

# Rangos:

①  $x=4$  rango  $=[-10, 17]$

$$\text{nom}(4) = \frac{(4 - (-10))}{(17 - (-10))} \approx 0.52 \rightarrow 52\%$$

$x=32$  rango  $=[30, 190]$

$$\text{nom}(32) = \frac{(32 - 30)}{(190 - 30)} \approx 0.0125 \rightarrow 1.25\%$$

②  $-10 \rightarrow \text{min}$  ;  $10 \rightarrow \text{max}$

$$-10 \rightarrow 0$$

$$10 \rightarrow 1$$

$$-5 \rightarrow 0.25$$

$$9 \rightarrow 0.95$$

$$4 \rightarrow 0.7$$

$$-1 \rightarrow 0.45$$

$$0 \rightarrow 0.5$$

③  ~~$\text{interp}(75, 25, 50) = (75 - (50 - 25)) + 25 =$~~

$t(75) 25, 50) = \underline{2}$

$$\text{interp}(2) 25, 50) = (2(50 - 25)) + 25 = \underline{75}$$

$$t(25) 5, 10) = \underline{0.5}$$

$$\text{interp}(0.5) 5, 10) = (0.5(5 - 10)) + 5 = \underline{2.5}$$

$\Rightarrow$  ~~Es el~~ La interpolación es el proceso inverso de la normalización. Los resultados de los números fuera de rango revesan el valor de '1'.

$$\textcircled{4} \text{ } \text{lexp}(0.5, 100, 250) = (0.25(250 - 100)) + 100 \\ = 137.5$$

$$\text{lexp}(0.6, -100, 40) = (0.6(40 - (-100))) + (-100) \\ = -16$$

$$\text{lexp}(0.01, 0, 104) = (0.01(104 - 0)) = 1.04$$

$$\textcircled{5} \text{ } \text{nom}(8) = \frac{(8 - 5)}{(30 - 5)} = \underline{0.12}$$

$$\text{lexp}(0.12, -10, 9) = (0.12(9 - (-10))) + (-10) = \underline{-7.72}$$

$$\text{nom}(0) = \frac{(0 - (-1))}{(1 - (-1))} = \underline{0.5}$$

$$\text{lexp}(0.5, 100, 300) = (0.5(300 - 100)) + 100 = \underline{200}$$