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الف $\sqrt{2-x} \leq 4$ $x \leq 2$ $[-14, 2]$
 $2-x \leq 14$ $-12 \leq x$
 $-14 \leq x$

ب $\sqrt{2-x} \leq 2$ $x \geq 2$ $[2, 11]$
 $2-x \leq 4$ $x \geq -2$ $2 \leq x \leq 11$

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الف $2(2-x)$ $\frac{-\sqrt{2}}{-1} + \frac{\sqrt{2}}{-1}$ $-\sqrt{2} \leq x \leq \sqrt{2}$ $[\sqrt{2}, \sqrt{2}]$

ب $9 \leq |x|$ $\frac{-2}{+} - \frac{2}{-} +$ $(-\infty, -2] \cup [2, \infty)$
 $3 \leq x$ $x \leq -3$

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الف $\sqrt{\frac{|x|+1}{|x|-2}}$ $|x| \neq 2$ $x \neq 2, -2$ $D_f: \mathbb{R} - \{2, -2\}$

ب $\sqrt{\frac{\sqrt{x}+1}{\sqrt{x}-2}}$ $0 \leq x$ $D_f: [0, \infty) - \{4\}$
 $\sqrt{x} \neq 2$ $x \neq 4$

(4)

الف $|x| \leq 3$ $|x| \neq -2$ $[-3, 3]$
 $-3 \leq x \leq 3$

ب $(1-x)(1+x) \geq 0$ $\frac{-2}{-1} + \frac{2}{1}$ $[-2, 2] - \{1, -1\}$
 $|x| \neq 1$ $x \neq 1, -1$ (5)

الف $x+|x| > 0$ $D_f: \mathbb{R}^+$ $(0, \infty)$
 ب $x|x| > 0$ $D_f: \mathbb{R}^+$ $(0, +\infty)$

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الف $[x] \leq 2$ $[x] \leq 2$
 $x \leq 3$ $x \leq 2$
 $(-\infty, 3)$ $(-\infty, 2)$

الف) $\frac{1}{x[n]} \quad x[n] \neq 0 \quad D_f = \mathbb{R} - \{0\} \quad -V$

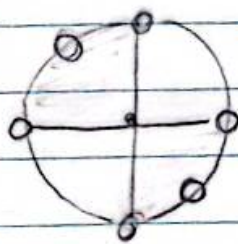
ب) $\frac{1}{\sqrt{x[n]}} \quad D_f \text{ غير } \emptyset$

الف) $\sqrt{\left[n - \frac{1}{f}\right] + \left[n + \frac{1}{f}\right]} \quad x \geq \frac{1}{f} \quad D_f = \left[\frac{1}{f}, +\infty\right)$
 $\left\lceil \left[n + \frac{1}{f}\right] - 1 \right\rceil \geq 0 \quad \left\lceil \left[n + \frac{1}{f}\right] \right\rceil \geq \frac{1}{f} \quad x + \frac{1}{f} \geq 1 \quad x \in \mathbb{Z} \rightarrow$
 $\{n\} + \{-n\} < \quad x \neq \mathbb{Z} \rightarrow$
 ب) $\sqrt{\left[n - \frac{1}{f}\right] + \left[n + \frac{1}{f}\right]} \quad \left[n - \frac{1}{f}\right] + \left[-\left(n - \frac{1}{f}\right)\right] \in \mathbb{Z}$

$D_f\left(x \mid x \leq k + \frac{1}{f}, k \in \mathbb{Z}\right) \quad x - \frac{1}{f} \in \mathbb{Z}$

الف) $\sin^2 x \neq 1 \quad D_f = \mathbb{R} \quad -9$
 $\sin^2 x \neq \frac{1}{f}$
 $\sin x \neq \pm \frac{1}{\sqrt{f}}$

ب) $\cot = \frac{\cos}{\sin} \quad \sin x \neq 0 \quad \tan = \frac{\sin}{\cos} \quad \cos \neq 0$
 $\tan \neq 1$



$D_f = \mathbb{R} - \left\{k\pi, k\pi + \frac{\pi}{f}, k\pi + \frac{\pi}{2}\right\}$

الف) $|\sin x| \geq 1 \rightarrow \sin x \geq \frac{1}{f} \quad D_f = \left[k\pi + \frac{\pi}{4}, k\pi + \frac{3\pi}{4}\right]$



ب) $1 \geq |\cos x| \geq \frac{1}{f} \quad D_f = \left[k\pi + \frac{\pi}{4}, k\pi - \frac{\pi}{4}\right]$

