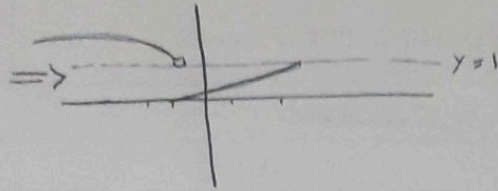


$$y > 0 \Rightarrow y = \frac{n+1}{2}$$

$$y > 1 \Rightarrow \pm \sqrt{-n}$$



✓ تابع هست

(۲)
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$$\frac{n^2(n-2)}{f(n)} > 0 \Rightarrow \frac{-2 \quad -2 \quad 0 \quad 2 \quad \Delta^* \quad 2}{- \quad + \quad - \quad + \quad - \quad +} \Rightarrow D_f = (-2, -2] \cup [0, 2) \cup [2, +\infty)$$

$$f(n) = 0 \Rightarrow n \in \{-2, 2, \Delta\}$$

$$f(n-2) = 0 \Rightarrow n \in \{-2, \Delta, 2\}$$

فقط خطوط باشد که $x = 4$ در دایره است و $x = 4$ در دایره است $f(n-2)$ نیست که در بازه است آفده نیست

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$$f(n) = \frac{2n^2 - 3n + 2}{n(n-2)(n+2)} \Rightarrow D_f(n) = \mathbb{R} - \{2, 0, -2\} \quad \checkmark \quad (\text{الف})$$

$$\text{ب) } \frac{2n^2 - 3n + 2}{n(n-2)(n+2)} > 0 \Rightarrow \frac{-2 \quad 0 \quad 2}{- \quad + \quad - \quad +} \Rightarrow D_f = (-2, 0) \cup (2, +\infty) \quad \checkmark$$

(۲)
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$$\text{الف) } \frac{n-2}{t^2 - 2t - n} > 0 \xrightarrow{n^2 = t} \frac{-2 \quad 2}{- \quad + \quad +} \Rightarrow D_f = (-2, +\infty) - \{2\} \quad \checkmark$$

(۲)
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$$\text{ب) } \{-2[-n] \neq 0 \Rightarrow [-n] \neq 2 \Rightarrow \begin{matrix} -n > 2 \Rightarrow n < -2 \\ -n < 2 \Rightarrow n > -2 \end{matrix} \Rightarrow D_f = (-\infty, -2] \cup (-2, +\infty) \quad \checkmark$$

$$\text{الف) صورت: } n(n-1)(n+1) > 0 \Rightarrow \frac{-1 \quad 0 \quad 1}{- \quad + \quad - \quad +} \Rightarrow n \in [-1, 0] \cup [1, +\infty) \quad (I)$$

(۲)
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$$\text{عج: } |n| + n > 0 \rightarrow \begin{matrix} \text{II} \\ \text{III} \end{matrix} \Rightarrow D_f = [1, +\infty) \quad \checkmark$$

$$\text{ب) } ① |n| \neq 1 \Rightarrow n \neq \pm 1 \quad I$$

$$\text{② } |n-2| - n^2 > 0 \Rightarrow n^2 - |n-2| < 0 \Rightarrow \begin{matrix} n > 2 \Rightarrow n^2 - n + 2 < 0 \Rightarrow \Delta < 0 \Rightarrow \text{غیر ممکن} \\ n < 2 \Rightarrow n^2 + n - 2 < 0 \Rightarrow \frac{-2 \quad 1}{+ \quad - \quad +} \Rightarrow n \in [-2, 1] \quad \text{II} \end{matrix}$$

$$\text{II} \Rightarrow D_f = [-2, 1) - \{-1\} \quad \checkmark$$

$$\text{الف) } (n-2)[n-2] > 0 \Rightarrow \frac{2 \quad 2}{+ \quad - \quad +} \Rightarrow D_f = \mathbb{R} \quad \checkmark$$

(۲)
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$$\text{ب) } |n-1|[n-2] > 0 \Rightarrow \frac{1 \quad 2 \quad 2}{- \quad - \quad - \quad +} \Rightarrow D_f = [2, +\infty) \cup \{1\} \quad \checkmark$$

$$||x-r|-1|-K \neq 0 \Rightarrow | |x-r|-1 | \neq K \Rightarrow \begin{cases} |x-r|-1 \neq K \Rightarrow |x-r| \neq K+1 \\ |x-r|-1 \neq -K \Rightarrow |x-r| \neq 1-K \end{cases}$$

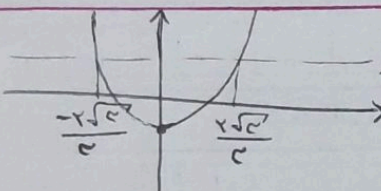
$$\Rightarrow \begin{cases} x-r \neq K+1 \Rightarrow x \neq K+r \\ x-r \neq -K-1 \Rightarrow x \neq 1-K \\ x-r \neq 1-K \Rightarrow x \neq r-K \\ x-r \neq K-1 \Rightarrow x \neq K+1 \end{cases} \xrightarrow[\text{مرد ندارد}]{\text{دانشه}} K+1 = r-K \Rightarrow K=1 \checkmark$$

$$D_f = R - \{-r, -1, 1\} \Rightarrow x=r \Rightarrow x^2 - 9x + 9 = 0 \Rightarrow (x-r)^2 = 0 \Rightarrow x=r \checkmark$$

یک ریشه دارد

$$\begin{array}{ll} x > 0 & \text{I} \\ x+1 > 0 \Rightarrow x > -1 & \text{II} \\ x+1 \neq 1 \Rightarrow x \neq 0 & \text{III} \end{array} \quad \log_{\frac{1}{x}} > 0 \Rightarrow \log_{\frac{1}{x}}^n > 0 \Rightarrow x < 1 \quad \text{IV}$$

😊 اشتباه نه $D_f = (0, 1) \checkmark$

$$-2 \leq x^2 - 1 \leq 2$$


$$\begin{array}{c} x^2 - 1 \leq 2 \\ x^2 \leq 3 \\ -\sqrt{3} \leq x \leq \sqrt{3} \end{array}$$

$$\Rightarrow D_f = \left[-\sqrt{3}, \sqrt{3} \right] \checkmark$$