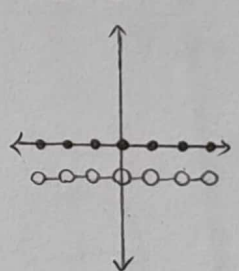
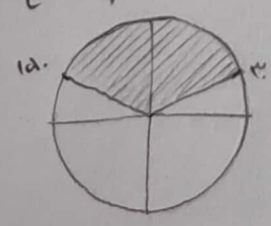
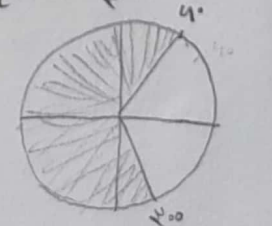


$x - 2 \geq 0 \rightarrow x \geq 2$ $\sqrt{x-2} \geq 0 \rightarrow \sqrt{x-2} \leq 4$ $x - 2 \leq 14 \rightarrow x \leq 16$ $-14 \leq x \leq 2$ $D_f = [-14 \ 2]$ (الف)	$x - 2 \geq 0 \rightarrow x \geq 2$ $3\sqrt{x-2} \geq 0 \rightarrow \sqrt{x-2} \leq 4 \rightarrow x - 2 \leq 16 \rightarrow x \leq 18$ $2 \leq x \leq 18$ $D_f = [2 \ 18]$ (ب)	۱
$x - 2x^2 \geq 0 \rightarrow 2x^2 \leq x \rightarrow x^2 \leq \frac{x}{2} \rightarrow \sqrt{x} \leq \sqrt{\frac{x}{2}} \rightarrow \sqrt{x} \leq \frac{\sqrt{x}}{\sqrt{2}} \rightarrow \sqrt{x} \leq \sqrt{2}$ $D_f = [\sqrt{2} \ \sqrt{2}]$ (الف)	$3 x - 9 \geq 0 \rightarrow 3 x \geq 9 \rightarrow x \geq 3$ $D_f = (-\infty -3] \cup [3 +\infty)$ (ب)	۲
$ x - 3 \neq 0 \rightarrow x \neq 3 \rightarrow x \neq 3, -3$ $D_f = \mathbb{R} - \{3, -3\}$ (الف)	$x \geq 0$ $\sqrt{x} \neq 3 \rightarrow x \neq 9$ $D_f = [0 +\infty) - \{9\}$ (ب)	۳
$ x + 2 \rightarrow$ همیشه مثبت $3 - x \geq 0 \rightarrow x \leq 3 \rightarrow -3 \leq x \leq 3$ $D_f = [-3 \ 3]$ (الف)	$ x - 1 \neq 0 \rightarrow x \neq 1 \rightarrow x \neq 1, -1$ $x - x^2 \geq 0 \rightarrow x^2 \leq x \rightarrow -2 \leq x \leq 2$ $D_f = [-2 \ 2] - \{1, -1\}$ (ب)	۴
$x + x > 0$ $ x > -x$ $D_f = \mathbb{R}^+$ (الف)	$x x > 0$ $D_f = \mathbb{R}^+$ (ب)	۵

$\forall -[x] > 0 \rightarrow [x] < \forall$ $D_f = (-\infty \quad \forall)$	$\forall -[x] > 0 \rightarrow [x] < \forall$ $D_f = (-\infty \quad \forall)$	6
(الف) ب)	(الف) ب)	
$x[x] \neq 0$ $\oplus \checkmark$ $\ominus \checkmark$ $\odot \times$ $D_f = \mathbb{R} - \{0\}$	$-x[x] > 0$ $\oplus \times$ $\ominus \times$ $\odot \times$ $D_f = \emptyset$	7
(الف) ب)	(الف) ب)	
$\forall [x] + \frac{1}{x} > 0 \quad [x] > -\frac{1}{x}$ $D_f = [0 \quad +\infty)$	$[x] + [-x] > 0$ $D_f = \mathbb{Z}$ 	8
(الف) ب)	(الف) ب)	
$\forall \sin^2 x - 1 \neq 0 \rightarrow \sin^2 x \neq \frac{1}{\forall} \rightarrow \sin x \neq \pm \frac{1}{\forall} = \pm \frac{\sqrt{\forall}}{\forall}$ $D_f = \mathbb{R} - \left\{ \frac{k\pi}{\forall} \pm \frac{\pi}{\forall} \right\}$	$\tan x \neq -1 \rightarrow k\pi - \frac{\pi}{2}$ $\frac{\sin}{\cos} \rightarrow \cos \neq 0 \rightarrow k\pi + \frac{\pi}{2}$ $D_f = \mathbb{R} - \left\{ k\pi + \frac{\pi}{\forall}, k\pi - \frac{\pi}{\forall} \right\}$	9
(الف) ب)	(الف) ب)	
$\forall \sin x - 1 > 0 \rightarrow \sin x > \frac{1}{\forall}$ $D_f = \left[k\pi + \frac{\pi}{4} \quad k\pi + \frac{3\pi}{4} \right]$ 	$1 - \forall \cos x > 0 \quad \cos x < \frac{1}{\forall}$ $D_f = \left[k\pi + \frac{\pi}{4} \quad k\pi + \frac{7\pi}{4} \right]$ 	10
(الف) ب)	(الف) ب)	