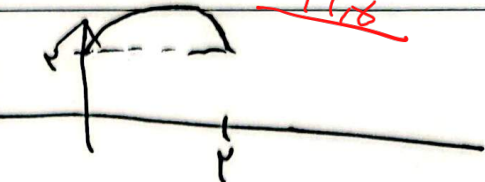
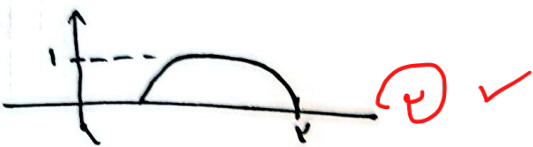


(ب) 	(الف) 	1
(د) 	(ج) 	1
$x^2 - 6x + 5 < 0 \rightarrow (x-1)(x-5) < 0$ 1 5 + - + (1, 5) (2)	$x^2 - 6x + 5 > 0 \rightarrow (x-1)(x-5) > 0$ 1 5 + - + $(-\infty, 1) \cup (5, +\infty)$	1
$x^2 - 6x + 5 < 0 \rightarrow (x-1)(x-5) < 0$ 1 5 + - + $[1, 5]$	$x^2 + 6x + 5 \geq 0 \rightarrow (x+1)(x+5) \geq 0$ -5 -1 + - + $(-\infty, -5] \cup [-1, +\infty)$	1
$\frac{x^2 - 1}{x^2 - 6x + 5} \geq 0 \rightarrow \frac{(x-1)(x+1)}{(x-1)(x-5)} \geq 0$ -1 1 5 + - 0 - 0 + $(-\infty, -1) \cup (1, 5) \cup (5, +\infty)$ 1, 5	سریار از آن باز باید بکنیم $\frac{x^2 - 3x + 2}{x - 5} \geq 0 \rightarrow \frac{(x-1)(x-2)}{x-5} \geq 0$ 1 2 5 + - 0 - 0 + $(1, 5) \cup (5, +\infty)$	3
$x^2 - 1 \leq (x-4)(x+3)$ $x^2 - 6x + 5 \leq (x-1)(x-5)$ -5 1 + - 0 - 0 + $(-\infty, -5) \cup (1, 5) \cup (5, +\infty)$ $(0, +1) \cup (1, 5) \cup (5, +\infty)$	(الف) $\frac{x^3 - 1}{x^3 - x} \rightarrow \frac{x^3 - 1}{x^3 - x} \neq 0$ $x^3 - 1 \leq (x-1)(x^2 + x + 1)$ $\frac{x^3 - 1}{x^3 - x} \geq 0$ -1 0 1 + 0 - 0 + $(-\infty, -1) \cup (0, 1) \cup (1, +\infty)$	4
$y = \sqrt{3 - \sqrt{x-2}} \rightarrow x-2 \geq 0 \rightarrow x \geq 2$ $3 - \sqrt{x-2} \geq 0 \rightarrow 3 \geq \sqrt{x-2}$ $9 \geq x-2 \rightarrow 11 \geq x$ $2 \leq x \leq 11 \rightarrow D_f = [2, 11]$	(الف) $x - m \geq 0 \rightarrow x \geq m$ $3 - \sqrt{x-2} \geq 0 \rightarrow 3 \geq \sqrt{x-2}$ $\Rightarrow 14 \geq x-2 \rightarrow x \leq 16$ $D_f = [-14, 2]$	5

$y = \sqrt{3 x-9 } \rightarrow 3 x-9 \geq 0$ $3 x-9 \geq 9 \rightarrow x-9 \geq 3$ $(-8, -3] \cup [3, +\infty)$	$\sqrt{4-2x^2} \geq 0 \rightarrow 4-2x^2 \geq 0$ $4-2x^2 \geq 0 \rightarrow x^2 \leq 2 \rightarrow x \in [-\sqrt{2}, \sqrt{2}]$ $D_f = [-\sqrt{2}, \sqrt{2}]$	٤
$\sqrt{x} \geq 0 \rightarrow x \geq 0$ $\sqrt{x-3} \neq 0 \Rightarrow \sqrt{x} \neq 3 \Rightarrow x \neq 9$ $D_f = [0, +\infty) - \{9\}$	الف) $\sqrt{x-3} \neq 0 \Rightarrow x-3 \neq 0 \Rightarrow x \neq 3$ $\Rightarrow x \neq 3, x \neq -3$ $D_f = \mathbb{R} - \{3, -3\}$	٧
$r \sin n + 1 \neq 0 \Rightarrow r \sin n \neq -1$ $\sin n \neq -\frac{1}{r} \Rightarrow D_f = \mathbb{R} - \{n\pi + \frac{3\pi}{2}, n\pi + \frac{5\pi}{2}\}$	الف) $r \cos n - 1 \neq 0 \rightarrow r \cos n \neq 1$ $\cos n \neq \frac{1}{r} \rightarrow D_f = \mathbb{R} - \{n\pi \pm \frac{\pi}{3}\}$	٨
$r \sin^2 n - 3 \neq 0 \rightarrow r \sin^2 n \neq 3$ $\sin^2 n \neq \frac{3}{r} \rightarrow \sin n \neq \pm \sqrt{\frac{3}{r}} \Rightarrow D_f = \mathbb{R} - \{n\pi \pm \arcsin(\sqrt{\frac{3}{r}})\}$	ب) $y = \tan n + r$ $\tan n \neq -\frac{r}{1} \rightarrow \cos n \neq 0$ $\sin n \neq 0$ $\cos n \neq 1$ $D_f = \mathbb{R} - \{k\pi, \frac{\pi}{2} + k\pi, \pi + k\pi, \frac{3\pi}{2} + k\pi\}$	٩
$y = \frac{1}{\sqrt{2 x-2 - \frac{1}{2}}} \Rightarrow 2 x-2 - \frac{1}{2} > 0 \Rightarrow 2 x-2 > \frac{1}{2}$ $ x-2 > \frac{1}{4} \Rightarrow x-2 < -\frac{1}{4} \text{ or } x-2 > \frac{1}{4}$ $x < \frac{7}{4} \text{ or } x > \frac{9}{4}$ $D_f = (-\infty, \frac{7}{4}) \cup (\frac{9}{4}, +\infty)$	الف) $y = \sqrt{4-2 x }$ $4-2 x \geq 0 \Rightarrow 2 \geq x $ $-2 \leq x \leq 2 \Rightarrow D_f = [-2, 2]$	١٠