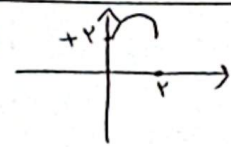
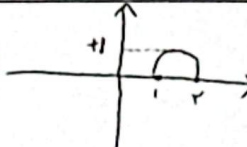
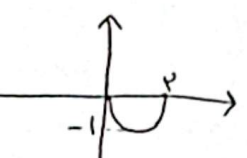


الف)  ب) 	ج)  د) 	1
الف) $x = \frac{\omega \pm \sqrt{\omega^2 - 4}}{2} = 3, 2$ $\frac{2}{+d} - \frac{3}{-d} +$ $D_f = (-\infty, 2) \cup (3, +\infty)$ ب) $\frac{1}{+d} - \frac{\omega}{-d} +$ $D_f = (1, \omega)$	ج) $\frac{-1}{+d} - \frac{-\omega}{-d} +$ $D_f = [-\infty, -\omega] \cup [-1, +\infty)$ د) $\frac{-1}{+d} - \frac{\omega}{-d} +$ $D_f = [1, \omega]$	2
الف) $\frac{(x-1)(x-2)}{+1+2} \rightarrow$ ریشه صورت $x-2=0 \Rightarrow x=2 \rightarrow$ ریشه منفرجه $\frac{1}{-d} + \frac{2}{+d} - \frac{\omega}{-d} +$ $D_f = (-\infty, 1) \cup (2, \omega)$	ب) $x^2 - 1 = 0 \Rightarrow x^2 = 1 \Rightarrow x = \pm 1 \rightarrow$ ریشه صورت $\frac{(x-1)(x-\omega)}{+1+\omega} \rightarrow$ ریشه منفرجه $\frac{-1}{+d} - \frac{1}{-d} - \frac{\omega}{-d} +$ $D_f = (-\infty, -1] \cup (\omega, +\infty)$	3
الف) $\frac{x^3 - 1}{x^3 - x} > 0$ $x^3 - 1 = 0 \Rightarrow x^3 = 1 \Rightarrow x = 1 \rightarrow$ ریشه صورت $x^3 - x = 0 \Rightarrow x(x^2 - 1) = 0 \Rightarrow x(x-1)(x+1) = 0$ $\frac{-1}{+d} - \frac{0}{-d} + \frac{1}{+d} +$ $D_f = (-\infty, -1) \cup (0, +\infty) - \{1\}$	ب) $\frac{x^2 - 14}{x^2 - \omega x + 4} > 0$ $x^2 - 14 = 0 \Rightarrow x^2 = 14 \Rightarrow x = \pm \sqrt{14} \rightarrow$ ریشه صورت $\frac{(x-1)(x-\omega)}{+1+\omega} \rightarrow$ ریشه منفرجه $\frac{-4}{+d} - \frac{1}{-d} + \frac{4}{+d} +$ $D_f = (-\infty, -\sqrt{14}) \cup (\sqrt{14}, +\infty) - \{\omega\}$	4
الف) $x - m > 0 \Rightarrow m < x$ $x - \sqrt{2-m} > 0 \Rightarrow x > \sqrt{2-m}$ $\Rightarrow x - m < 14 \Rightarrow m < 14$ $-14 < m < 14$ $D_f = [-14, 14]$	ب) $x - 2 > 0 \Rightarrow m > 2$ $3 - \sqrt{m-2} > 0$ $\Rightarrow \sqrt{m-2} < 3$ $\Rightarrow m - 2 < 9$ $\Rightarrow m < 11$ $2 < m < 11$ $D_f = [2, 11]$	5

الف) $\{x - 2x^2\} \geq 0$ $2x^2 \leq 4 \Rightarrow x^2 \leq 2$ $\Rightarrow -\sqrt{2} \leq x \leq \sqrt{2}$ $D_f = [-\sqrt{2}, \sqrt{2}]$	6
الف) $m - 3 \neq 0$ $\Rightarrow m \neq 3$ $\Rightarrow m \neq \pm 3$ $D_f = \mathbb{R} - \{\pm 3\}$	7
الف) $\sqrt{\cos x} - 1 \neq 0$ $\Rightarrow \sqrt{\cos x} \neq 1 \Rightarrow \cos x \neq 1$ $D_f = \mathbb{R} - \{2k\pi - \frac{\pi}{2}, 2k\pi + \frac{\pi}{2}\}$ ب) $\sqrt{\sin x} + 1 \neq 0 \Rightarrow \sqrt{\sin x} \neq -1$ $\Rightarrow \sin x \neq -1$ $D_f = \mathbb{R} - \{2k\pi - \frac{\pi}{2}, 2k\pi - \frac{3\pi}{2}\}$	8
$\sqrt{ x-2 } - \frac{1}{x} > 0$ $\sqrt{ x-2 } > \frac{1}{x}$ $x-2 > \frac{1}{x^2}$ $x-2 > \frac{1}{x^2} \Rightarrow x > \frac{2}{x^2}$ $x-2 < -\frac{1}{x^2} \Rightarrow x < \frac{2}{x^2}$ $\Rightarrow D_f = (-\infty, \frac{2}{x^2}) \cup (\frac{2}{x^2}, +\infty)$	9
الف) $\{x - 2 m \} \geq 0$ $\sqrt{ m } \leq 4$ $m \leq 2$ $-2 \leq m \leq 2$ $\Rightarrow D_f = [-2, 2]$	10