

نام و نام خانوادگی: امیر محمد صفا پاسخنامه تشریحی تکلیف شماره ۷... کلاس: دبیرستان
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$$D_{f_2}[-1, 2] \rightarrow -1 \leq \frac{x_{n+1}}{2} \leq 2 \rightarrow -2 \leq x_{n+1} \leq 4 \rightarrow -1 \leq x_n \leq 2 \rightarrow D_{f_2}[-1, 2]$$

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$$D = [-2, 2] \rightarrow -2 \leq x \leq 2 \rightarrow -6 \leq x \leq 6 \rightarrow -1 \leq x - 2 \leq 1 \rightarrow f_n \rightarrow D = [-1, 1]$$

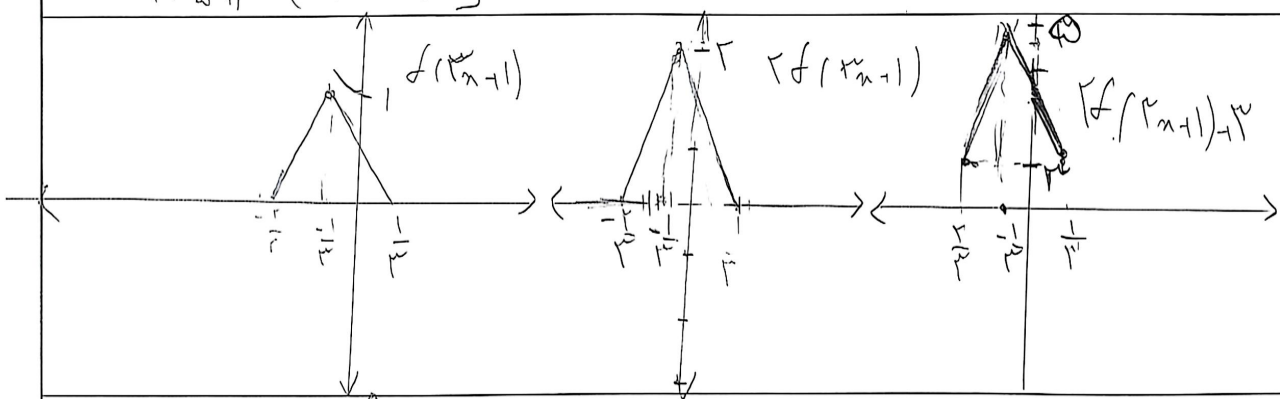
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$$-1 \leq x \leq 2 \rightarrow -1 \leq x_{n+1} \leq 1 \rightarrow -1 \leq \frac{x_{n+1}}{2} \leq 1 \Rightarrow$$

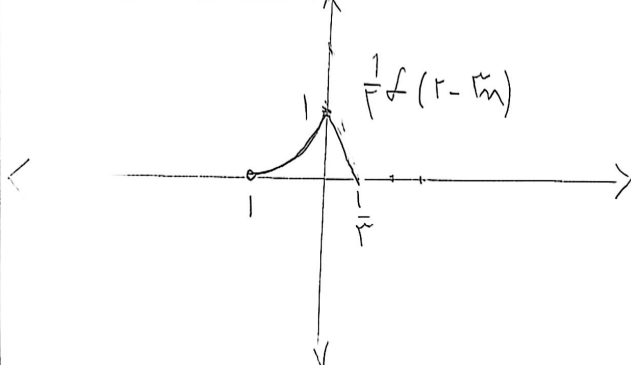
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$$D_{f(x-2n)} \rightarrow -1 \leq x-2n \leq 1 \rightarrow -2 \leq -2n \leq 2 \rightarrow \frac{x}{2} \leq 2 \rightarrow x \leq 4$$

$$D_{f(x-2n)} = [-4, 4]$$



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$m_s = \frac{b}{ra} \rightarrow \frac{-\frac{x}{a}}{-\frac{x}{r}} = \frac{r}{a}$ $y_s = \frac{ra}{r}$ $\textcircled{1}$	بافتن اینه اتنا فقط باها به جای اس $\textcircled{2} \rightarrow A_2(r, r) \Rightarrow y = -\frac{1}{r}(n-r)r$ $-\frac{1}{r}(n-r)r_1 r_2 = 0 \rightarrow (n-r)r_2 = 0$ $n-r_2 \neq r$ $\underline{n = 1 \text{ و } 6}$	6
$A(\alpha, \beta) \text{ به } A'(1, r) \rightarrow r_\alpha + r = 1 \rightarrow \alpha = -\frac{1}{r}$ $\underline{\beta = 1 - r \times r = -r} \rightarrow \alpha \beta = \frac{r}{r}$		7
$D_f = [a, r] \rightarrow D_{f(n)} = [a+1, d]$ $D_g = [-1, b) \rightarrow D_{g(n)} = [-r, b-1]$ $a+1 = -r \rightarrow a = -r$ $b-1 = d \rightarrow b = d$ $\underline{a-b = -d}$	$D_{f \cap g} = (r, d) = (a+1, d) \cap [-r, b-1]$	8
$D_{f(\frac{n}{r}+1)} = [-r, d] \rightarrow -r \leq x \leq d \rightarrow -\frac{r}{r} \leq \frac{n}{r} \leq \frac{d}{r} \rightarrow -1 \leq \frac{n}{r} + 1 \leq \frac{d}{r}$ $D_{f(n)-r} = [-\frac{1}{r}, \frac{d}{r}] \mid R_f = [-1, r] \rightarrow -1 \leq f(n) \leq r \rightarrow -\frac{1}{r} \leq f(n) \leq r$		9
$-\frac{d}{r} \leq f(n) - r \leq 1 \rightarrow 0 \leq f(n) - r \leq d \rightarrow 0 \leq f(n) - r \leq d \rightarrow R_r = [0, \sqrt{d}]$		
$f(n) = \left \frac{n+1}{r(n+1)} \right \xrightarrow{\text{مخرج}} \left \frac{n-1}{r(n-1)} \right \xrightarrow{\text{مخرج}} \left \frac{n-1}{r(n-1)} \right + 1 = g(n)$ $n + \left \frac{n-1}{r(n-1)} \right + 1 < 0 \xrightarrow{\text{مخرج}} n + 1 + \frac{n-1}{r(n-1)} < 0 \xrightarrow{\text{مخرج}} (n+1)(r(n-1)) + n-1 > 0 \rightarrow rn^2 > r^2$ $rn^2 > r^2 \rightarrow n > \sqrt{r} \text{ و } n < -\sqrt{r} \rightarrow n < -1$		10

$$\hookrightarrow n \in (-\infty, -\sqrt{r})$$