

$$f(x) \Rightarrow D_f = [-2, 4] \Rightarrow -2 \leq x \leq 4$$

$$f\left(\frac{x+2}{5}\right) \Rightarrow -2 \leq \frac{x+2}{5} \leq 4 \xrightarrow{\times 5} -10 \leq x+2 \leq 20 \xrightarrow{-2} -12 \leq x \leq 18$$

$$-4 \leq x \leq 4 \Rightarrow \left\{ D_{f\left(\frac{x+2}{5}\right)} : [-4, 4] \right\}$$

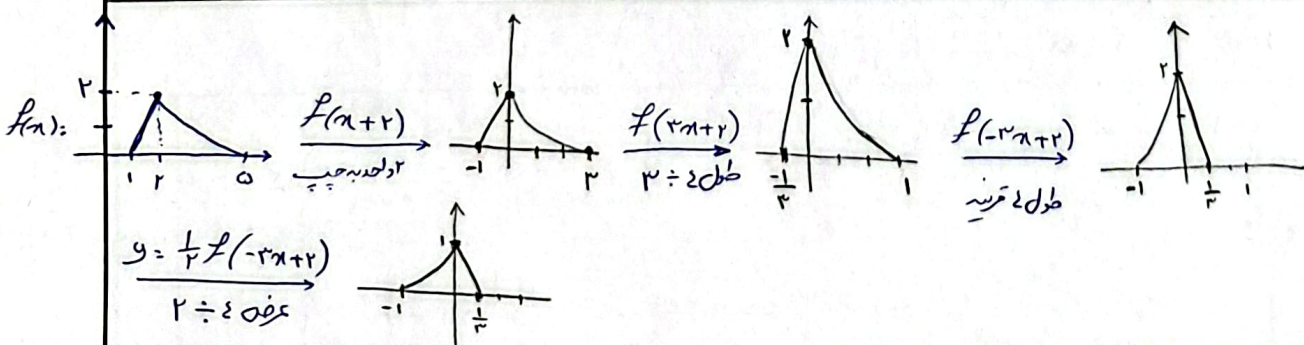
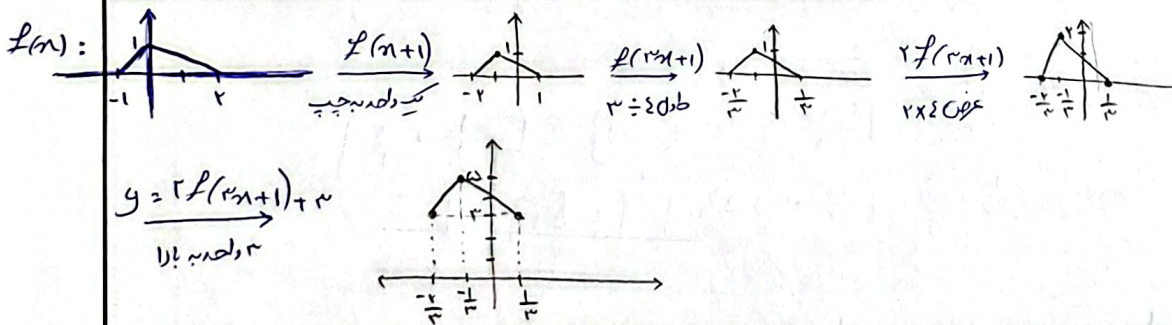
$$f(x-2) \Rightarrow D = [-2, 4] \quad \begin{cases} (-2) \Rightarrow \overset{-4}{2(-2)-2} = -4 \\ (4) \Rightarrow \overset{2}{2(4)-2} = 6 \end{cases}$$

$$f(x) \Rightarrow D_f : [-4, 6]$$

$$f\left(\frac{x+1}{2}\right) \Rightarrow D = [-1, 2] \quad \begin{cases} (-1) \Rightarrow \frac{2(-1)+1}{2} = -1 \\ (2) \Rightarrow \frac{2(2)+1}{2} = 2 \end{cases} \quad f(x) \Rightarrow D = [-1, 2]$$

$$f(x-2) \Rightarrow -1 \leq x-2 \leq 2 \xrightarrow{+2} 1 \leq x \leq 4 \rightarrow x \in [1, 4]$$

$$\frac{x}{2} \geq x > -\frac{x}{2} \sim D_{f(x-2)} = \left(-\frac{x}{2}, \frac{x}{2}\right]$$



$$D_x \cap D_y = (r, a)$$

$$D_{f(n)} : (a, f] \rightarrow a \leq n \leq f \xrightarrow{f(n-1)} a \leq n-1 \leq f$$

: Prob (N) d'x

$$\text{circled: } a+1 \leq n \leq f$$

$$D_{g(n)} : [-1, b) \rightarrow -1 \leq n < b \xrightarrow{g(n+1)} -1 \leq n+1 < b$$

$$\text{circled: } -1 \leq n < b-1$$

$$\begin{cases} a+1 \leq r \\ b-1 \leq a \end{cases} \rightarrow \begin{cases} a \leq r \\ b \leq a \end{cases}$$

$$\text{circled: } a-b \leq r-q \leq a$$

جواب