

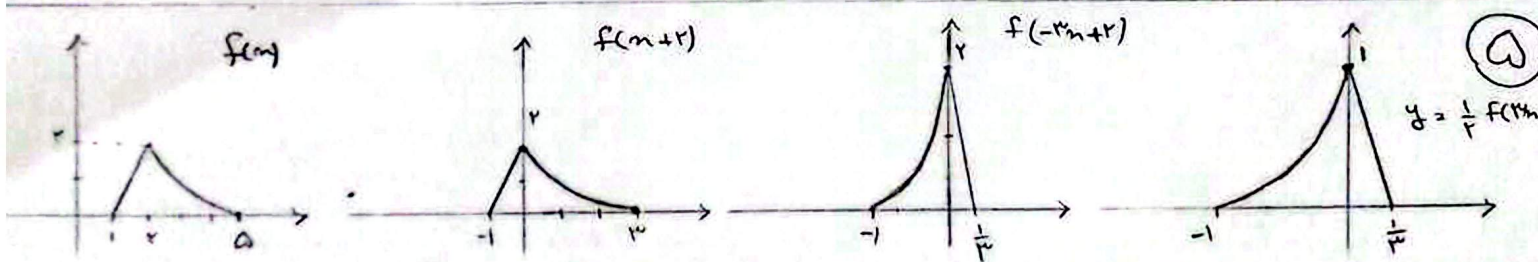
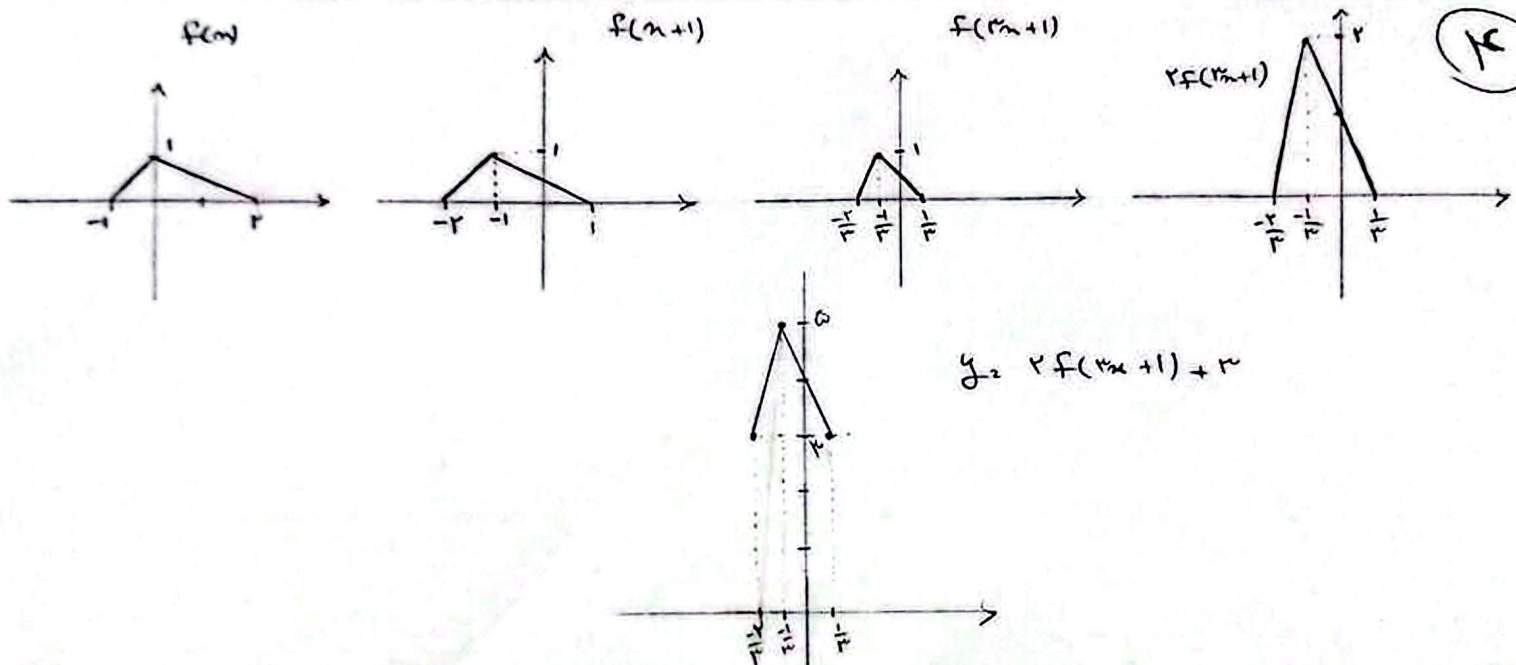
$$D_{f(n)} = [-r, r]$$

$$-r \leq \frac{r_{n+1}}{\omega} \leq r \rightarrow -1 \leq r_{n+1} \leq r \rightarrow -1 \leq r_{n+1} \leq r \rightarrow \boxed{-f(r) \leq f(r)} \quad (1)$$

$$D_{f(r_{n+1})} = [-r, r] \rightarrow -1 \leq r_{n+1} \leq r \rightarrow \boxed{D_{f(n)} = [-1, 1]} \quad (2)$$

$$D_{f\left(\frac{r_{n+1}}{r}\right)} = [-1, 1] \rightarrow -1 \leq \frac{r_{n+1}}{r} \leq 1 \rightarrow -1 \leq r - \omega n \leq 1$$

$$-r \leq -\omega n \leq r \rightarrow -r \leq \omega n \leq r \rightarrow \boxed{\frac{-r}{\omega} \leq n \leq \frac{r}{\omega}} \quad (3)$$



$$y_r = \frac{1}{r} (n-r)^r + r = 0 \rightarrow (n-r)^r = -r \rightarrow n-r = \pm \sqrt[r]{r} \rightarrow \boxed{\frac{n-r}{r} = \pm 1}$$

چون انتهای 1 است پس انتهای 1 نهاده می شود

$$\frac{1}{p} + r = 1 \rightarrow m = \frac{1}{p} = \alpha$$

$$f(\frac{1}{p} + r) = r \rightarrow y = 1 - r(x) = -v = \beta$$

$$\left\{ \alpha \beta = \frac{1}{p} (-v) = \frac{v}{p} \right\}$$



$$D_f = (a, x]$$

$$D_g = [-1, b)$$

$$y = f(n-1) + g(n+1)$$

$$\left. \begin{array}{l} a(n-1) \leq x \rightarrow a+1 \leq n \leq \Delta \\ -1 \leq n+1 \leq b \rightarrow -r \leq n \leq b-1 \\ \text{اطلاعات سوال} \rightarrow -r \leq n \leq \Delta \end{array} \right\}$$

$$a+1 = -r \rightarrow \boxed{a = -r}$$

$$b-1 = \Delta \rightarrow \boxed{b = \Delta + 1}$$

$$a - b = -r - (\Delta + 1) = \boxed{-r - \Delta - 1}$$



$$g_r = \sqrt{|rf(x) - r|}$$

$$D_{g_r} \rightarrow |rf(x) - r| \geq 0$$

هوا و سطر
به این مقادیر در فرمول

$$D_{f(x)} \rightarrow \left[\frac{r}{p} + 1, \frac{\Delta}{p} + 1 \right] = \left[\frac{1}{p}, \frac{v}{p} \right]$$

$$R_{g_r} \rightarrow -1 \leq f(x) \leq r \rightarrow -r \leq rf(x) \leq r \rightarrow -\Delta \leq rf(x) - r \leq 1 \rightarrow 0 \leq |rf(x) - r| \leq \Delta$$

$$0 \leq \sqrt{|rf(x) - r|} \leq \sqrt{\Delta}$$

$$\left\{ \begin{array}{l} D_{g_r} = \left[-\frac{1}{p}, \frac{v}{p} \right] \\ R_{g_r} = [0, \sqrt{\Delta}] \end{array} \right\}$$



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$$g(m) = \left| \frac{(m-2)+1}{2(m-2)+1} \right| + 1 = \left| \frac{m-1}{2m-3} \right| + 1$$

$$n + g(m) < 0 \rightarrow n + 1 + \left| \frac{m-1}{2m-3} \right| < 0 \rightarrow \left| \frac{m-1}{2m-3} \right| < -n-1 \rightarrow -n-1 > 0 \rightarrow n < -1$$

همواره منفی است

1) $\leftarrow$ دایره بازه جواب داخل قد، مطلق منفی است

$$\frac{1-n}{2-2m} < -n-1 \rightarrow 1-n < (-n-1)(2m+3)$$

$$2m^2 - m - 3 > 1-n \rightarrow 2m^2 > 4 \rightarrow$$

$$\textcircled{1} \cap \textcircled{2}$$

$$m^2 > 2 \rightarrow m > \sqrt{2} \text{ یا } m < -\sqrt{2} \quad \textcircled{2}$$

$$\boxed{m \in (-\infty, -\sqrt{2}) \cup (\sqrt{2}, \infty)}$$