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△

$$f(x) = \sqrt{\log_{10} \log_{10} (1/x)}$$

$$|n-1\rangle_0 \Rightarrow |n\rangle_1 \Rightarrow n > \frac{1}{\gamma} \quad (I)$$

$$| \log^{(n-1)} \rangle_0 \Rightarrow | n-1 \rangle | \Rightarrow | n \rangle | \Rightarrow | n \rangle | \text{ (II)}$$

$$\log_{\omega} \log_{\omega}^{(Y_n-1)} \geq 0 \Rightarrow \log_{\omega}^{(Y_n-1)} \leq 1 \Rightarrow Y_n-1 \leq \omega \Rightarrow Y_n \leq \omega+1 \Rightarrow n \leq \omega+1 \quad (\text{III})$$

$$\frac{I \cap II \cap III}{\longrightarrow} D_f = (1, 3] \checkmark$$

$$\text{c) } y = \log(y \cos x + 1) \Rightarrow y \cos x + 1 \geq 0 \Rightarrow y \cos x \geq -1 \Rightarrow \cos x \geq \frac{-1}{y}$$

$\Rightarrow$  $\Rightarrow D_f = \left\{ \frac{1}{4}k\pi + \frac{1}{4}\pi, \frac{1}{4}k\pi + \frac{3}{4}\pi \right\}$

$$\text{c.) } y = \sqrt{\log \frac{x-1}{x+1}} \Rightarrow \frac{x-1}{x+1} > 0 \Rightarrow \frac{1}{x+1} - \frac{1}{x-1} \quad (II) \quad \underline{I \cap II} \rightarrow D_f = (-\infty, -1) \checkmark$$

$$\log \frac{z-1}{z+1} \rangle_0 \Rightarrow \frac{z-1}{z+1} \rangle_1 \Rightarrow \frac{z-1}{z+1} - 1 \rangle_0 \Rightarrow \frac{z-1-z-1}{z+1} \rangle_0 \Rightarrow \frac{-2}{z+1} \rangle_0 \Rightarrow \frac{-1}{1+\frac{1}{z}} \quad (II)$$

$y = \sqrt{(a+2)x^2 + ax + b}$
 $\xrightarrow{Df = (-\infty, 2]}$
 یک ریشه ۳ دارد و در دوطرف
 تغییر علامت داده پس
 $a+2=0 \Rightarrow a=-2$

$$y = \sqrt{-2x + b} \implies -2x + b \geq 0 \implies -2x + b = 0 \xrightarrow[\text{است}]{\substack{\text{برای} \\ \text{برابر} \\ x=3}} -2(3) + b = 0$$

$$\Rightarrow -9 + b = 0 \Rightarrow b = 9 \quad \checkmark$$

$y = \sqrt{x^2 + 2x + 1 - m^2}$ $\Delta \leq 0 \Rightarrow \varepsilon - \varepsilon(1)(2 - m^2) \leq 0$
 چون دامنه به ازای x جواب دارد و $\Delta \geq 0$ است
 جواب دارد پس $\Delta \leq 0$

$$\Rightarrow 1 - (1 - m^r) \leq 0 \Rightarrow 1 - 1 + m^r \leq 0 \Rightarrow m^r - 1 \leq 0 \Rightarrow$$

	-1	1
$P \leq 0$	+	-
	$\frac{1}{2}$	$\frac{1}{2}$

$$\Rightarrow m = [-1, 1] \Rightarrow \begin{matrix} \text{Min}(m) = -1 \\ \text{Max}(m) = 1 \end{matrix} \xrightarrow{\text{اختلاف}} 1 - (-1) = 2 \quad \checkmark$$

$y = \frac{\sqrt{8-x^2}}{[x]+[-x]+1} \Rightarrow [x]+[-x]+1 \neq 0 \Rightarrow \underbrace{[x]+[-x]}_{\substack{\text{برای اعداد صحیح} \\ \text{درست است}}} \neq -1 \Rightarrow \textcircled{\mathbb{Z}} \quad (I)$

$\sqrt{\varepsilon - x^2} \Rightarrow \varepsilon - x^2 \gg 0 \Rightarrow \varepsilon \gg x^2 \Rightarrow x \gg x \gg -x$

$$\Rightarrow I \cap II = D_f = \{-2, -1, 0, 1, 2\}$$