

<p>الف) $2 - a \geq 0$ $a \leq 2$</p> <p>$\sqrt{2-a} \geq 0$ $2-a \leq 4$ $2-a \leq 16$ $-a \leq 14$ $a \geq -14$</p> <p>$D_f = [-14, 2]$</p>	<p>ب) $a - 2 \geq 0$ $a \geq 2$ $2 - \sqrt{a-2} \geq 0$ $2 \geq \sqrt{a-2}$ $4 \geq a-2$ $a \leq 6$</p> <p>$D_f = [2, 6]$</p>
<p>الف) $\sqrt{2-a} \geq 0$... $2-a \leq 4$ $-\sqrt{2} \leq a \leq \sqrt{2}$</p> <p>$D_f = [-\sqrt{2}, \sqrt{2}]$</p>	<p>ب) $3 a - 9 \geq 0$ $a \geq 3$ $a \leq -3$ $a \geq 3$</p> <p>$D_f = \mathbb{R} - (-3, 3)$</p>
<p>الف) ... $2 - 2 \neq 0$ $2 \neq 2$ $a \neq 2, -2$</p> <p>$D_f = \mathbb{R} - \{2, -2\}$</p>	<p>ب) $a > 0$ $\sqrt{a-2} \neq 0$ $\sqrt{a} \neq 2$ $a \neq 4$</p> <p>$D_f = [0, 4) \cup (4, \infty)$</p>
<p>الف) $2 - a \geq 0$ $2 \geq a$ $-2 \leq a \leq 2$</p> <p>$D_f = [-2, 2]$</p> <p>تشریح: ...</p>	<p>ب) $\sqrt{2-a} \geq 0$ $2-a \leq 4$ $-2 \leq a \leq 2$ $a - 1 \neq 0$ $a \neq 1, -1$</p> <p>$D_f = [-2, -1) \cup (-1, 1) \cup [1, 2]$</p>
<p>الف) $a + a \geq 0$ \checkmark \checkmark \times \times</p> <p>$D_f = (0, \infty)$</p>	<p>ب) $a a \geq 0$ \times \times \checkmark</p> <p>$D_f = [0, \infty)$</p>

<p>الف) $\begin{cases} r - [a] \geq 0 \\ r \geq [a] \\ [a] \leq r \end{cases} \quad D_p = (-\infty, r)$</p>	<p>ب) $\begin{cases} r - [a] > 0 \\ [a] < r \end{cases} \quad D_p = (-\infty, r)$</p>	<p>6</p>
<p>الف) $\begin{cases} a[n] \neq 0 \\ a \neq 0 \\ [a] \neq 0 \\ 0 \leq a < 1 \end{cases}$ $D_p = (-\infty, 0) \cup [1, \infty)$</p>	<p>ب) $\begin{cases} -a[n] > 0 \\ a[n] < 0 \end{cases}$ همبستگی کمتر از $-x \rightarrow -$ و فزود $-x_0 \rightarrow 0$ بیشتر $+x_0 \rightarrow 0$ $+x \rightarrow +$ $D_p = \emptyset$</p>	<p>7</p>
<p>الف) $\begin{cases} [a + \frac{1}{r}] + [a + \frac{1}{r} - 1] \geq 0 \\ [a + \frac{1}{r}] \geq 1 \\ [a + \frac{1}{r}] \geq 1 \\ a + \frac{1}{r} \geq 1 \\ [a] \geq \frac{1}{r} \end{cases}$ $D_p = [\frac{1}{r}, \infty)$</p>	<p>ب) $\begin{cases} [a - \frac{1}{r}] + [-a + \frac{1}{r}] \geq 0 \\ [a] + [-a] \geq 0 \end{cases}$ برای اعداد صحیح دو عدد صحیح -1 پس $a - \frac{1}{r} \in \mathbb{Z} \rightarrow a \in \mathbb{Z} \rightarrow D_p = \{a \in \mathbb{R} \mid a = k + \frac{1}{r}, k \in \mathbb{Z}\}$</p>	<p>8</p>
<p>الف) $\begin{cases} \sin^2 a - 1 \neq 0 \\ \sin^2 a \neq 1 \\ \sin^2 a \neq \frac{1}{r} \\ \sin^2 a \neq \frac{1}{r} \end{cases} \quad D_p = \mathbb{R} - \left\{ k\pi + \frac{\pi}{2}, k\pi + \frac{3\pi}{2}, k \in \mathbb{Z} \right\}$</p>	<p>ب) $\begin{cases} \cot a, \tan a \neq 0 \\ \tan a + 1 \neq 0 \rightarrow a \neq \frac{k\pi}{r} \\ \tan a \neq -1 \rightarrow a \neq \frac{k\pi}{r} \end{cases} \quad D_p = \mathbb{R} - \left\{ \frac{k\pi}{r}, \frac{k\pi}{r} - \frac{\pi}{r} \right\} \quad k \in \mathbb{Z}$</p>	<p>9</p>
<p>الف) $\begin{cases} \sin^2 a - 1 \geq 0 \\ \sin^2 a \geq 1 \\ \sin^2 a \geq \frac{1}{r} \end{cases}$ $D_p = \left[k\pi + \frac{\pi}{2}, k\pi + \frac{3\pi}{2} \right]$ $k \in \mathbb{Z}$</p>	<p>ب) $\begin{cases} 1 - \cos a \geq 0 \\ 1 \geq \cos a \\ \cos a \leq \frac{1}{r} \\ k \in \mathbb{Z} \end{cases}$ $D_p = \left[k\pi + \frac{\pi}{r}, k\pi + \frac{\pi}{r} \right]$</p>	<p>10</p>