

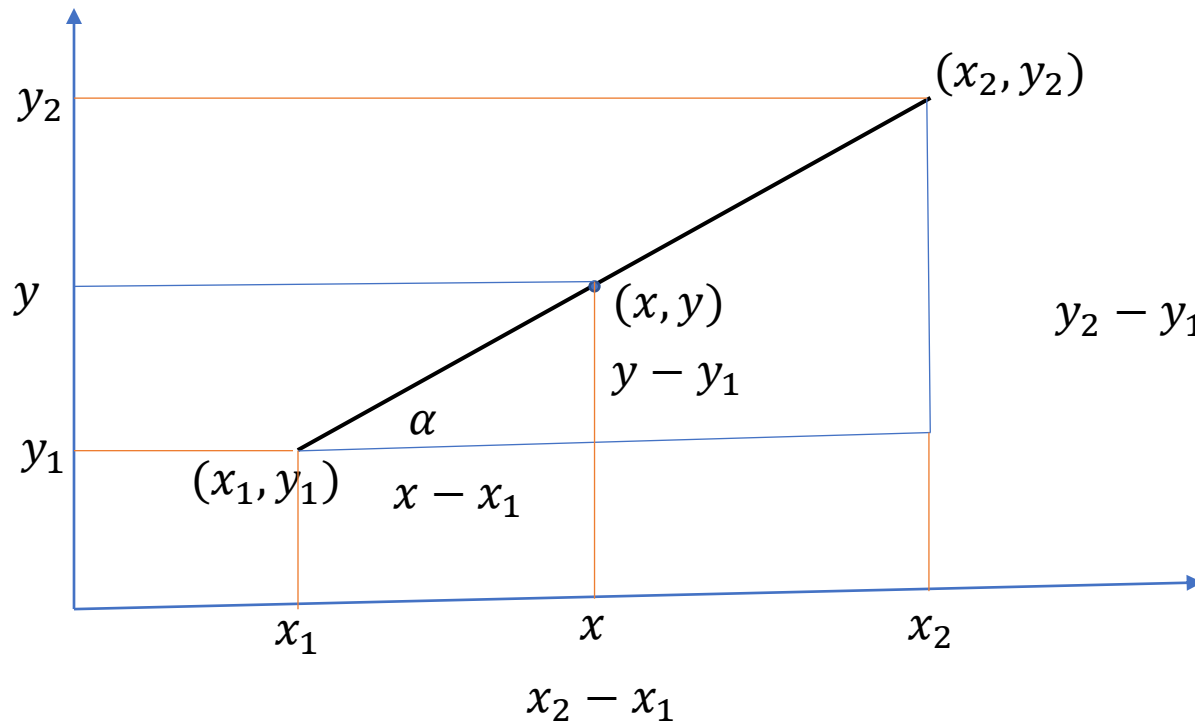


Funciones

Dr. José Federico Ramírez Cruz

Funciones

- Función de una recta cuando tengo dos puntos:



$$\tan \alpha = \frac{y_2 - y_1}{x_2 - x_1}$$

$$\tan \alpha = \frac{y - y_1}{x - x_1}$$

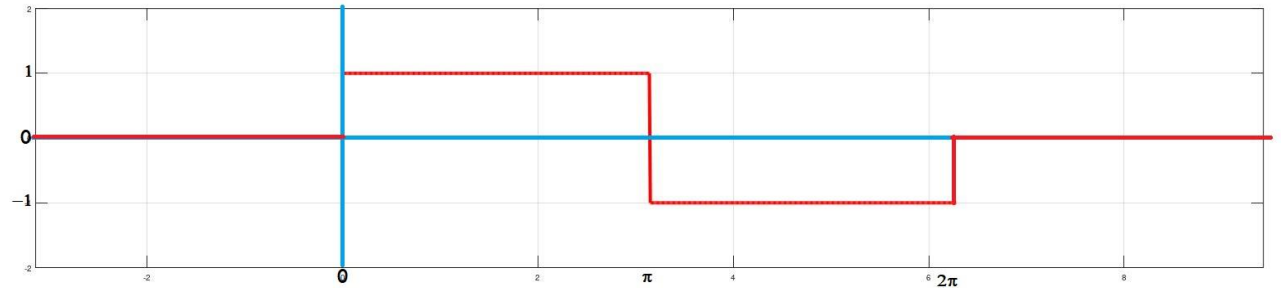
$$\frac{y - y_1}{x - x_1} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$y = \frac{y_2 - y_1}{x_2 - x_1} * (x - x_1) + y_1$$

Funciones

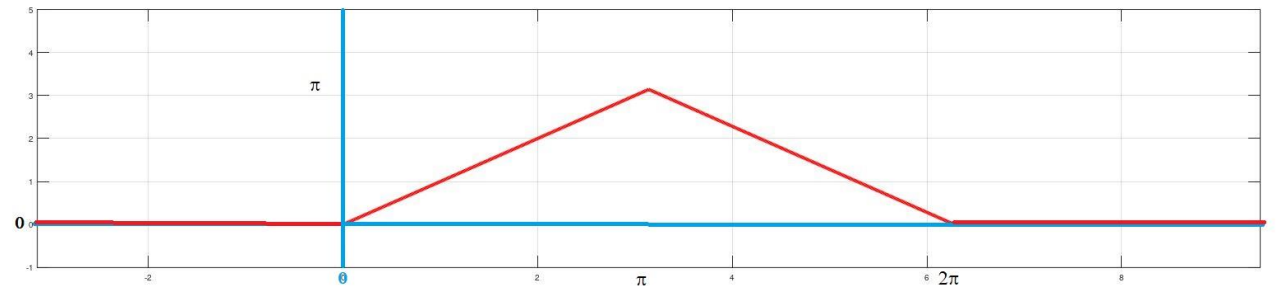
Función Rectangular

$$f(x) = \begin{cases} 1 & \text{si } 0 \leq x < \pi \\ -1 & \text{si } \pi \leq x \leq 2\pi \\ 0 & \text{si } 2\pi < x < 0 \end{cases}$$



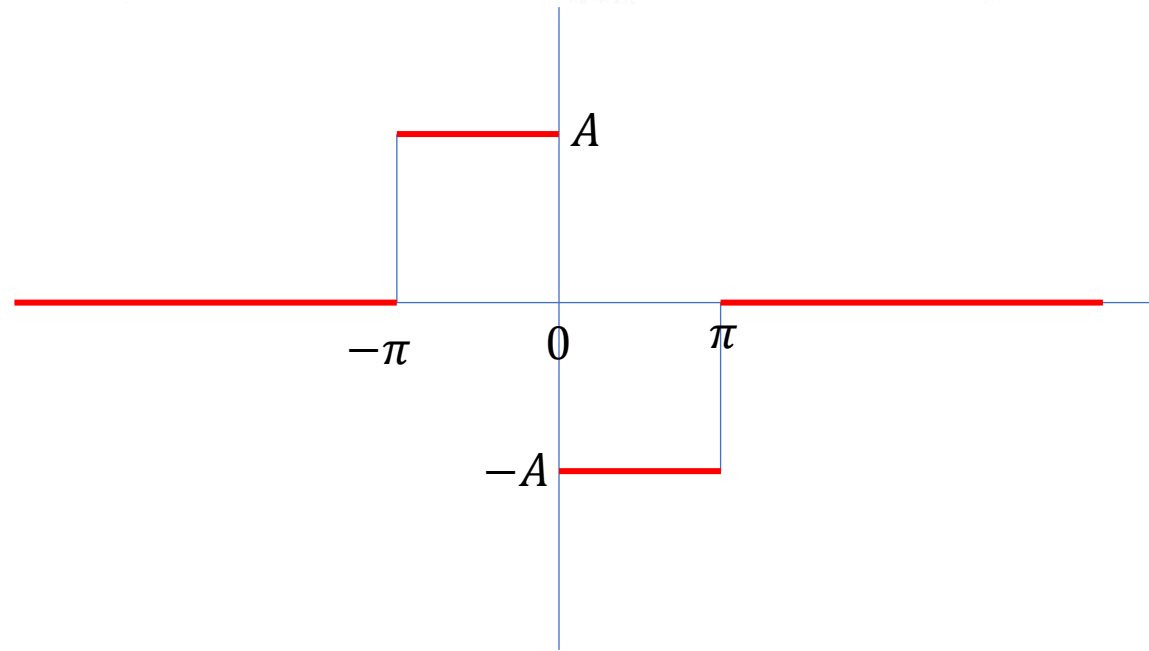
Función Triangular

$$f(x) = \begin{cases} 0 & \text{si } 2\pi < x < 0 \\ x & \text{si } 0 \leq x < \pi \\ -x + 2\pi & \text{si } \pi \leq x \leq 2\pi \end{cases}$$



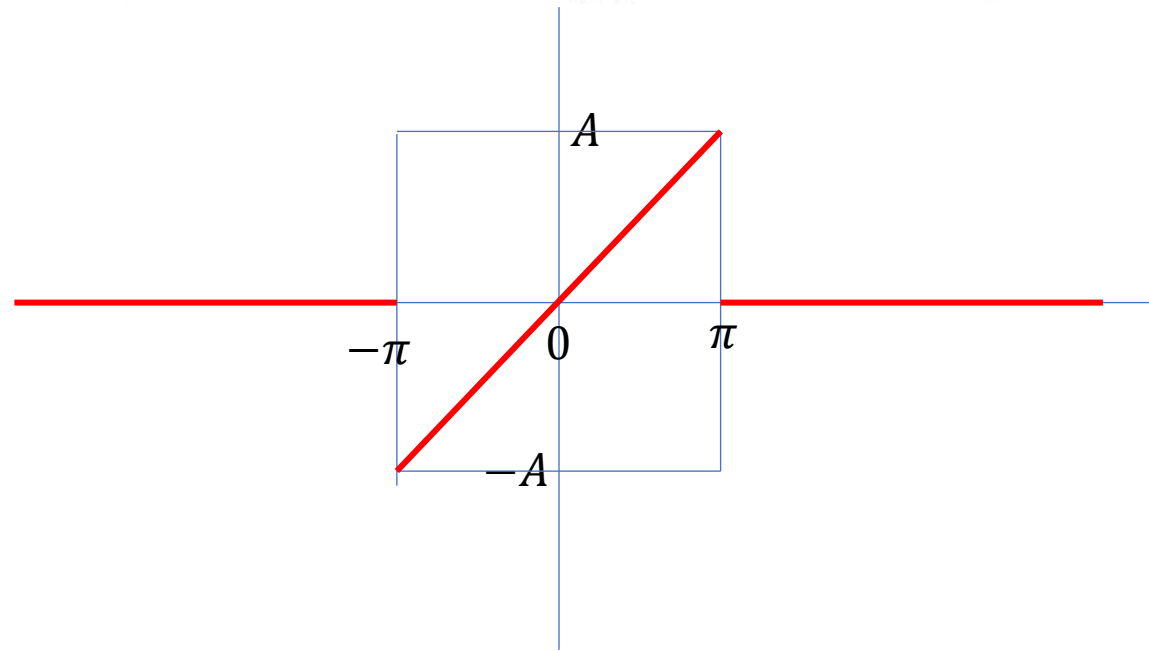
Funciones

$$f(x) = \begin{cases} 0 & \text{si } \pi < x < -\pi \\ A & \text{si } -\pi < x < 0 \\ -A & \text{si } 0 < x < \pi \end{cases}$$



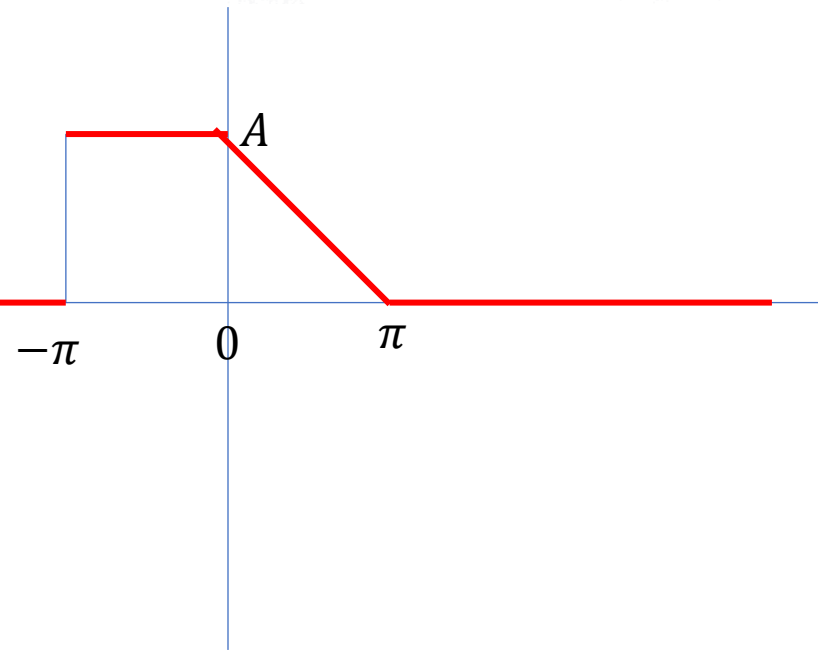
Funciones

$$f(x) = \begin{cases} 0 & \text{si } \pi < x < -\pi \\ y = \frac{A}{\pi}x & \text{si } -\pi < x < \pi \end{cases}$$



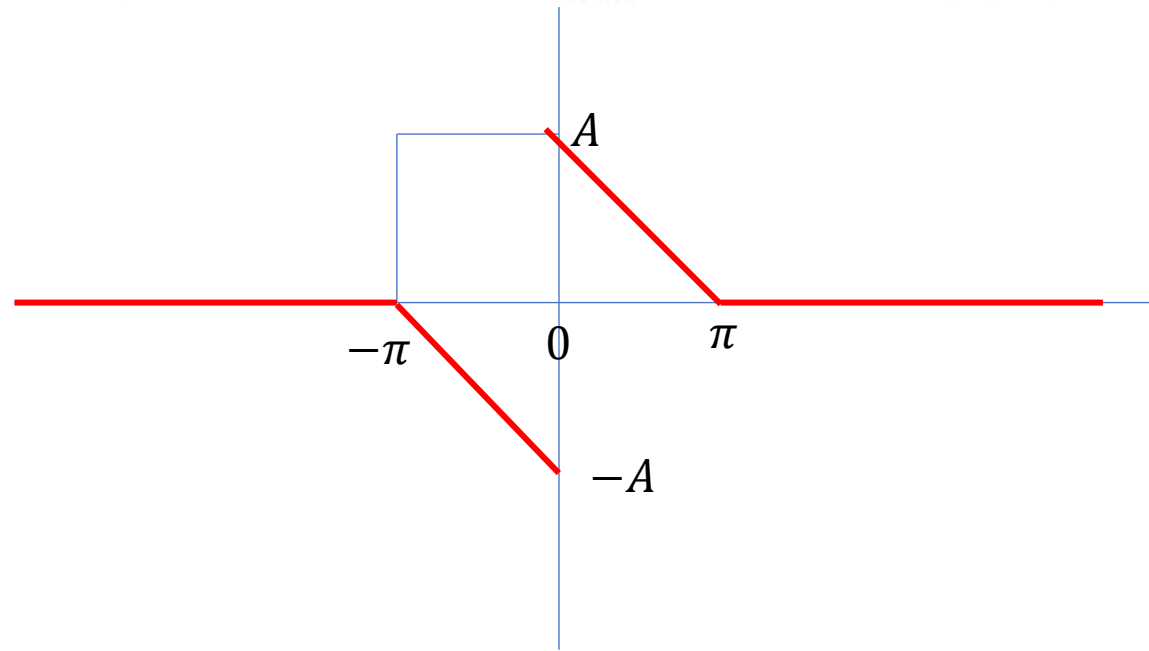
Funciones

$$f(x) = \begin{cases} 0 & \pi < x < -\pi \\ A & -\pi \leq x < 0 \\ y = \frac{-A}{\pi} * x + A & 0 \leq x < \pi \end{cases}$$



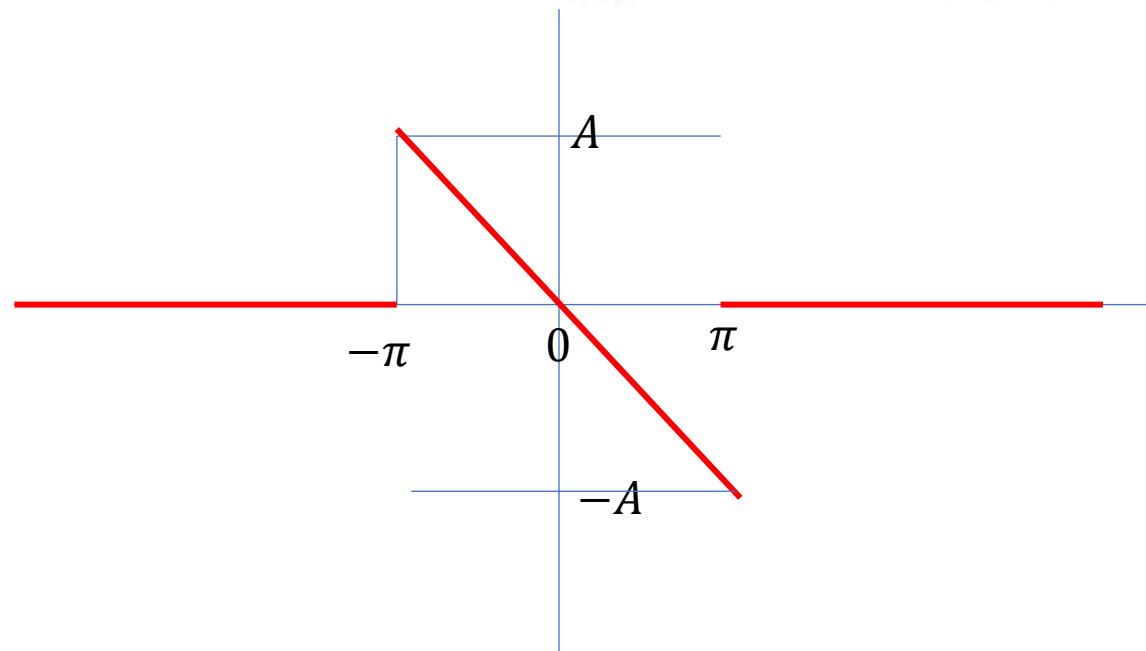
Funciones

$$f(x) = \left\{ \right.$$



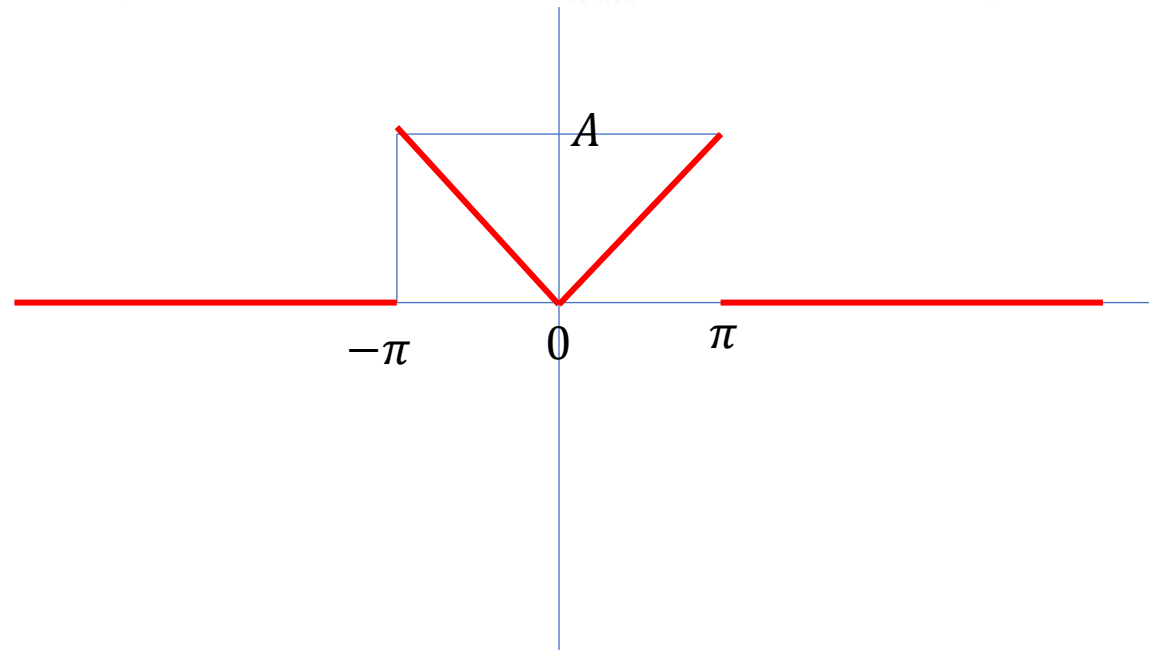
Funciones

$$f(x) = \left\{ \right.$$



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