

موضوع: المصفوفة Matrix

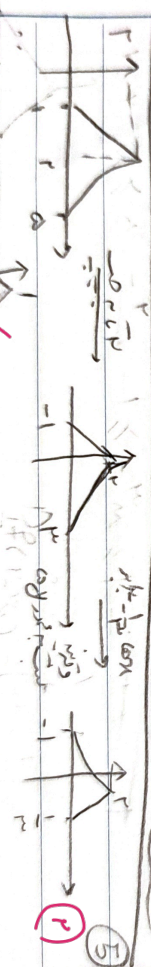
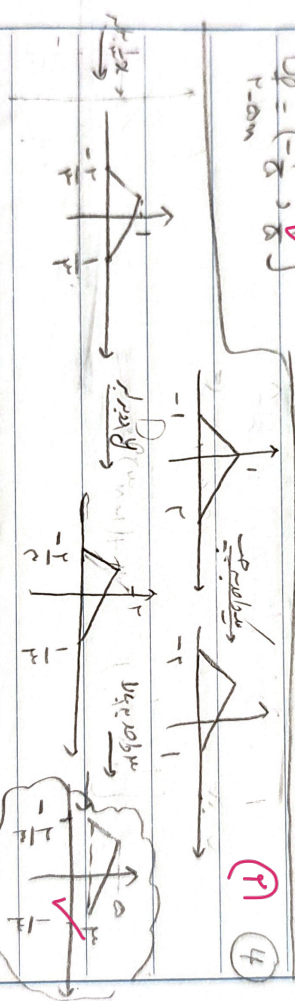
الهدف

$D_{f(m)} = \begin{bmatrix} 1 & 2 & 3 \end{bmatrix} \rightarrow x \in \frac{1}{a} \text{ مخرج } \rightarrow -1 \leq x \leq 1$ (1)
 $\rightarrow -1 \leq x \leq 1 \rightarrow -1 \leq x \leq 1 \rightarrow D_{f(m)} = \begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$ (1)

$f(-1) - 1 = -1 - 1 = -2 \rightarrow D_{f(m)} = \begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$ (1) (2)

$\frac{f(-1)+1}{1} = -1 \rightarrow D_{f(m)} = \begin{bmatrix} 1 & 2 & 3 \end{bmatrix}$ (2)
 $\rightarrow -1 \leq x \leq 1 \rightarrow \frac{1}{a} = \frac{1}{1} = 1 \rightarrow -1 \leq x \leq 1 \rightarrow \frac{1}{a} \leq x \leq \frac{1}{a}$ (1)

$D_f = \begin{bmatrix} -\frac{1}{a} & \frac{1}{a} \end{bmatrix}$ (1) (4)



$g = a(x - x_0) + y_0 \rightarrow -\frac{1}{a}(x - x_0) + y_0 = y \rightarrow -\frac{1}{a}(x - x_0) + y_0 = y$ (1)
 $\rightarrow \frac{1}{a}(x - x_0) = y_0 - y \rightarrow (x - x_0) = a(y_0 - y) \rightarrow x - x_0 = a(y_0 - y) \rightarrow x = a(y_0 - y) + x_0$ (1)

$$-1 \leq x + 1 \leq 1 \Rightarrow -1 \leq x \leq 1 \Rightarrow -1 \leq x \leq 1 \quad (1) \quad (2)$$

$$\frac{a+b}{2} = \frac{-1+1}{2} = \frac{0}{2} = 0 \Rightarrow \frac{a+b}{2} = 0 \Rightarrow a+b = 0 \Rightarrow a = -b$$

$$D_{(a-1)} = (a+1, 0) \quad a-1 = -1 \rightarrow a = 0 \quad (1) \quad (2)$$

$$D_{(a+1)} = (-1, b-1) \quad b-1 = 0 \rightarrow b = 1 \quad (1) \quad (2)$$

$$D_p \rightarrow \frac{-\frac{1}{p} + 1}{\frac{1}{p} + 1} = \frac{-1 + p}{1 + p} \rightarrow D_p = \left[\frac{-1+p}{1+p}, \frac{1+p}{1+p} \right] \quad (1) \quad (2)$$

$$R_p \rightarrow \left[-1, 1 \right] \xrightarrow{-x^p} \left[-1, 1 \right] \xrightarrow{-x^p} \left[-1, 1 \right] \rightarrow$$

$$R_p = \left[-1, 1 \right] \rightarrow R_p = \left[-1, 1 \right]$$

$$\left| \frac{x-1}{x+1} \right| + 1 + x < 0 \Rightarrow \left| \frac{x-1}{x+1} \right| < -1-x \quad (1) \quad (2)$$

$$|x-1| = 1-x \rightarrow \frac{1-x}{x+1} + x < 0 \quad (1) \quad (2)$$

$$|x+1| = x+1 \rightarrow \frac{x+1}{x+1} + x < 0 \Rightarrow 1 + x < 0 \Rightarrow x < -1$$

$$x < -1 \quad (1) \quad (2)$$

$$-1 \leq x \leq 1$$