

$x - 2 \geq 0 \Rightarrow x \geq 2$ $\sqrt{x-2} \geq 0 \Rightarrow \sqrt{x-2} \leq 4$ $2 - x \leq 14 \Rightarrow x \geq -14$ $-14 \leq x \leq 2$ $D_f = [-14 \ 2]$ (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
$x - 2x^2 \geq 0 \Rightarrow 2x^2 \leq x \Rightarrow x^2 \leq \frac{x}{2} \Rightarrow \sqrt{x} \leq \sqrt{\frac{x}{2}} \Rightarrow \sqrt{x} \leq \frac{\sqrt{x}}{\sqrt{2}} \Rightarrow \sqrt{x} \leq \sqrt{2} \Rightarrow x \leq 2$ $D_f = [\sqrt{2} \ \sqrt{2}]$ (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$ صراحتاً 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

$\sqrt{[x]} > 0 \rightarrow [x] < \sqrt{}$ $D_f = (-\infty, \sqrt{})$	$\sqrt{[x]} > 0 \rightarrow [x] < \sqrt{}$ $D_f = (-\infty, \sqrt{})$	$\sqrt{}$
$x[x] \neq 0$ $D_f = \mathbb{R} - \{0\}$	$-x[x] > 0$ $D_f = \emptyset$	$\sqrt{}$
$\sqrt{[x]} + \frac{1}{\sqrt{}} > 0$ $D_f = [0, +\infty)$	$[x] + [-x] > 0$ $D_f = \mathbb{Z}$	$\sqrt{}$
$\sqrt{\sin^2 x - 1} \neq 0 \rightarrow \sin^2 x \neq \frac{1}{\sqrt{}} \rightarrow \sin x \neq \pm \frac{1}{\sqrt{}} = \pm \frac{\sqrt{}}{\sqrt{}}$ $D_f = \mathbb{R} - \left\{ \frac{k\pi}{\sqrt{}} \pm \frac{\pi}{\sqrt{}} \right\}$	$\tan x \neq -1 \rightarrow k\pi - \frac{\pi}{\sqrt{}}$ $\frac{\sin}{\cos} \rightarrow \cos \neq 0 \rightarrow k\pi + \frac{\pi}{\sqrt{}}$ $D_f = \mathbb{R} - \left\{ k\pi + \frac{\pi}{\sqrt{}}, k\pi - \frac{\pi}{\sqrt{}} \right\}$	$\sqrt{}$
$\sqrt{\sin x - 1} > 0 \rightarrow \sin x > \frac{1}{\sqrt{}}$ $D_f = \left[k\pi + \frac{\pi}{\sqrt{}}, k\pi + \frac{\pi}{\sqrt{}} \right]$	$1 - \sqrt{\cos x} > 0 \rightarrow \cos x < \frac{1}{\sqrt{}}$ $D_f = \left[k\pi + \frac{\pi}{\sqrt{}}, k\pi + \frac{\pi}{\sqrt{}} \right]$	$\sqrt{}$