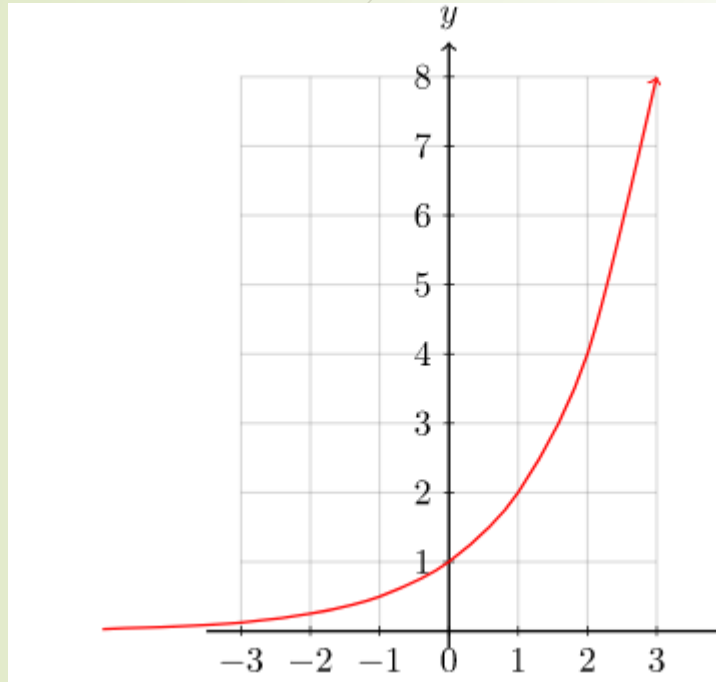




# Repaso 1 primer punto Examen institucional. Gráficas

# Función exponencial

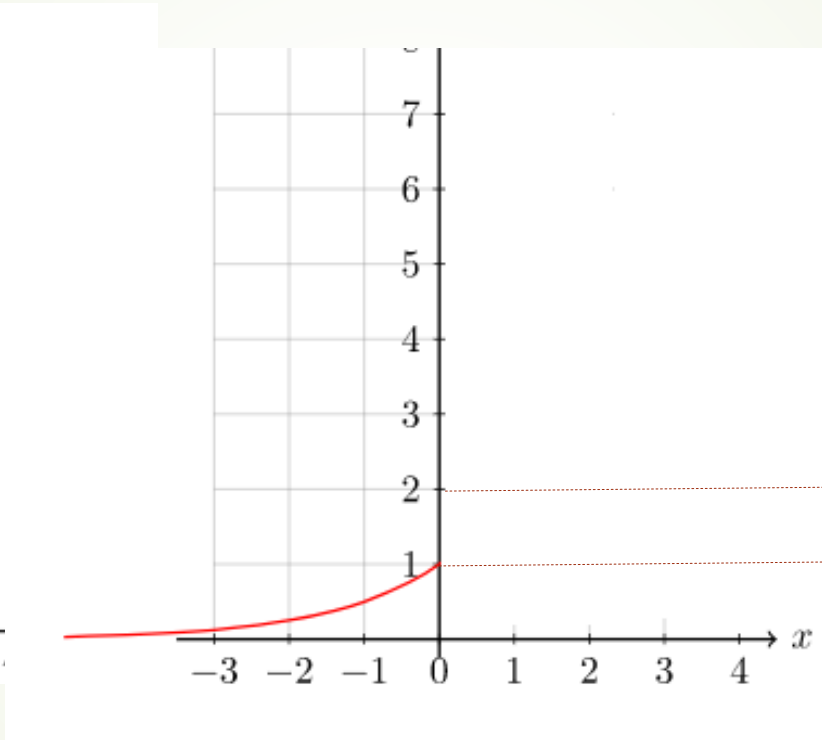
## Función original



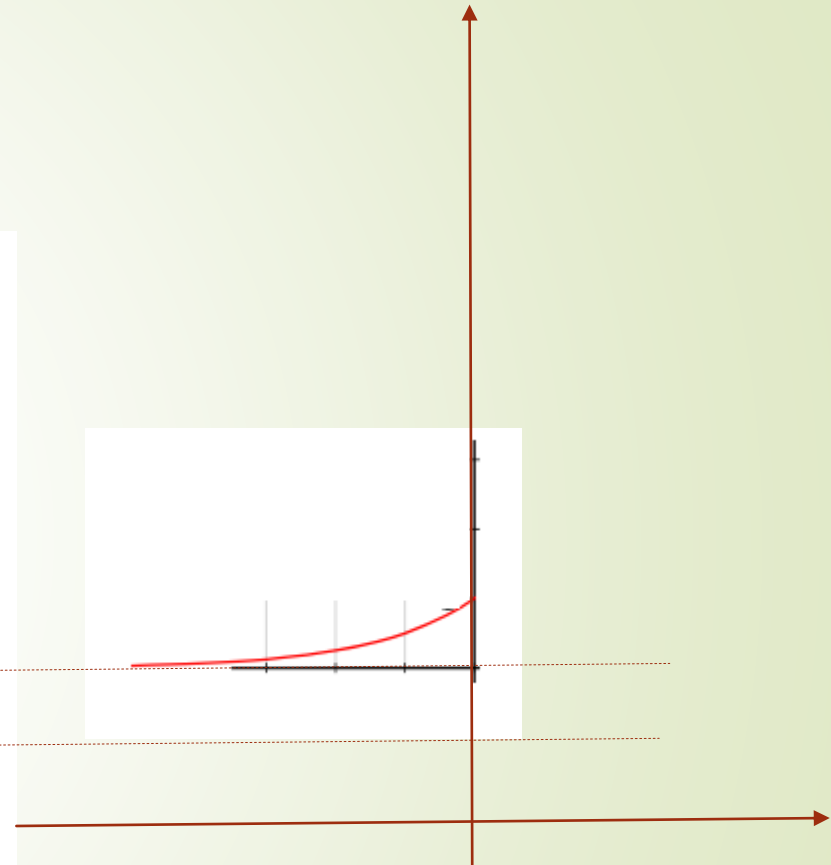
$$e^x$$

Características

1. Asíntotas en eje x
2. Corta el al eje y en 1
3. Se eleva muy rápido



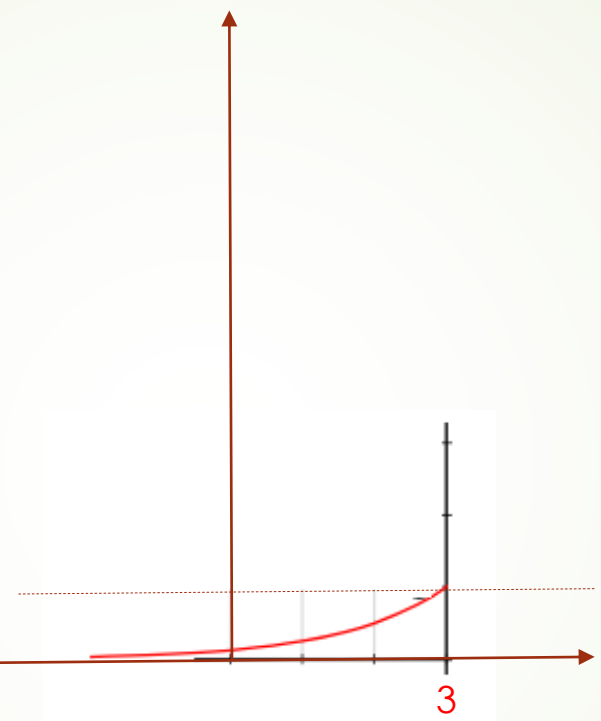
$$e^x \text{ si } x \leq 0$$



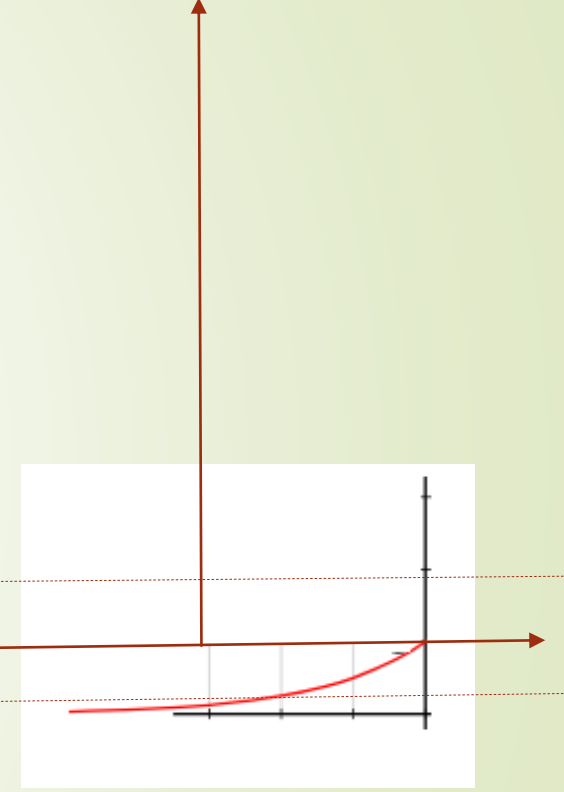
$$e^x + 2 \text{ si } x \leq 0$$



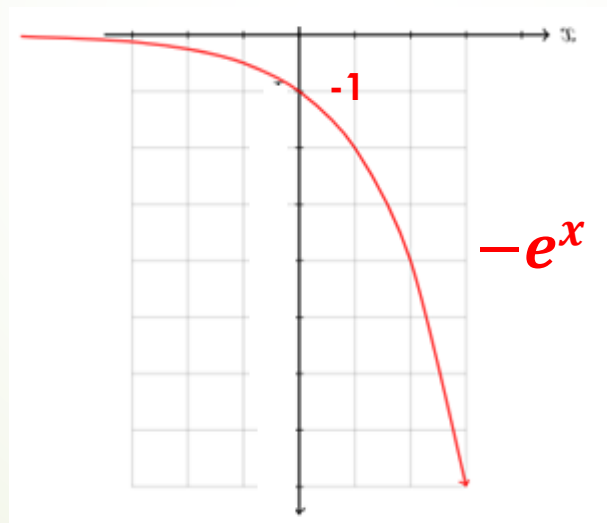
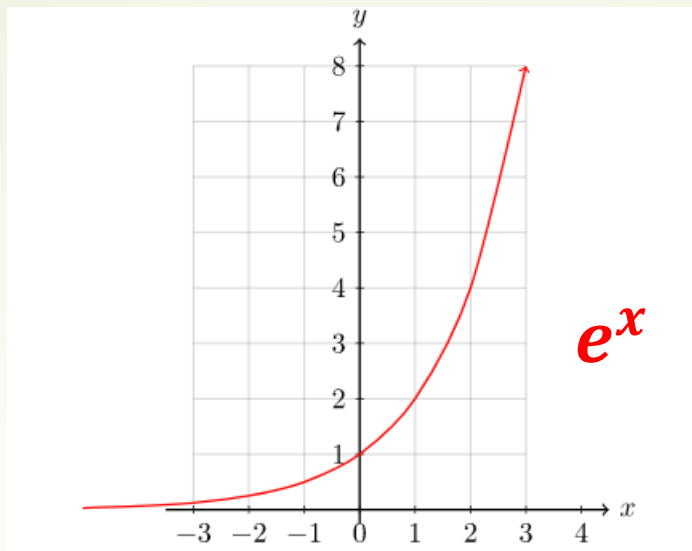
$e^x - 2 \text{ si } x \leq 0$



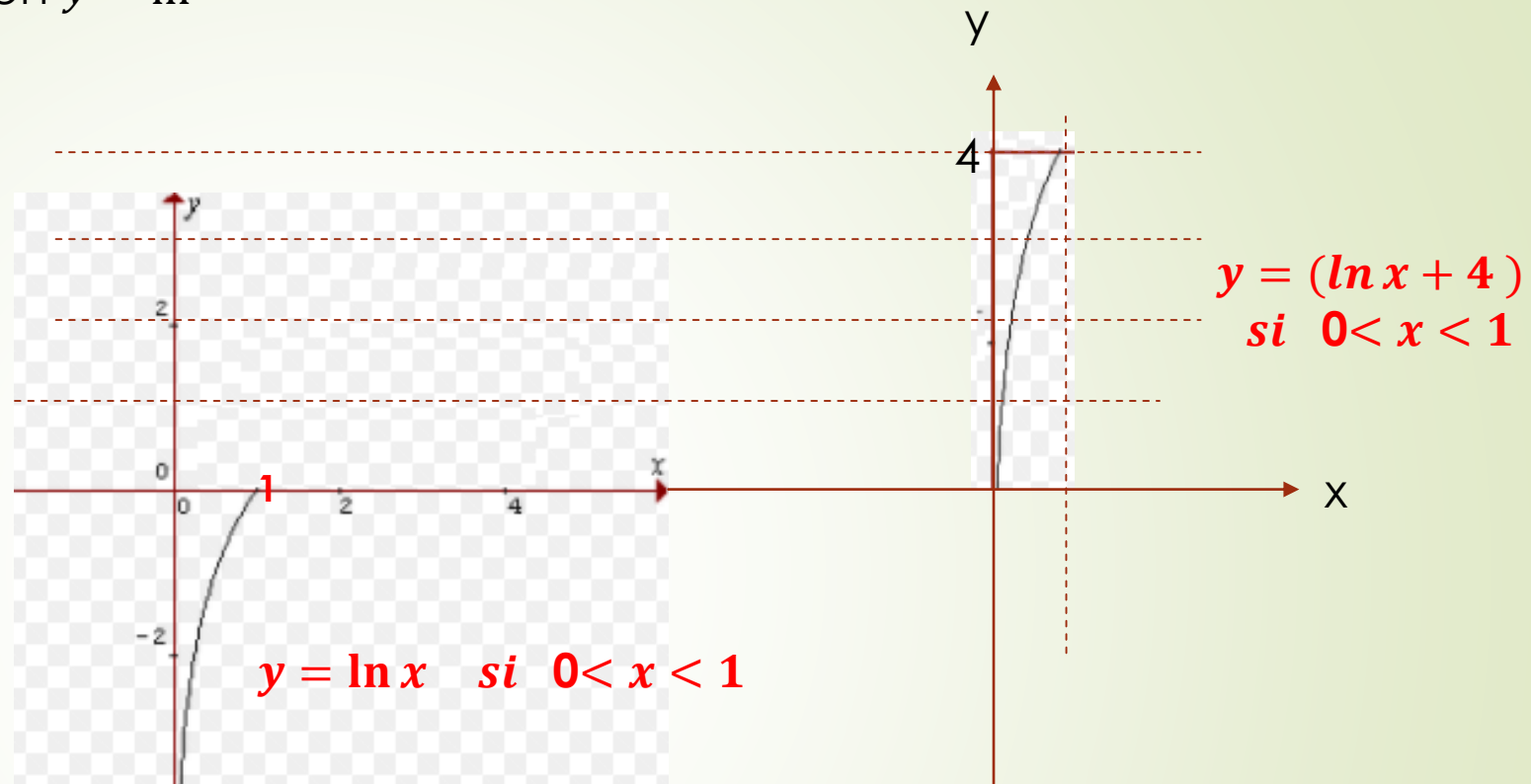
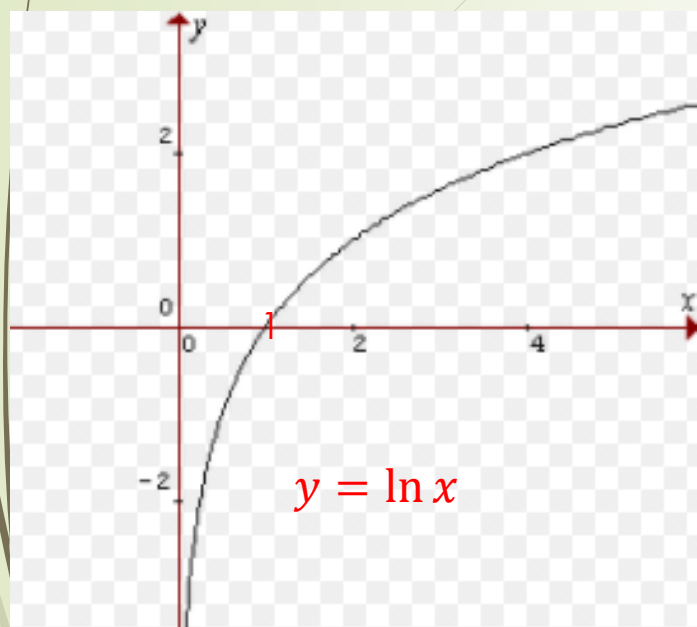
$e^{x-3} \text{ si } x \leq 0$



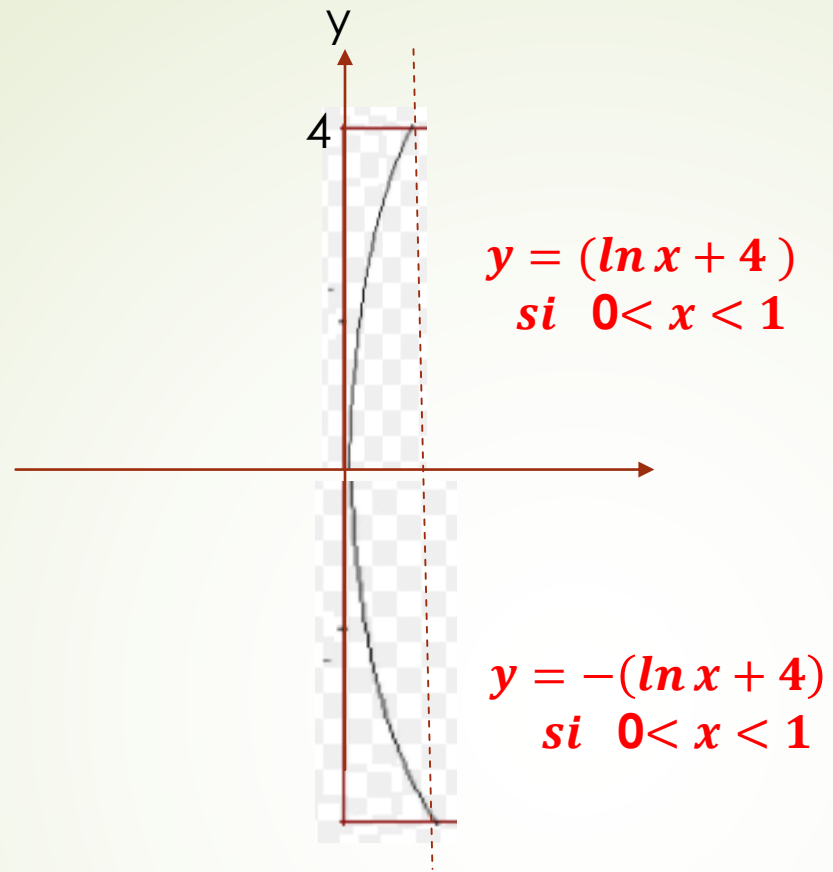
$e^{x-3} - 1 \text{ si } x \leq 0$

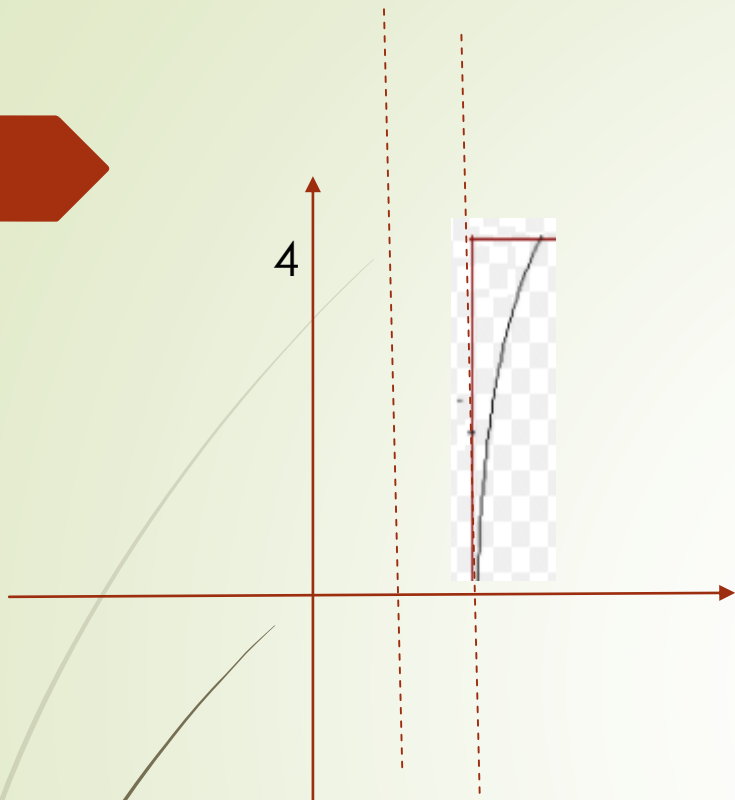


# Función $y = \ln$



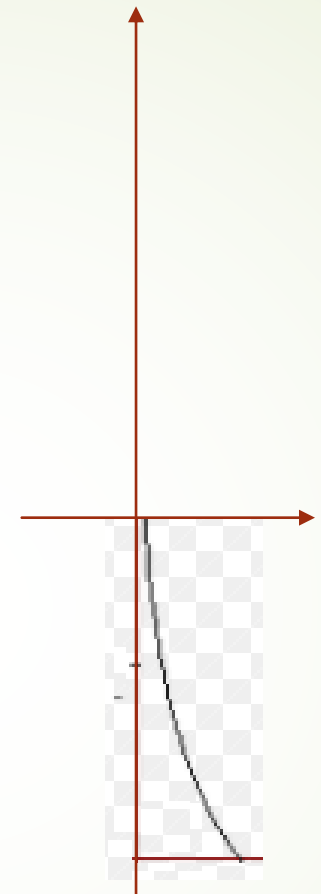
Comienza con asíntota en  $-\infty$   
Corta al eje x en  $x=1$



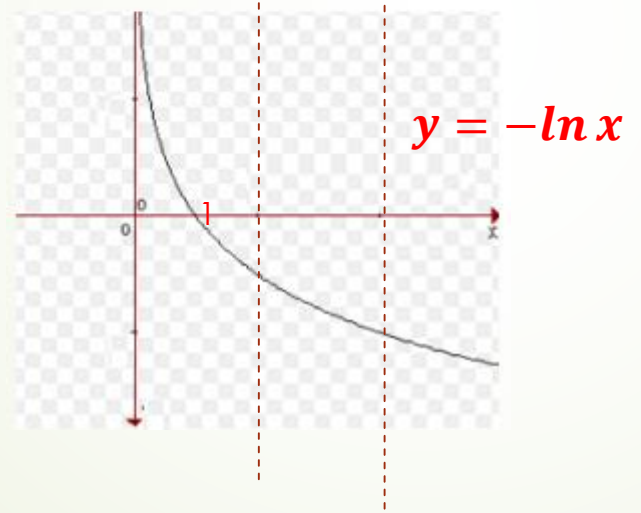
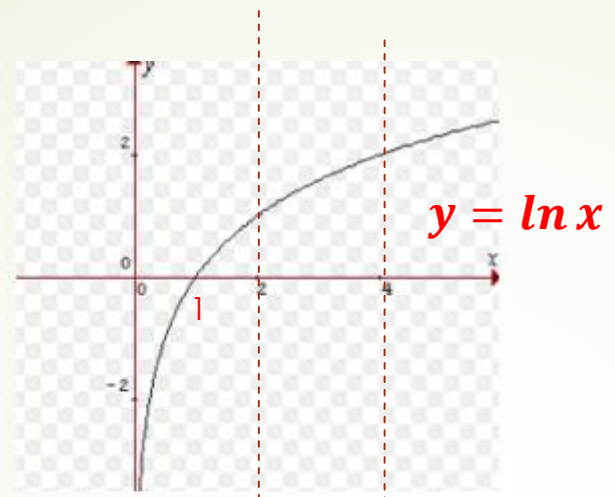
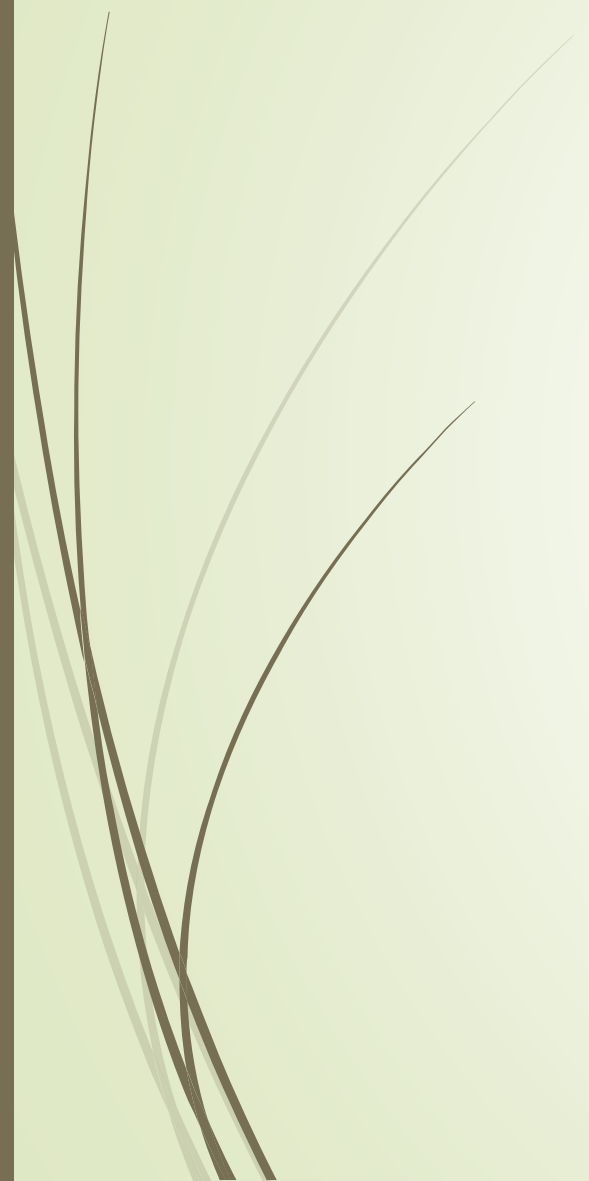


$$y = \ln(x - 2) + 4 \quad \text{si} \quad 0 < x < 1$$

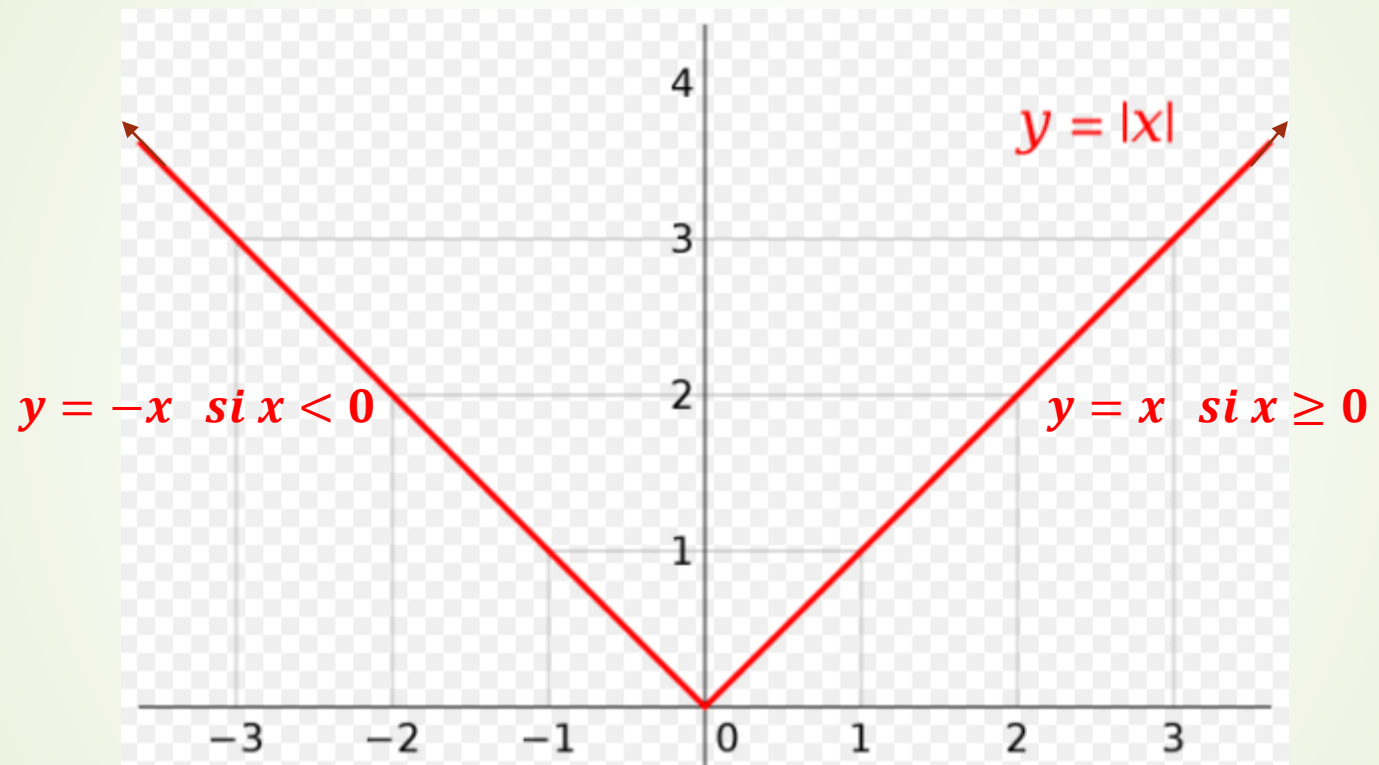
?

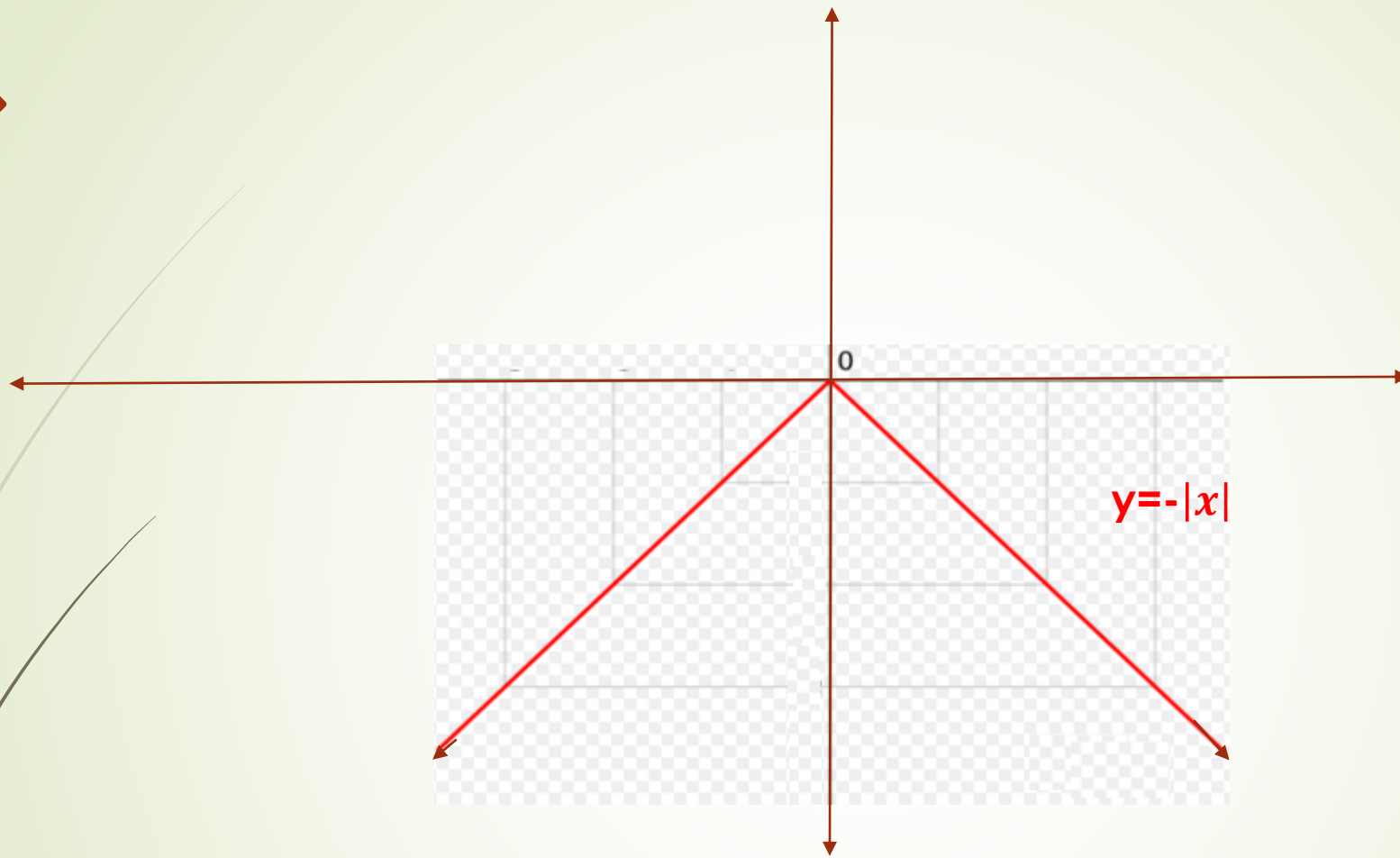
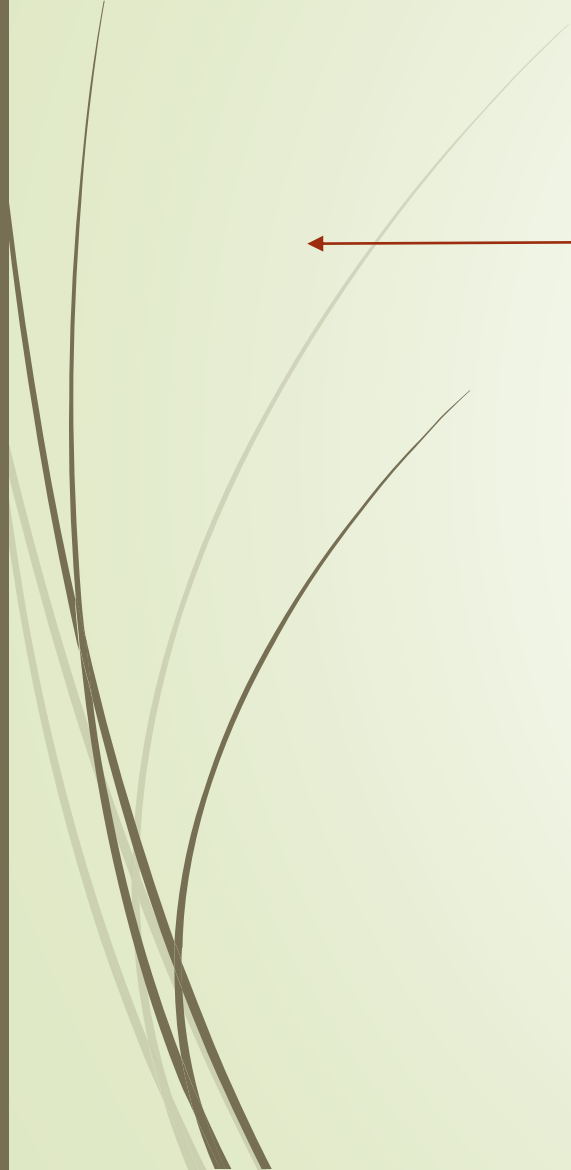


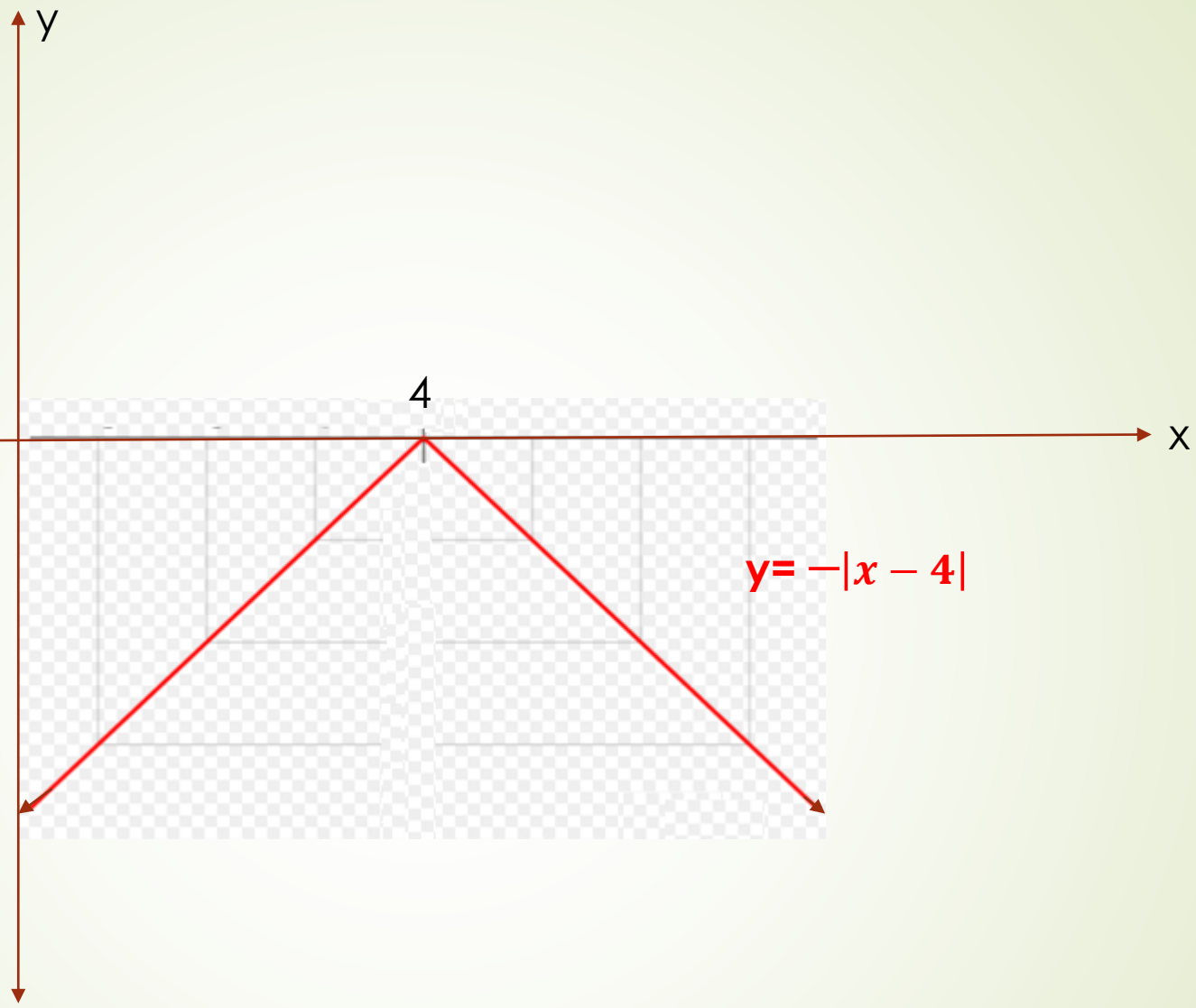
$$y = -\ln x \quad \text{si} \quad 0 < x < 1$$

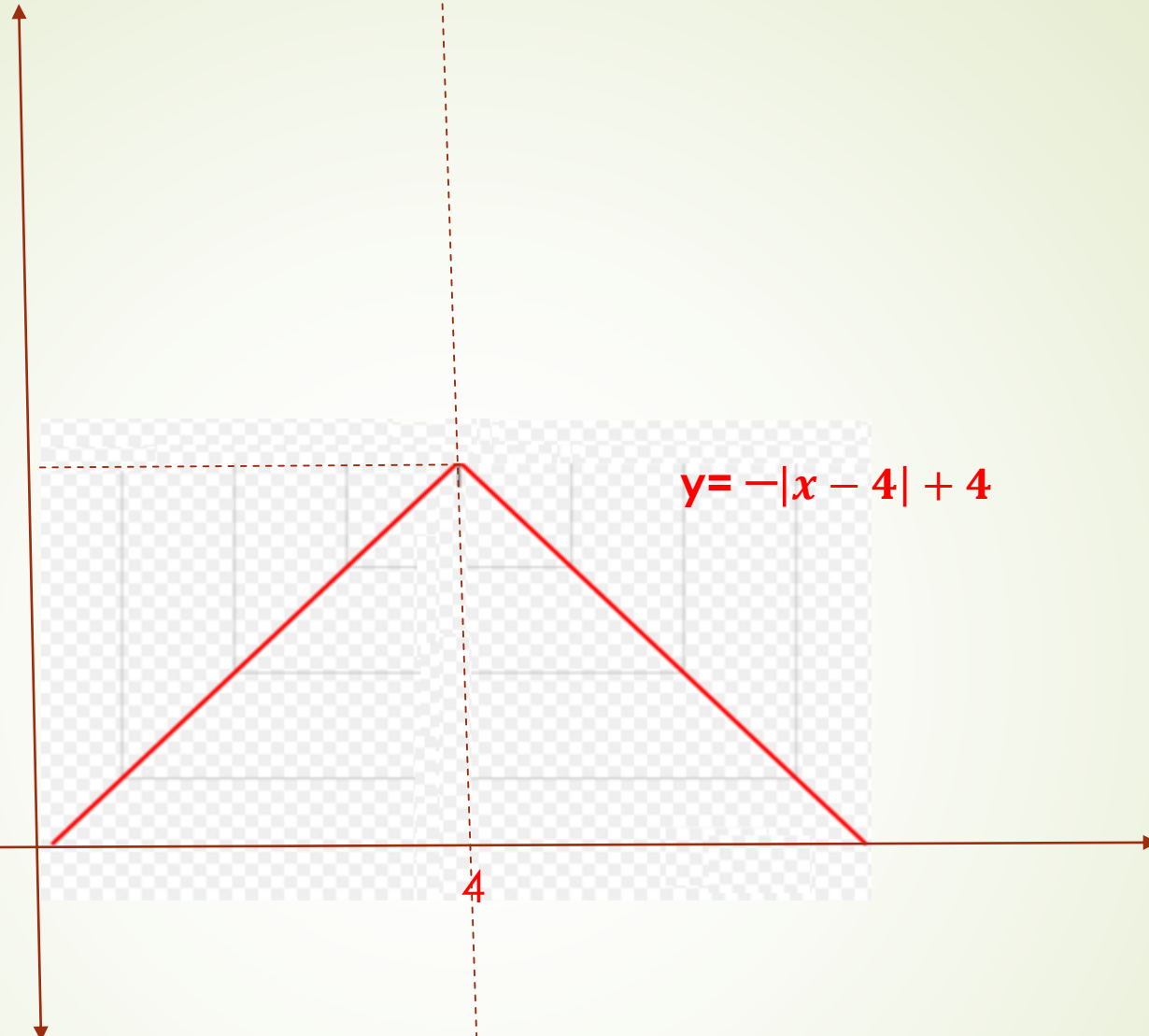











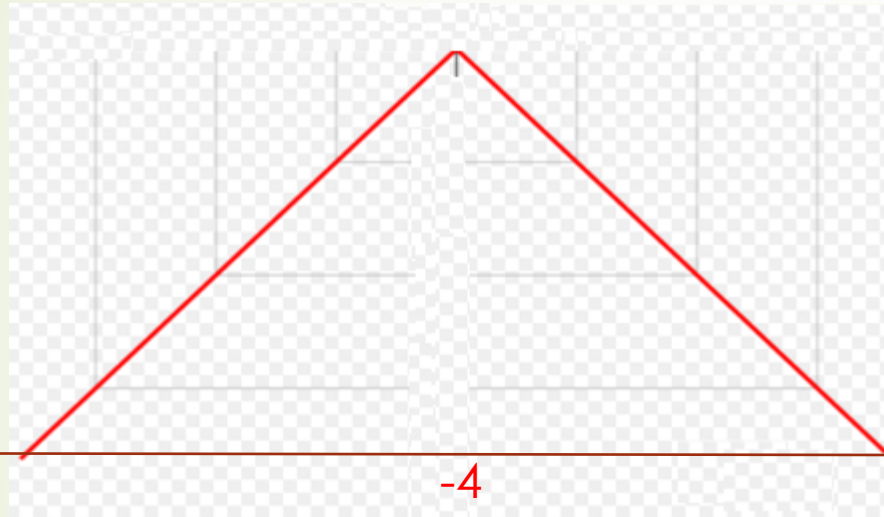


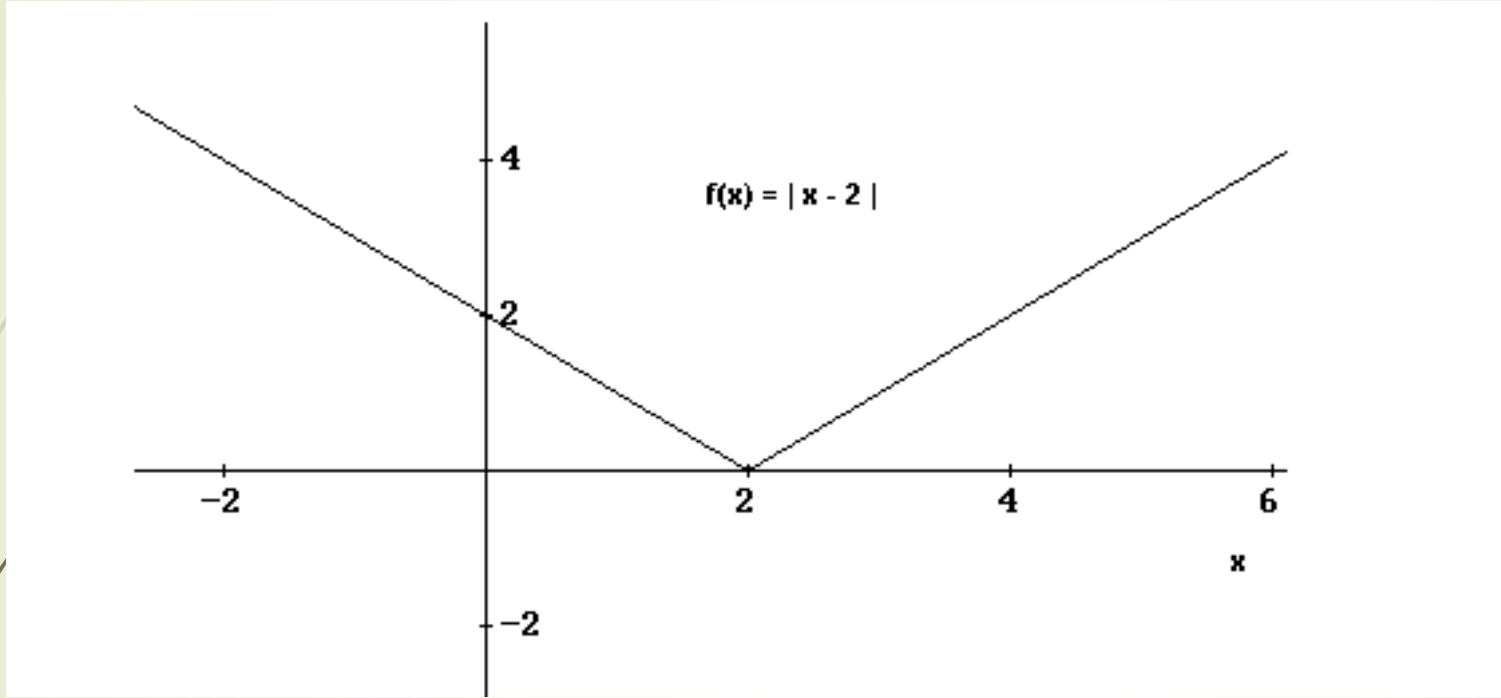
$$y = -|x - 4| + 4$$

4

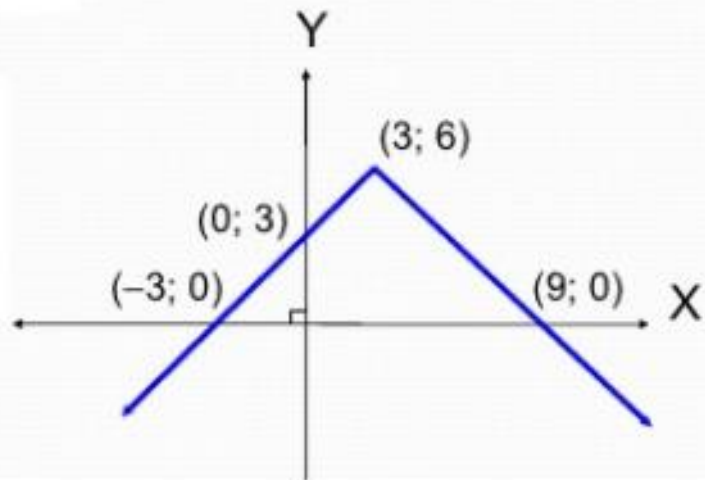


$y = -|x + 4| + 4$



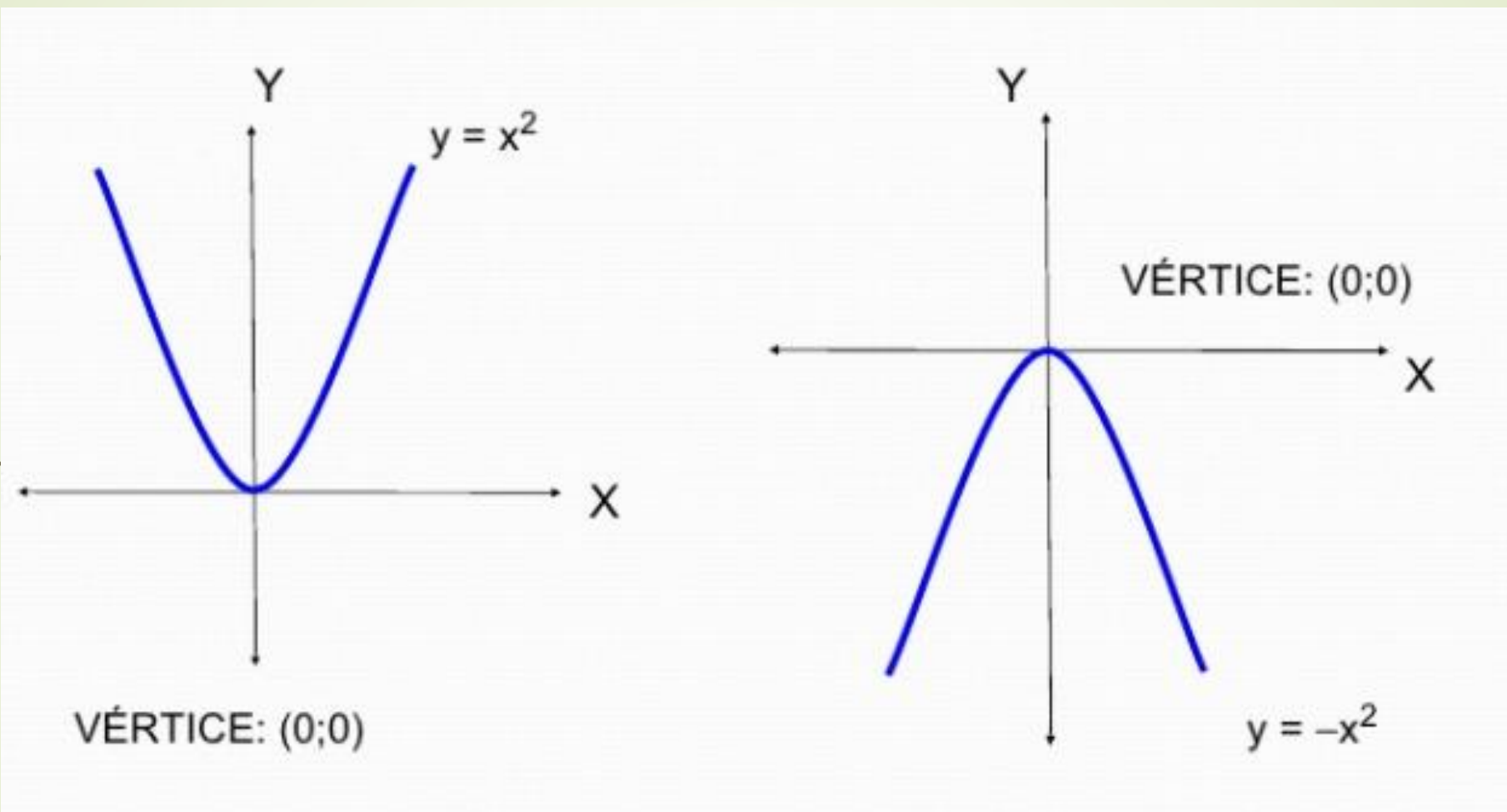


$$y = -|x - 3| + 6$$



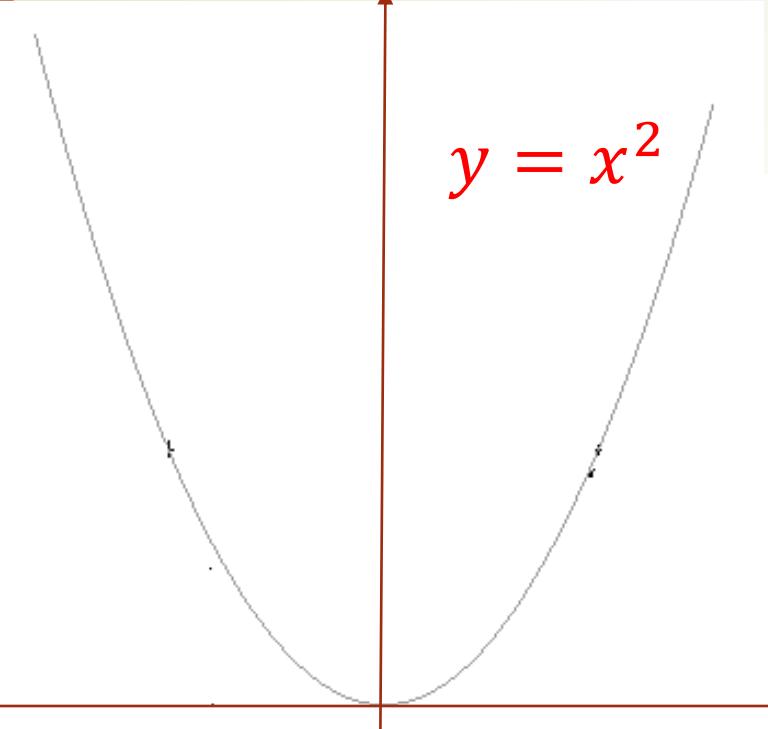
Dominio:  $\mathbb{R}$

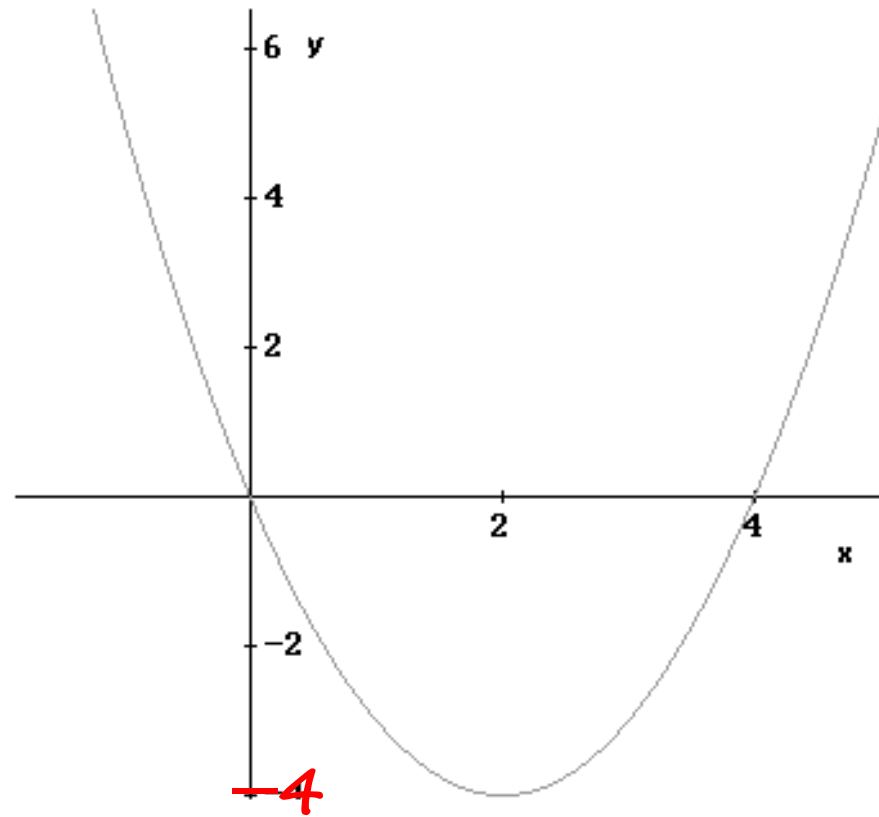
Rango:  $(-\infty; 6]$



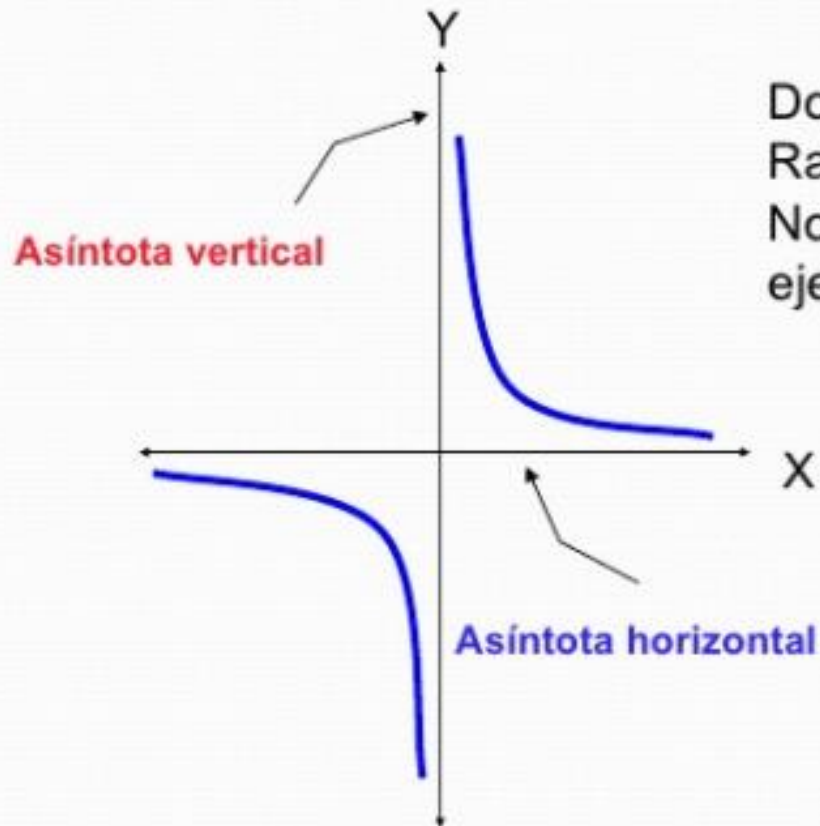


$$y = (x - 2)^2 - 4$$

$$y = x^2$$
A coordinate plane showing the graph of the parent function  $y = x^2$ . The parabola opens upwards with its vertex at the origin (0, 0). The x and y axes are shown with arrows at their ends. The equation  $y = x^2$  is written in red in the upper right quadrant of the graph.



$$y = \frac{1}{x}$$

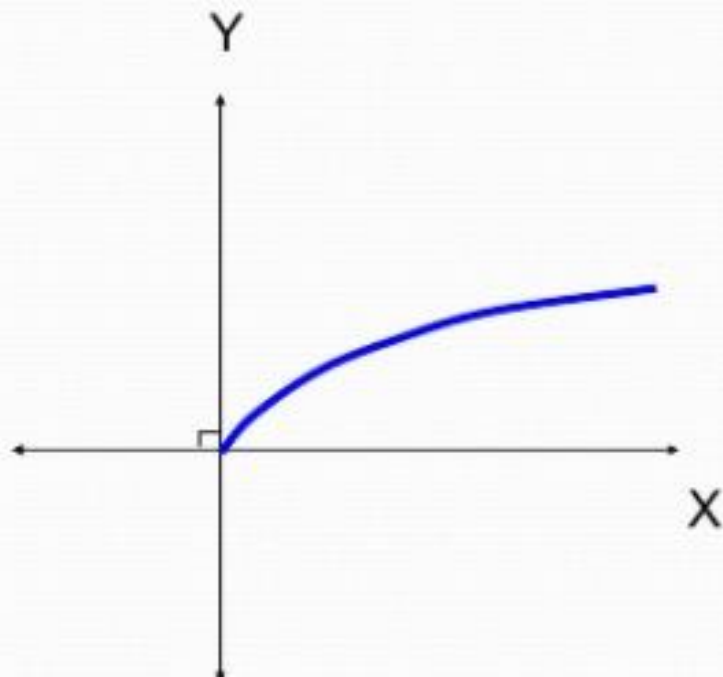


Dominio =  $\mathbb{R} - \{0\}$

Rango =  $\mathbb{R} - \{0\}$

No existen intersecciones sobre los ejes

**FUNCIÓN RAÍZ CUADRADA:**  $y = \sqrt{x}$



(0; 0) : Origen de la curva

(0; 0) : Intersección sobre el eje X

(0; 0) : Intersección sobre el eje Y.

Dominio =  $[0; \infty >$

Rango =  $[0; \infty >$

## VARIACIONES DE LA GRÁFICA FUNCIÓN RAÍZ CUADRADA:

