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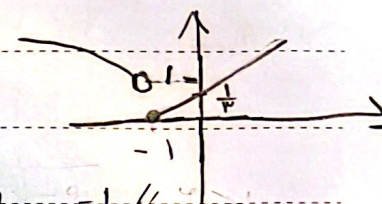
تعلیم شماره ۲

$$\frac{n+1}{3} \geq 0 \Rightarrow n \geq -1$$

روز دهم اخترا

سایه سید محمدی

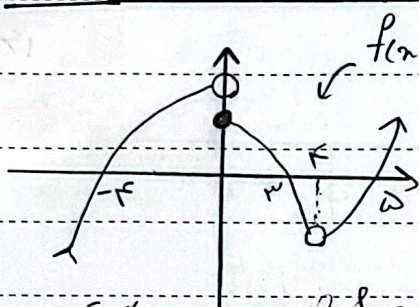
$$n = \begin{cases} y-1 & y \geq 0 \\ -y^2 & y > 1 \end{cases} \Rightarrow y = \frac{n+1}{3}$$



$$\Rightarrow n = -y^2 \Rightarrow y^2 = -n \Rightarrow y = \pm \sqrt{-n}$$

تابع است که به دو شاخه $y = +\sqrt{-n}$ و $y = -\sqrt{-n}$ تقسیم می شود.

$$\Rightarrow 1 < -n \Rightarrow (-1 > n)$$



$$g(n) = \frac{\sqrt{n f(n-2)}}{f(n)}$$

$$Dg = (-\infty, -2] \cup (0, 2) \cup [2, +\infty)$$

	-4	-2	0	2	4	6
n	-	-	0	+	+	+
f(n-2)	-	-	0	+	+	-
f(n)	-	+	+	0	0	+
p	-	+	0	+	-	+

$f(n-2)$ ، طول های تابع اصلی به علاوه ۲ می شوند ، $f(n-2)$ عبارت می شود $(-4, -2, 0, 2, 4, 6)$

$$f(n) = \frac{2n^2 - 2n + 1}{n^2 - 2n}$$

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$$n^2 - 2n \neq 0 \quad n(n-2) \neq 0 \Rightarrow n \neq 0, \pm 2$$

$$Df = \mathbb{R} - \{-2, 0, 2\}$$

$$\sqrt{f(n)} \Rightarrow f(n) \geq 0 \Rightarrow \frac{2n^2 - 2n + 1}{n^2 - 2n} \geq 0$$

$$Df = (-2, 0) \cup (2, +\infty)$$

$$الف) y = \sqrt{\frac{n-2}{n^2 - 2n^2 - 1}} \Rightarrow a \geq 0$$

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$$\frac{-2}{n^2} + \frac{1}{n^2} = \frac{-2n^2 + 1}{n^2} = \frac{-(2n^2 - 1)}{n^2}$$

$$Df = (-2, +\infty) - \{2\}$$

$$ب) y = \frac{2n^2 + 1}{2 - 2[-n]} \Rightarrow \mathbb{R} - (-3, -2) = Df = \mathbb{R} - (-3, -2)$$

$$2 - 2[-n] = 0 \Rightarrow 2 = 2[-n] \Rightarrow -n = 1 \Rightarrow -1 < n < 2$$

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$$\Rightarrow -3 < n < -2$$

$$\left. \begin{aligned} n(n-1) &\geq 0 \Rightarrow \frac{-1}{-1} \frac{0}{0} \frac{+1}{+1} \\ |n| + n &> 0 \Rightarrow n \in (0, +\infty) \end{aligned} \right\} n$$

$$b) f(n) = \frac{\sqrt{|n-r|} - nr}{|n| - 1}$$

$$\frac{-r}{-q + \phi} \Rightarrow \begin{cases} n \geq r \Rightarrow -n^2 + n - r \\ n < r \Rightarrow -n^2 - n + r \end{cases}$$

$$|n|-1 \neq 0 \Rightarrow n \neq \pm 1$$

$$D_f = [-r, 1) - \{-1\}$$

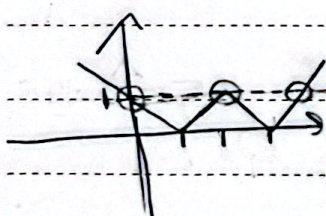
$$\Downarrow$$
$$D_f = -1\mathbb{R}$$

$$\rho_f = [r_9 + \infty) \cup \{1\}$$

$$y = \frac{1}{| |x-r|-1 | - k}$$

$$\Rightarrow | |x-2| - 1 | - k \neq 0$$

$$| |x-2| - 1 | \neq k$$



مقدار $y = |12x - 2| - 1$ باید در سه نقطه با $y = k$ برخورد کند

$k < 1 \Rightarrow$ كنفقه

$$k=1 \Rightarrow \frac{1}{\det M} \Rightarrow k=1$$

$$k > 1 \Rightarrow \frac{1}{\alpha} \neq 0$$

$$f(x) = \frac{\frac{x^r + r^n + r}{x^r + r^n + r}}{\frac{n+1}{n-1}}$$

$$n^2 - 4n + 4 = 0 = (n-2)^2 \Rightarrow n=2$$

$$n-1 \neq 0 \Rightarrow n \neq 1$$

$$n+1 \neq 0 \Rightarrow n \neq -1$$

$$n^r + r n + r \neq 0 \Rightarrow (n+1)(n+r) \neq 0 \Rightarrow n \neq -1, -r$$

$$\{ \Rightarrow n = 14$$

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$$y = \log_{n+1} \log_n \frac{1}{x}$$

$$\left. \begin{array}{l} n+1 \neq 1, n+1 > 0 \Rightarrow n > -1 \\ n > 0, n \neq 1 \end{array} \right\} \Rightarrow Df = (0, +\infty) - \{1\}$$

$$f(x^{n^2-1}) \Rightarrow Df = ?$$

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$$Df(x) = [-\infty, \infty]$$

$$\Rightarrow Df = \left[-\frac{1}{\sqrt{x}}, \frac{1}{\sqrt{x}}\right]$$

$$f(x) \xrightarrow{\substack{n \text{ ها به علاوه 1} \\ n \text{ ها ضرب در } \frac{1}{n} \\ \text{ریشه } n \text{ می گیریم}}} f(x^{n^2-1}) \Rightarrow [-\infty, \infty] \Rightarrow [-\varepsilon, \varepsilon]$$

$$\left[-\frac{1}{\sqrt{x}}, \frac{1}{\sqrt{x}}\right] \Leftarrow \left[-\frac{\varepsilon}{\sqrt{x}}, \frac{\varepsilon}{\sqrt{x}}\right]$$

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