

الف) $y = \sqrt{4-2 x } \rightarrow 4-2 x \geq 0$ $2 x \leq 4$ $x \leq 2$ $x \in [-2, 2]$ $Df = [-2, 2]$	ب) $y = \sqrt{3 x -9}$ $3 x -9 \geq 0$ $3 x \geq 9$ $x \geq 3$ $x \in (-\infty, -3] \cup [3, +\infty)$	٤
الف) $y = \frac{\sqrt{ x +1}}{ x -3}$ $x \neq 3$ $x \neq -3, 3$ $Df = \mathbb{R} - \{-3, 3\}$	ب) $y = \frac{\sqrt{\sqrt{x}+1}}{\sqrt{x}-3}$ $\sqrt{x}+1 \geq 0 \rightarrow \sqrt{x} \geq -1$ $x \geq 0$ $\sqrt{x}-3 \neq 0 \rightarrow \sqrt{x} \neq 3$ $x \neq 9$ $Df = [0, +\infty) - \{9\}$	٧
الف) $y = \cos x \neq \frac{1}{2}$ $\cos x \neq \frac{1}{2}$ $Df = \mathbb{R} - \{2k\pi \pm \frac{\pi}{3}\}$ ج) $y = \tan x + 1$ $\tan x \neq -1$ $Df = \mathbb{R} - \{\frac{k\pi}{2} \pm \frac{3\pi}{4}\}$	ب) $y = \frac{\cos x + 1}{\sin x + 1}$ $\sin x + 1 \neq 0 \rightarrow \sin x \neq -1$ $Df = \mathbb{R} - \{2k\pi \pm \frac{3\pi}{2}\}$ ج) $y = \frac{\sin x + 1}{\sin x - 3}$ $\sin x - 3 \neq 0 \rightarrow \sin x \neq 3$ $Df = \mathbb{R} - \{2k\pi \pm \frac{\pi}{2}\}$	٨
الف) $y = \frac{1}{\sqrt{2 x-2 -\frac{1}{2}}}$ $2 x-2 -\frac{1}{2} > 0$ $2 x-2 > \frac{1}{2}$ $x-2 > \frac{1}{4}$ $x < \frac{7}{4}$ $x > \frac{9}{4}$ $Df = (-\infty, \frac{7}{4}) \cup (\frac{9}{4}, +\infty)$	ب) $y = \frac{\sqrt{ x }}{ x }$ $x > 0$ $Df = \mathbb{R} - \{0\}$	٩
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