



$$\begin{aligned} \text{د) } \underline{u = u+1} \rightarrow (u-1)^T(u) &= u^T - Ku^T + Ku \\ \underline{u = 1-u} \rightarrow (-u-1)^T(-u) &= -u^T - Ku^T - Ku \end{aligned} \quad \left. \begin{array}{l} \\ \end{array} \right\} -\Lambda u^T = g(u)$$

$$\begin{aligned} \text{ه) } f(-1) &\Rightarrow 1-Ku = -1 \leadsto u=1 \leadsto \sqrt{-1} = K \\ f(K) &\Rightarrow 1-Ku = K \leadsto u=-1 \leadsto \sqrt{-1} + K = 1 \end{aligned} \quad \rightarrow 1+K = 0$$

$$\text{و) } u + \sqrt{u} = 4 \Rightarrow u = K \leadsto f(u) = K^K + K \times K = K^4$$

$$\begin{aligned} \text{أ) } f(u-1) &= (u-1)^K + u-1 = u^K - Ku^K + Ku - 1 \\ f(1-u) &= (1-u)^K + 1-u = -u^K + Ku^K - Ku + 1 \end{aligned}$$

$$\begin{aligned} \text{ب) } Ku - Ka &\geq 0 \rightarrow u \geq \frac{K}{K} a \xrightarrow{\text{اشتراط}} u=1 \Rightarrow b=K \\ b - Ku &\geq 0 \rightarrow u \leq \frac{b}{K} \quad a = \frac{K}{K^2} \end{aligned}$$

$$Kf(1) - g(1) = K^2 - 1 - K^2 = K \rightarrow K = -1$$

$$Ka - \frac{b}{K} - K = K - 1 + 1 = K$$

$$1.) \quad 2n+1 \geq 0 \rightarrow n \geq -1 \quad m-n \geq 9 \rightarrow n \leq m$$

(1)

$$\Rightarrow [1, m] = [1, V] \rightarrow m = V$$

$$(f-g)(x) = 9\sqrt{x} \rightarrow f(x) - g(x) = x+n - x\sqrt{x} = 9\sqrt{x}$$

$$n = 1\sqrt{x} - 1$$

$$m+n = 1\sqrt{x} - 1 + V = 1\sqrt{x} + 0$$