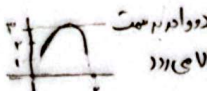
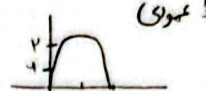
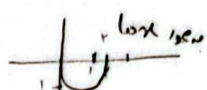
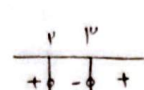
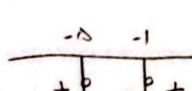
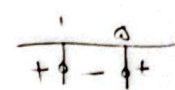
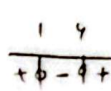
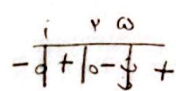
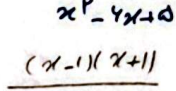
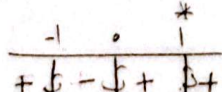
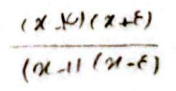


الف) $f(x) + 2$  دوادم، صحت ۷۸ ج) $f(x-1)$  یک وادم، صحت ۷۸	ب) $2f(x)$  انبار و عمودی د) $-f(x)$  قرینه نسبت به محور x صحت ۷۸	۱
الف) $x^2 - 5x + 4 > 0$ $(x-2)(x-3)$  $D_f = (-\infty, 2) \cup (3, +\infty)$ ج) $x^2 + 2x + 5 > 0$ $(x+1)(x+5)$  $D_f = (-\infty, -5) \cup (-1, +\infty)$	ب) $x^2 - 4x + 5 < 0$ $(x-1)(x-5)$  $D_f = [1, 5]$ د) $x^2 - 5x + 4 \leq 0$ $(x-1)(x-4)$  $D_f = [1, 4]$	۲
الف) $\frac{x^2 - 3x + 2}{x-5} < 0$ $\frac{(x-1)(x-2)}{x-5}$  $D_f = (-\infty, 1) \cup (2, 5)$	ب) $\frac{x^2 - 1}{x^2 - 2x + 5} > 0$ $\frac{(x-1)(x+1)}{(x-1)(x-5)}$  $D_f = (-\infty, -1) \cup (5, +\infty)$	۳
الف) $\frac{\sqrt{x^3 - 1}}{x^3 - x} > 0$ $\frac{(x-1)\sqrt{x^2 + x + 1}}{x(x-1)(x+1)}$ $x \neq 1, x \neq 0, x \neq -1$  $D_f = (-\infty, -1) \cup (0, 1) \cup (1, +\infty)$	ب) $\frac{\sqrt{x^2 - 4}}{x^2 - 5x + 6} > 0$ $x \neq 5, x \neq 1$ $\frac{(x-2)(x+2)}{(x-1)(x-6)}$  $D_f = (-\infty, -2) \cup (1, 2) \cup (6, +\infty)$	۴
الف) $y = \sqrt{4 - \sqrt{2-x}}$ $2-x \geq 0$ $4 - \sqrt{2-x} \geq 0$ $\sqrt{2-x} \leq 4$ $2-x \leq 14$ $x \geq -12$ $D_f = [-12, 2]$	ب) $y = \sqrt{3\sqrt{x-2}}$ $x-2 \geq 0$ $3\sqrt{x-2} \geq 0$ $\sqrt{x-2} \geq 0$ $x-2 \geq 0$ $x \geq 2$ $D_f = [2, 11]$	۵

الف) $y = \sqrt{4-2x^2}$ $4-2x^2 \geq 0$ $2x^2 \leq 4$ $x^2 \leq 2$ $D_f = -\sqrt{2} \leq x \leq \sqrt{2}$	$y = \sqrt{3 x -9}$ $3 x -9 \geq 0$ $3 x \geq 9$ $x \geq 3$ $x \leq -3$ $x \geq 3$ $D_f = x \leq -3$ $x \geq 3$	۶
الف) $y = \sqrt[3]{\frac{ x +1}{ x -3}}$ $x -3 \neq 0$ $x \neq 3$ $x \neq \pm 3$ $D_f = (-\infty, -3) \cup (-3, 3) \cup (3, +\infty)$	ب) $y = \sqrt{\frac{\sqrt{x}+1}{\sqrt{x}-3}}$ $\sqrt{x} \geq 0$ $x \geq 0$ $\sqrt{x}-3 \neq 0$ $\sqrt{x} \neq 3$ $x \neq 9$ $D_f = [0, 9) \cup (9, +\infty)$	۷
الف) $y = \frac{\sin x}{2\cos x - 1} \neq 0$ $\cos x \neq \frac{1}{2}$ $D_f = R - \{11\pi \pm \frac{\pi}{3}\}$ ب) $y = \frac{\tan x + 2}{\cot x - 1} \neq 0$ $\cot x \neq 1$ $D_f = R - \{11\pi \pm \frac{\pi}{4}\}$ 	ب) $y = \frac{\cos x + 1}{2\sin x + 1} \neq 0$ $\sin x \neq -\frac{1}{2}$ $D_f = R - \{11\pi \pm \frac{\pi}{6}, 11\pi \pm \frac{5\pi}{6}\}$ د) $y = \frac{\sin x + 1}{f\sin x + 1} \neq 0$ $\sin^2 x \neq \frac{1}{f^2}$ $\sin x \neq \pm \frac{1}{f}$ $D_f = R - \{11\pi \pm \frac{\pi}{f}, 11\pi \pm \frac{5\pi}{f}\}$	۸
$\frac{1}{\sqrt{ x -1} - \frac{1}{f}} > 0$ $x -1 > \frac{1}{f^2}$ $x-1 > \frac{1}{f}$ $x-1 > \frac{1}{f} \Rightarrow x > \frac{1}{f} + 1$ $x-1 > \frac{1}{f} \Rightarrow x < \frac{1}{f} - 1$ $D_f = (-\infty, \frac{1}{f} - 1) \cup (\frac{1}{f} + 1, +\infty)$	$x-1 > \frac{1}{f}$ $x-1 > \frac{1}{f}$ $x-1 > \frac{1}{f} \Rightarrow x > \frac{1}{f} + 1$ $x-1 > \frac{1}{f} \Rightarrow x < \frac{1}{f} - 1$ $D_f = (-\infty, \frac{1}{f} - 1) \cup (\frac{1}{f} + 1, +\infty)$	۹
$y = \sqrt{4-2 x } \geq 0$ $4-2 x \geq 0$ $x \leq 2$ $D_f = -2 \leq x \leq 2$ $y = \sqrt{\frac{ x }{ x }}$ $\frac{ x }{ x } = 1$ $y = \sqrt{1} = 1$ $D_f = R - \{0\}$	$x \leq 2$ $x \leq 2$ $x \geq -2$ $D_f = -2 \leq x \leq 2$	۱۰