

این که اشغال رفیع میزنند مرسوم! بدقت مناسب شوند!

بجای خطی

$$\frac{1}{2} = \frac{1}{2} \rightarrow \alpha = 2$$

۲

$$x=3 \rightarrow 9a-18+3b+b=0 \rightarrow 12a+b=18 \xrightarrow{\alpha=2} 24+b=18 \rightarrow b=-6$$

$$\Delta=0 \xrightarrow{C=2-m^2} 4-4C=0 \rightarrow 4=4C \rightarrow 1=2-m^2 \rightarrow m^2=1 \rightarrow m=\pm 1$$

$$\Delta=0 \rightarrow 2 \text{ اختلاف}$$

$$4-x^2 \geq 0 \rightarrow x^2 \leq 4 \rightarrow -2 \leq x \leq 2 \mid P = [-2, 2]$$

$$\Rightarrow P = \{-2, -1, 0, 1, 2\}$$

$$\text{خرج} \neq 0 \rightarrow \text{خرج} = [x] + [-x] + 1 \neq 0 \rightarrow \Pi P = x \in \mathbb{Z}$$

$$[x] + [-x] \neq -1$$

سوال گفته شامل ضد عدد می باشد؟ (۵)

$$(الف) \quad x^3 + 3x^2 \geq 0 \rightarrow x^2(x+3) \geq 0 \quad x \begin{pmatrix} -3 \\ 0 \end{pmatrix} \Rightarrow P = [-3, +\infty)$$

$$= \frac{-3}{1} + \frac{0}{1} +$$

۱

$$(ب) \quad \text{ریشه ها} \rightarrow (1), (-1), (0), (0)$$

$$\text{ریشه ها} =$$

۱

$$\begin{array}{c|c|c|c|c|c} -3 & -1 & 0 & 1 & & \\ \hline - & + & - & + & + & + \end{array}$$

$$P = [-3, -1] \cup [0, +\infty) \setminus \{1\}$$

الف) $|x-2| - 3 \geq 0 \rightarrow |x-2| \geq 3 \rightarrow \begin{cases} x-2 \geq 3 \rightarrow x \geq 5 \\ x-2 \leq -3 \rightarrow x \leq -1 \end{cases}$ (5)

$P = (-\infty, -1] \cup [5, +\infty)$

ب) $4 - |2-x| \geq 0 \rightarrow |2-x| \leq 4 \rightarrow \begin{cases} 2-x \leq 4 \rightarrow x \geq -2 \\ 2-x \geq -4 \rightarrow x \leq 6 \end{cases}$

$P = [-2, 6]$

الف) $1 - x|x| \geq 0 \rightarrow x|x| \leq 1 \rightarrow \begin{cases} x > 0 \rightarrow x \leq 1 \\ x < 0 \rightarrow P_{\text{دست}} = R \end{cases}$ (5)

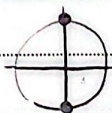
$P = (-\infty, 1]$

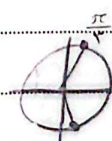
ب) $3 - |x-5| \geq 0 \rightarrow |x-5| \leq 3 \rightarrow 2 \leq x \leq 8$ (1/20)

$\begin{cases} x-5 \leq 3 \rightarrow x \leq 8 \\ x-5 \geq -3 \rightarrow x \geq 2 \end{cases} \Rightarrow \begin{cases} x-5 \leq 3 \rightarrow x \leq 8 \\ x-5 \geq -3 \rightarrow x \geq 2 \end{cases}$

$3 - |x-5| \neq 1 \rightarrow |x-5| \neq 2 \rightarrow \begin{cases} x-5 \neq 2 \rightarrow x \neq 7 \\ -x+5 \neq 2 \rightarrow x \neq 3 \end{cases}$

$P = [2, 8] - \{7\}$ وقتی 2 طرف از هم جدا می شود. در این صورت 7 و 3 را حذف می کنند.

الف) $\cos \neq 0$  $P = R - \{k\pi + \frac{\pi}{2}\}$ (7)

ب) $2\cos - 1 \neq 0 \rightarrow \cos \neq \frac{1}{2}$  $P = R - \{2k\pi - \frac{\pi}{3}, 2k\pi + \frac{\pi}{3}\}$ (2)

$$\text{الف)} \quad |2x+1| - |x+3| \neq 0 \rightarrow 4x^2 + 4x + 1 \neq x^2 + 6x + 9$$

(1)

$$3x^2 - 2x - 8 \neq 0$$

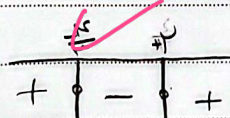
$$\rightarrow 3x^2 - 2x - 8 \neq 0$$

$$D_f = R - \left\{ -\frac{1}{3}, \frac{4}{3} \right\}$$

$$(x - \frac{4}{3})(x + \frac{1}{3}) \neq 0 \rightarrow x \neq \left\{ -\frac{1}{3}, \frac{4}{3} \right\}$$

$$\text{ب)} \quad |2x+1| \geq |x+3| \rightarrow 4x^2 + 4x + 1 \geq x^2 + 6x + 9$$

$$(2x - \frac{4}{3})(2x + \frac{2}{3}) \geq 0$$



$$D_f = (-\infty, -\frac{1}{3}] \cup [\frac{2}{3}, +\infty)$$

$$\text{I} \quad 2x-1 > 0 \rightarrow x > \frac{1}{2}$$

(9)

$$\text{II} \quad \log_{\frac{1}{2}}(2x-1) > 0 \rightarrow 2x-1 > 1 \rightarrow x > 1$$

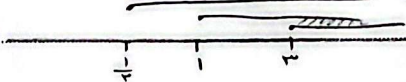
(1, 2.5)

$$\text{III} \quad \log_{\frac{1}{2}}(2x-1) \geq 0 \rightarrow \log_{\frac{1}{2}}(2x-1) \geq 1 \rightarrow 2x-1 \geq \frac{1}{2} \rightarrow x \geq \frac{3}{4}$$

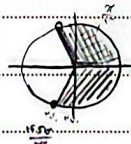
منابع ۵ و ۱۱ است پس مثبت معنی مریز

در سطح هفته ی قبل هم بود!

$$\text{I} \cap \text{II} \cap \text{III} \rightarrow D_f = [\frac{3}{4}, +\infty)$$



$$\text{الف)} \quad 2\cos\theta + 1 > 0 \rightarrow \cos\theta > -\frac{1}{2}$$



$$D_f = \left(\frac{2\pi}{3}, \frac{4\pi}{3} \right)$$

(10)

در اعداد بازه چنانچه کتا؟

(1, 2.5)

$$\text{ب)} \quad \frac{x-1}{x+1} > 0 \quad + \quad \frac{-1}{\frac{1}{2}} - \frac{1}{\frac{1}{2}} + \quad \text{و} \quad \log_{\frac{1}{2}} \frac{x-1}{x+1} \geq 0 \rightarrow \frac{x-1}{x+1} - 1 \geq 0 \rightarrow \frac{-2}{x+1} \geq 0$$

$$D_f = (-\infty, -1)$$

Arman

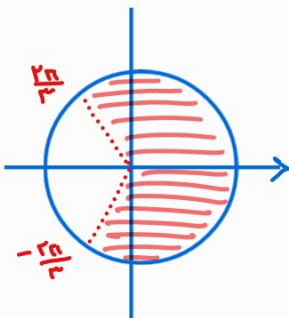
$$D_f = (-\infty, -1)$$

3- ب) $\frac{(n^2-1)(n^2-n^2)}{(n^2-1)} \geq 0 \rightarrow \frac{(n-1)(n+1)(n^2)(n-1)}{(n-1)(n^2+n+1)} \geq 0$
 $\begin{array}{ccccccc} & -1 & * & 0 & * & 1 & 3 \\ + & 0 & - & 0 & - & 0 & + \end{array}$

 $D_f = (-\infty, -1] \cup \{0\} \cup [3, +\infty)$ $\Delta < 0$ ریشه ندارد

4- ب) $3 - |n-5| \geq 0 \rightarrow |n-5| \leq 3 \rightarrow -3 \leq n-5 \leq 3 \rightarrow 2 \leq n \leq 8$
 $\sqrt{3-|n-5|} - 1 \neq 0 \rightarrow \sqrt{3-|n-5|} \neq 1 \rightarrow 3-|n-5| \neq 2 \rightarrow |n-5| \neq 2 \rightarrow n \neq 3, 7$
 $D_f = [2, 8] - \{3, 7\} = [2, 3) \cup (3, 7) \cup (7, 8]$

9) $\log_{\frac{1}{5}} \log_a^{n-1} \rightarrow n-1 > 0 \rightarrow n > \frac{1}{2}$
 $\log_{\frac{1}{5}}^{n-1} > 0 \rightarrow n-1 > 0 \rightarrow n-1 > 1 \rightarrow n > 2$
 $\log_{\frac{1}{5}} \log_{\frac{1}{5}}^{n-1} \geq 0 \xrightarrow[\text{منتهی به 0!}]{\text{منتهی به 0!}} \log_{\frac{1}{5}}^{n-1} \leq \frac{1}{2} \rightarrow \log_{\frac{1}{5}}^{n-1} \leq 1 \rightarrow n-1 \leq 5 \rightarrow n \leq 6 \rightarrow n \leq 3$
 $\hookrightarrow D_f = (1, 3]$

الف - 10 $C \cdot \sin u + 1 > 0 \rightarrow C \cdot \sin u > -\frac{1}{2}$


 $D_f = (2k\pi - \frac{\pi}{6}, 2k\pi + \frac{\pi}{6})$