

1) $\cos n \neq 0 \rightarrow D_F = \mathbb{R} - \left\{ \frac{\pi}{2} + k\pi \right\}$ (10)

ب) $\cos n = 1 \rightarrow D_F = \mathbb{R} - \{2k\pi\}$ (5)

2) $\begin{cases} \cos n \neq 0 \\ \tan n \neq 1 \end{cases} \Rightarrow D_F = \mathbb{R} - \left\{ \frac{\pi}{2} + k\pi, \frac{\pi}{4} + k\pi \right\}$ (10)

ب) $\begin{cases} \cot n \neq 1 \\ \sin n \neq 1 \end{cases} \Rightarrow D_F = \mathbb{R} - \left\{ \frac{\pi}{2} + k\pi, \frac{\pi}{4} + k\pi \right\}$ (10)

3) $1 \leq n \leq \sqrt{2} \rightarrow D_F = [-\sqrt{2}, -1] \cup [1, \sqrt{2}]$ (10)

ب) $\begin{cases} -1 \leq \sqrt{n} - 2 \leq 1 \\ n \geq 0 \end{cases} \rightarrow D_F = [2, 17]$ (10)

4) $2 \leq |n| \leq 4 \rightarrow D_F = [-4, -2] \cup [2, 4]$ (1)

ب) $-2 \leq x^2 + 2x \leq 0 \rightarrow D_F = [-1, 0]$ (10)

5) $x > 2 \rightarrow x > 2, x < -2 \rightarrow D_F = (-\infty, -2) \cup (2, +\infty)$ (10)

ب) $x > 2 \rightarrow D_F = (2, +\infty)$ (10)

ب) $2 \leq |n| \rightarrow D_F = (-\infty, -2) \cup (2, +\infty)$ (10)

6) $\begin{cases} n > 2 \\ n > 3 \\ n \neq 4 \end{cases} \Rightarrow D_F = (2, 4) \cup (4, \infty)$ (10)

ب) $\begin{cases} n > 1, n < -1 \\ n > 2 \\ n \neq -2 \end{cases} \Rightarrow D_F = (-2, -1) \cup (1, +\infty) - \{-2\}$ (10)

7) $\log \frac{(n-1)(n-2)}{n-3} \Rightarrow \log n \neq 1 \Rightarrow n > 1 \rightarrow D_F = (1, +\infty) - \{2\}$ (10)

ب) $\begin{cases} \frac{n+2}{n-2} > 0 \\ n > 2 \\ n \neq 4 \end{cases} \Rightarrow D_F = (-\infty, -2) \cup (-2, 2) \cup (2, +\infty) - \{4\}$ (10)

٨) $\{x \mid x > 1\}$ $\checkmark$ $\rho_f \in [0, +\infty)$ $\rightarrow x-1 \leq 1$ $n \leq 1$ $D_f = (1, 1]$

١) $\begin{cases} \log x > \frac{1}{x} \\ x > 0 \end{cases} \rightarrow x > \frac{1}{\sqrt{x}}$ $D_f = (\sqrt{x}, +\infty)$ (110)

٩) $\varepsilon^n \neq -1$ $D_f = \mathbb{R}$ $\checkmark$

١) $\varepsilon^n \neq 1$ $D_f = \mathbb{R} \setminus \{0\}$ $\checkmark$

٢) $\varepsilon^n \neq 1$ $D_f = \mathbb{R} \setminus \{1\}$ (٩)

٣) $\varepsilon^n \neq 1$ $D_f = \mathbb{R} \setminus \{1, \sqrt[n]{\varepsilon}\}$ $\checkmark$
 $n \neq \log \varepsilon$

١٠) $(n+1) \in \mathbb{W}$ $\checkmark$ $D_f = [-\frac{1}{f}, +\infty)$

١) $\begin{cases} \frac{\varepsilon^n - 1}{\varepsilon^n - \omega} \checkmark \in \mathbb{W} \\ n \neq \frac{\omega}{f} \end{cases} (-\infty, \frac{\omega}{f}) \cup [\frac{\omega}{f}, +\infty)$ $D_f = \{x \mid x = \frac{k-1}{f}, k \in \mathbb{W}\}$

(1) $D_f = \{x \mid x = \frac{\omega k - 1}{f k - 1}, k \in \mathbb{W}\}$