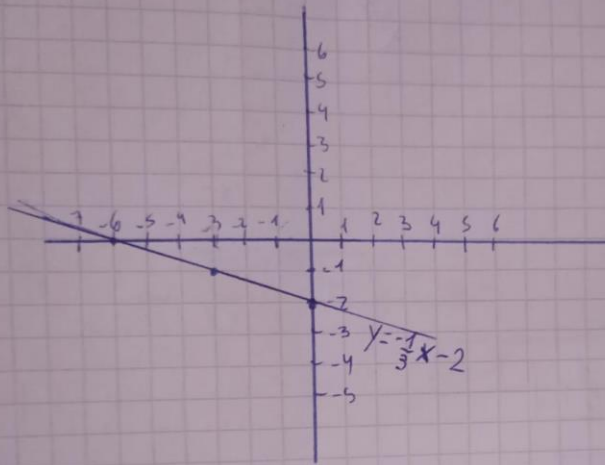


1.  $y = -\frac{1}{3}x - 2$

1) Pendiente  $m = -\frac{1}{3}$

Ordenada  $b = -2$



) Dom:  $\{-\infty, +\infty\}$

Imag:  $\{-\infty, +\infty\}$

Es decreciente porque la pendiente es negativa

$$y = -\frac{1}{3}x - 2$$

$$0 = -\frac{1}{3}x - 2$$

$$2 = -\frac{1}{3}x$$

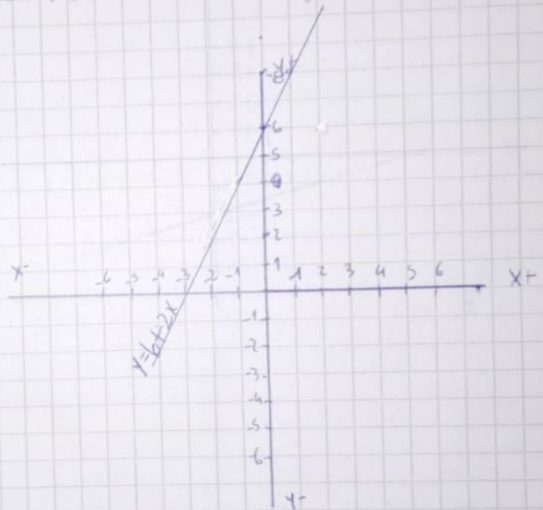
$$2 : \frac{1}{3} = x$$

$[-6 = x]$  -6 es la raíz de la función

$$2 - \frac{y - 2x}{3} = 2$$

$$y - 2x = 2 \cdot 3$$

$$y = 6 + 2x$$



$$3. y = x^2 - 4x - 5$$

$$\frac{-b \pm \sqrt{b^2 - 4 \cdot a \cdot c}}{2 \cdot a}$$

$$\frac{-(-4) \pm \sqrt{(-4)^2 - 4 \cdot 1 \cdot (-5)}}{2 \cdot 1}$$

$$\frac{4 \pm \sqrt{16 + 20}}{2}$$

$$\frac{4 \pm \sqrt{36}}{2} \rightarrow \frac{4 + 6}{2} = \frac{10}{2} = 5 = R_1$$

$$\frac{4 - 6}{2} \rightarrow \frac{4 - 6}{2} = \frac{-2}{2} = -1 = R_2$$

$$V = (h, k)$$

$$h = \frac{\beta_1 + \beta_2}{2}$$

$$V = (2, k)$$

$$h = \frac{5 + (-1)}{2}$$

$$V = (2, 9)$$

$$h = \frac{4}{2} = 2$$

$$k = 2^2 - 4 \cdot 2 - 5$$

$$k = 4 - 8 - 5$$

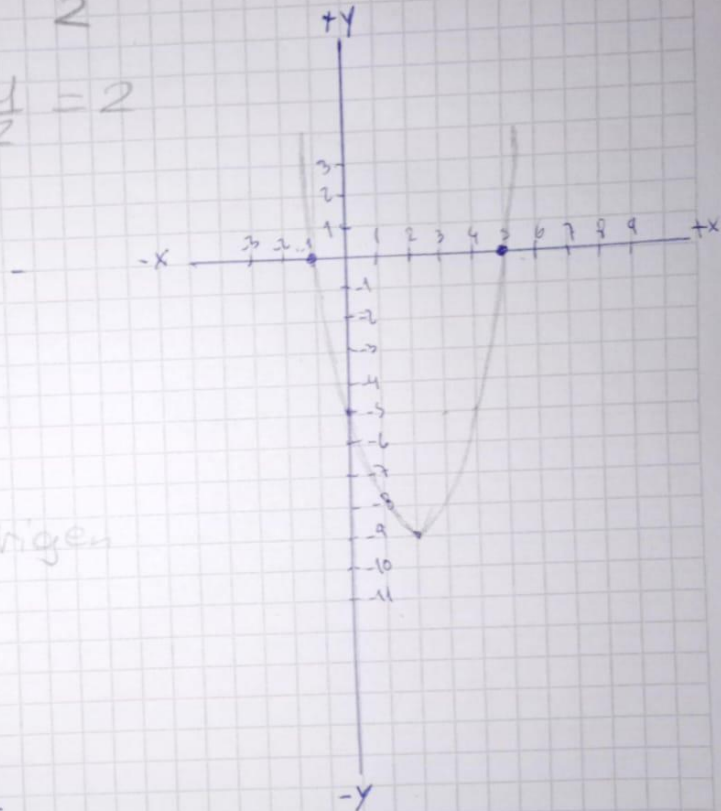
$$k = 4 - 13$$

$$k = -9$$

Ordenada del origen

$$y = 0^2 - 4 \cdot 0 - 5$$

$$y = -5$$



2) Dom:  $\{(-\infty, +\infty)\}$

Imag:  $\{(-9, +\infty)\}$

Crece en:  $(2, \infty)$  y decrece:  $(-\infty, 2)$

hay un punto mínimo en  $(2, -9)$  y no hay punto máximo