

۱	الف) $\begin{cases} 2-x \geq 0 \rightarrow x \leq 2 \\ 9-\sqrt{2-x} \geq 0 \rightarrow 19 \geq 2-x \rightarrow 17 \leq x \end{cases} \rightarrow -14 \leq x \leq 17$ ب) $D = [-14, 2]$
۲	الف) $\begin{cases} 4-x^2 \geq 0 \rightarrow -2 \leq x \leq 2 \\ -\sqrt{2} \leq x \leq \sqrt{2} \end{cases} \rightarrow [-\sqrt{2}, \sqrt{2}]$ ب) $3 x - 9 \geq 0 \rightarrow x \geq 3 \rightarrow x \leq -3 \text{ or } x \geq 3$ $D = (-\infty, -3] \cup [3, +\infty)$
۳	الف) $x - 3 \neq 0 \rightarrow x \neq 3 \rightarrow x \neq \pm 3$ $D = \mathbb{R} - \{-3, 3\}$ ب) $\begin{cases} x \geq 0 \\ x \neq 9 \rightarrow \sqrt{x} - 3 = 0 \end{cases} \rightarrow [0, 9) \cup (9, +\infty)$
۴	الف) $\begin{cases} 3- x \geq 0 \rightarrow x \leq 3 \rightarrow -3 \leq x \leq 3 \\ \text{مخرج منفرجه} \end{cases} \rightarrow [-3, 3]$ ب) $\begin{cases} 4-x^2 \geq 0 \rightarrow x^2 \leq 4 \rightarrow -2 \leq x \leq 2 \\ x-1 \neq 0 \rightarrow x \neq 1 \rightarrow x \neq \pm 1 \end{cases} \rightarrow [-2, -1) \cup (-1, 1) \cup (1, 2]$
۵	الف) $\begin{cases} x+ x \geq 0 \\ x \neq x \neq 0 \end{cases} \rightarrow x \geq 0 \rightarrow [0, +\infty)$ ب) $x x \geq 0 \rightarrow x = x \rightarrow \sqrt{x^2} = \sqrt{x^2} = x = x$ $x \geq 0 \rightarrow D_f = (0, +\infty)$

الف) $2 - [x] \geq 0 \rightarrow 2 \geq [x] \rightarrow (-\infty, 3)$

5

$$\implies \sqrt{r-[a]} > 0 \implies r-[a] > 0 \implies r > [a]$$

(الف) $x[2] > 0$ ✓

$\therefore \theta_f = (-\infty, -1) \cup [1, \infty)$

ii) $-x[x]_{70} \rightarrow x[x]_{70} < 0 \rightarrow \emptyset$

1170

الف $\left[n + \frac{r}{p} - 1 \right] + \left[n + \frac{r}{p} \right] \geq 0 \rightarrow X \left[n + \frac{r}{p} \right] \geq 1$

$$40) D_f = \left[\frac{1}{p} + \infty \right] \checkmark \leftarrow \left[\alpha + \frac{r}{p} \right], \frac{1}{p}$$

$$x - \frac{1}{p} \in \mathbb{Z} \rightarrow \mathcal{A} = \{x \mid x = k + \frac{1}{p}, k \in \mathbb{Z}\}$$

(الف) $r \sin^2 \alpha \times \frac{1}{r} \rightarrow \sin^2 \alpha \times \frac{1}{r} \rightarrow \sin^2 \alpha \times \frac{1}{r}$
 $\therefore Df = R - \left\{ \frac{1}{r} + \frac{1}{r} \right\}$ 0.0 $\frac{\sqrt{r}}{r}$

$\tan \alpha + 1 \rightarrow \tan \alpha - 1 \rightarrow \text{---} \circledast \text{---}$, q, r, p, s
 $R_f = R \cdot \left\{ \frac{1}{1 + \frac{R}{E}} \right\} \perp$ 1, 2

الف) $2\sin x - 1 \geq 0 \rightarrow 2\sin x \geq 1 \rightarrow \sin x \geq \frac{1}{2}$

$$D_f = \left[PKR + \frac{\pi}{2}, PKR + \frac{\omega \pi}{4} \right]$$

1, 2

$\hookrightarrow 1 - \gamma \cos \alpha \xrightarrow{\gamma \rightarrow 0} 1, \gamma \cos \alpha \rightarrow \frac{1}{\gamma} \gamma \cos \alpha$

~~$$Q = \left[\frac{1}{\sqrt{2}} \frac{1}{\sqrt{2}} \right]$$~~