

همان مجموعه می باشد که از آن α و β می باشد. $\alpha - 1$ بخش β است.

$$\text{---} \text{II, } \gamma_{\alpha}^{\mu} + \gamma_{\alpha}^{\nu} - \lambda \alpha + \nu \neq 0 \quad \rightarrow \gamma - \lambda + \nu + \nu = 0$$

$$\frac{x^3 - x^2 + x - 1}{x^3 - x^2 + x - 1} \cdot \frac{x-1}{x^2 - x + 1} \rightarrow (x-1)(x^2 - x + 1) \rightarrow D_f = \mathbb{R} - \{1\}$$

بـ 1 $x - r_n + r_{n-1} \neq 0 \Rightarrow (x-1) \underbrace{(a^r - a^{r+1})}_{\neq 0} \neq 0 \Rightarrow x \neq 1$

$$n^r - d|n-1| - r_{n-1} + d \neq 0 \Rightarrow n^r - d|n-1| - r_{n-1} + d = n^r - \sqrt{n-1} = (n-d)(n-r)$$

$$\text{ii) } n < 1 \Rightarrow |n-1| = -n+1 \Rightarrow n^r + 0 \cdot n - 0 - r n + 0 = n^r + r n = n(n+r)$$

الف $[-\infty, -r]_{\mathbb{R}} \Rightarrow [-\infty, r] \Rightarrow x \leq -r \quad D_f = (-\infty, -r]$

$$- [m] - r[m] - r \neq 0 \Rightarrow ([m] + 1)([m] - r) \neq 0$$

الف $[n - \frac{1}{n}] + [m + \frac{1}{m}] \geq 0$

$$\therefore [n - \frac{1}{r}] + [\frac{1}{r} - n] \geq 0 \quad \frac{1}{r} \quad \text{---} \quad D_C = \{ \frac{1}{r} \}$$

ان) $y = \frac{\cot x + 1}{\tan x + 1}$ $\cot x \Rightarrow x \neq k\pi$

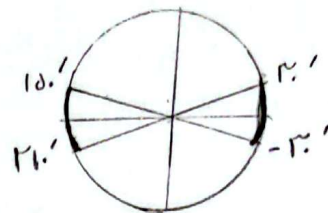
$\tan x + 1 \Rightarrow x \neq k\pi + \pi/2$

$\tan x + 1 \neq 0 \Rightarrow x \neq k\pi + \pi/4$

$D_f = \mathbb{R} - \{k\pi\} - \{k\pi + \pi/4\} - \{k\pi + \pi/2\}$

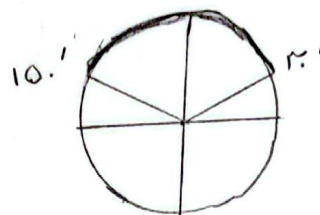
ب) $1 - \epsilon \sin^2 x \geq 0 \Rightarrow \sin^2 x \leq \frac{1}{\epsilon} \Rightarrow -\frac{1}{\sqrt{\epsilon}} \leq \sin x \leq \frac{1}{\sqrt{\epsilon}}$

$k\pi - \frac{\pi}{4} \leq x \leq k\pi + \frac{\pi}{4}$



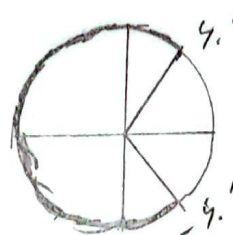
ان) $2 \sin x - 1 \geq 0 \Rightarrow \sin x \geq \frac{1}{2}$

$2k\pi + \frac{\pi}{6} \leq x \leq 2k\pi + \frac{5\pi}{6}$



ب) $1 - 2 \cos x \geq 0 \Rightarrow \cos x \leq \frac{1}{2}$

$2k\pi + \frac{\pi}{3} \leq x \leq 2k\pi - \frac{\pi}{3}$



ان) $-1 \leq x^2 + 3x + 1 \leq 1$

$-1 \leq x^2 + 3x + 1 \Rightarrow x^2 + 3x + 2 \geq 0 \Rightarrow (x+1)(x+2) \geq 0$

$\frac{-2}{+} \mid \frac{-1}{+}$

$[-\infty, -2] \cup [-1, +\infty)$

$x^2 + 3x + 1 \leq 1 \Rightarrow x^2 + 3x \leq 0 \Rightarrow x(x+3) \leq 0$

$\frac{-3}{+} \mid \frac{0}{+}$

$[-3, 0]$

$D_f = [-3, -2] \cup [-1, 0]$

ب) $0 \leq \sqrt{5-2x} \leq 1 \Rightarrow 0 \leq 5-2x \leq 1 \Rightarrow 5-2x \geq 0 \Rightarrow x \leq \frac{5}{2}$

$5-2x \leq 1 \Rightarrow 2x \geq 4 \Rightarrow x \geq 2$

$D_f = [2, +\frac{5}{2}]$

$[2, +\frac{5}{2}]$

الـ $1 - \lg_r^n > 0 \Rightarrow \lg_r^n < 1 \Rightarrow n < r$ $D_f = (0, r)$ -9

بـ $1 - \lg_{\frac{1}{r}}^n > 0 \Rightarrow \lg_{\frac{1}{r}}^n < 1 \Rightarrow n > \frac{1}{r}$ $D_f = (\frac{1}{r}, +\infty)$

الـ $r^{(n-r)} - 1 > 0 \Rightarrow r^{(n-r)} > r^r \Rightarrow (n-r) > r$ -10

$D_f = [r+1, +\infty)$

$\begin{array}{c} +1 \quad +r \\ | \quad | \\ + \quad - \quad + \end{array}$

بـ $(\frac{r_n + d}{r_n + \epsilon})!$ $r_n + \epsilon \neq 0 \Rightarrow n \neq -r$

$\frac{r_n + d}{r_n + \epsilon} \in \mathbb{W} \Rightarrow \frac{r_n + d}{r_n + \epsilon} = n \Rightarrow r_n + d = r_n n + \epsilon n$
 $\Rightarrow n = \frac{d - \epsilon n}{r_n - \epsilon}$

$D_f = \left\{ \frac{d - \epsilon n}{r_n - \epsilon} \mid n \in \mathbb{W} \right\} - \{-r\}$
 مجموعة قيم n التي تجعل $r_n + \epsilon \neq 0$