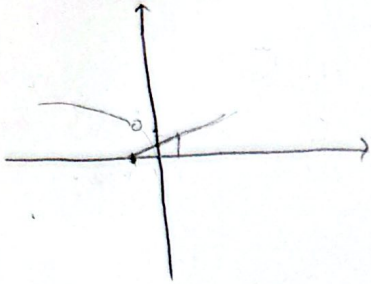


$$n = \begin{cases} \sqrt{x} - 1 & x \geq 1 \\ -\sqrt{x} & x < -1 \end{cases} \Rightarrow J_2 = \begin{cases} \frac{x-1}{2} & x \geq 1 \\ \sqrt{-x} & x < -1 \end{cases}$$



بالتحديد بالشكل التالي

$$f(x) \text{ : } -2, 3, \infty \quad \frac{n f(n-2)}{f(n)} \geq \quad \begin{array}{c} -2 \\ -\frac{1}{2} + \frac{1}{2} - \frac{1}{2} + \frac{1}{2} - \frac{1}{2} + \frac{1}{2} \end{array}$$

$$f(n-2) \text{ : } -2, \infty, 3$$

$$D_f = (-2, -2] \cup [3, 3) \cup [3, +\infty)$$

$$n^2 - 2n \neq 0 \Rightarrow n(n-2) = 0 \quad n(n-2)/(n-2) = 0 \quad D_f = \mathbb{R} - \{0, \pm 2\}$$

$$\frac{n^2 - 2n + 2}{n^2 - 2n} \geq \quad \begin{array}{c} -2 \\ -\frac{1}{2} + \frac{1}{2} - \frac{1}{2} + \frac{1}{2} \end{array} \quad D = (-2, 0) \cup (2, +\infty)$$

$$\frac{n-2}{n^2-2n^2-1} \geq \frac{n-2}{(n^2+1)(n-2)(n+2)} \quad \begin{array}{c} -2 \\ -\frac{1}{2} + \frac{1}{2} - \frac{1}{2} + \frac{1}{2} \end{array}$$

$$D_f = (-2, 2) \cup (2, +\infty)$$

$$f-2(-n) = \dots \quad [-n] \geq 2 \quad 2 \leq -n < 3 \quad -2 \leq n \leq -2$$

$$D_f = \mathbb{R} - (-2, -2]$$

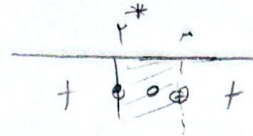
$$\frac{n(n-1)}{n(n-1)(n+1)} \geq \frac{-1}{-1+1-1+1} \quad D_f = [1, +\infty)$$

$$|n|+n > 0 \quad \begin{array}{c} \circ x \\ + \checkmark \\ - x \end{array}$$

ب) $|n-2| - n^2 \geq 0$ $|n-2| \geq n^2$ $\xrightarrow{n \geq 2} n^2 - n + 2 \leq 0 \rightarrow$ ~~مطلوبه~~ $\times$
 $\xrightarrow{n < 2} n^2 + n - 2 \leq 0$ $(n+2)(n-1) \leq 0$
 $\frac{-2}{+} \frac{1}{-} \rightarrow [-2, 1]$ $\textcircled{I}$

$|n| \neq 1$ $n \neq \pm 1$ $\cap I \rightarrow D_f = [-2, -1) \cup (-1, 1)$

ج) $(n-2)[n-2] \geq 0$



$D_f = \mathbb{R}$ - 9

د) $|n-1|[n-2] \geq 0$



$D_f = [2, +\infty) \cup \{1\}$

$||n-2| - 1| = k$ $|n-2| - 1 = \pm k$ $|n-2| = \pm k + 1$ - 7

$|n-2| = k+1 \rightarrow \begin{cases} n-2 = k+1 & n \geq k+3 \\ n-2 = -k-1 & n \leq -k+1 \end{cases}$

$k+1, -k+1$
 $2k+2, k, -1$

$|n-2| = -k+1 \rightarrow \begin{cases} n-2 = -k+1 & n \leq -k+3 \\ n-2 = k-1 & n \geq k+1 \end{cases}$

این حالت $k+1, -k+1$ نیز قابل قبول است زیرا در این حالت دو معادله داریم داشته
 $k=1 \leftarrow k+1, -k+3$ و $2, 0$ و $2, 0$
 $k=1 \leftarrow k+3, -k+1$ و $4, -2$ و $2, 0$

$n^2 + 2n + 2 \neq 0$ $(n+1)(n+2) \neq 0$ $\left. \begin{matrix} n \neq -1 \\ n \neq -2 \end{matrix} \right\} D_f = \mathbb{R} - \{-1, -2\}$ - 1
 $n+1 \neq 0$ $n \neq -1$
 $n-1 \neq 0$ $n \neq 1$
 $n=2$

$n^2 - 4n + 9 = 0$ $(n-2)^2 \geq 0$ $\rightarrow$ همیشه درست است

1) $x > 0$ و $x \neq 1$

2) $1 < \frac{1}{n} < 2 \rightarrow 0 < n < 1$ $\int D = (0, 1)$

3) $n+1 > 0$ $n > -1$
 $n \neq 0$

$$-a \leq n \leq r$$

$$-a \leq (n^2 - 1) \leq r$$

$$\sqrt{-1} \leq n^2 \leq r$$

-1

$$n^2 \leq r$$

$$n^2 \leq \frac{r}{r}$$

$$-\frac{\sqrt{r}}{r} \leq n \leq \frac{\sqrt{r}}{r}$$

$$D = \left[-\frac{\sqrt{r}}{r}, \frac{\sqrt{r}}{r} \right]$$

الس

-1