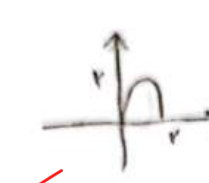
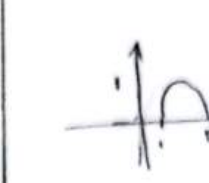
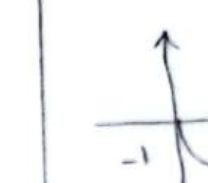
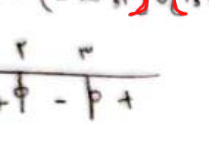
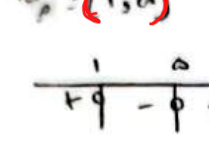
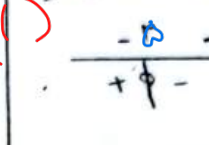
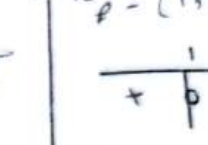
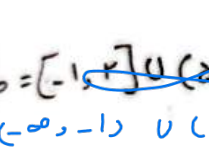
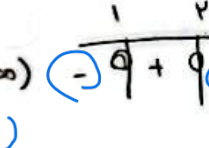
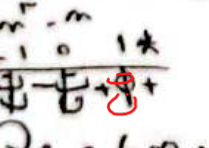
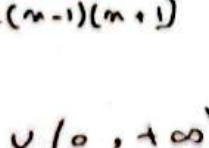
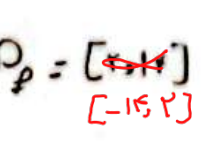


الف) 	ب) 	ج) 	د) 	1
الف) $x^2 - 2x + 1 > 0$ $(x-1)(x-1) > 0$ $D_f = (-\infty, 1) \cup (1, +\infty)$ 	ب) $x^2 - 4x + 5 < 0$ $(x-2)(x-1) < 0$ $D_f = (1, 2)$ 	ج) $x^2 + 4x + 5 > 0$ $(x+1)(x+5) > 0$ $D_f = (-\infty, -5) \cup (-1, +\infty)$ 	د) $x^2 - 5x + 4 \leq 0$ $(x-4)(x-1) \leq 0$ $D_f = [1, 4]$ 	2
الف) $\frac{x^2 - 2x + 2}{x - 5} < 0$ $\rightarrow$ $\frac{x^2 - 2x + 2}{x - 5} < 0$ $(x-1)(x-2) > 0$ $D_f = (-\infty, -1) \cup (2, +\infty)$ 	ب) $\frac{x^2 - 1}{x^2 - 4x + 5} \geq 0$ $\frac{(x-1)(x+1)}{(x-1)(x-5)} \geq 0$ $D_f = (-\infty, -1] \cup (5, +\infty)$ 	3		
الف) $y = \sqrt{\frac{x^2 - 1}{x^2 - x}}$ $\frac{x^2 - 1}{x^2 - x} > 0 \rightarrow \frac{(x-1)(x+1)}{x(x-1)} > 0$ $D_f = (-\infty, -1) \cup (0, +\infty) - \{1\}$ 	ب) $y = \sqrt{\frac{x^2 - 14}{x^2 - 5x + 6}}$ $\frac{x^2 - 14}{x^2 - 5x + 6} \geq 0$ $\frac{(x-4)(x+4)}{(x-1)(x-6)} \geq 0$ $D_f = (-\infty, -4] \cup (1, 4) \cup (6, +\infty)$ 	4		
الف) $y = \sqrt{x - \sqrt{x - m}}$ $x - m \geq 0 \rightarrow m \leq x$ $x - \sqrt{x - m} \geq 0 \rightarrow \sqrt{x - m} \leq x \rightarrow x - m \leq x^2 \rightarrow x^2 - x + m \geq 0$ $D_f = [1, 14]$ 	ب) $y = \sqrt{x - \sqrt{x - 1}}$ $x - 1 \geq 0 \rightarrow x \geq 1$ $x - \sqrt{x - 1} \geq 0 \rightarrow \sqrt{x - 1} \leq x \rightarrow x - 1 \leq x^2 \rightarrow x^2 - x + 1 \geq 0$ $D_f = [1, 11]$ 	5		

الف) $y = \sqrt{r - r^2}$ $r - r^2 \geq 0 \rightarrow r^2 \leq r \rightarrow r^2 \leq r \rightarrow$ $-\sqrt{r} \leq r \leq \sqrt{r}$ $D_f = (-\infty, -\sqrt{r}] \cup [\sqrt{r}, \infty)$ <u>1, VB</u>	ب) $y = \sqrt{r n - 9}$ $r n - 9 \geq 0 \rightarrow r n \geq 9 \rightarrow n \geq \frac{9}{r}$ $\Rightarrow -\frac{9}{r} \leq n \leq \frac{9}{r}$ $D_f = [-\frac{9}{r}, \frac{9}{r}]$	6		
الف) $y = \sqrt{\frac{ n +1}{ n -r}}$ $n -r \neq 0 \rightarrow n \neq r \Rightarrow n \neq \pm r$ $D_f = \mathbb{R} - \{\pm r\}$ <u>1, VB</u>	ب) $y = \sqrt{\frac{\sqrt{n}+1}{\sqrt{n}-r}}$ $\sqrt{n}-r \neq 0 \Rightarrow \sqrt{n} \neq r \Rightarrow n \neq r^2$ $D_f = \mathbb{R} - \{r^2\}$ <u>1, VB</u>	7		
الف) $y = \frac{\sin n}{r \cos n - 1}$ $r \cos n - 1 \neq 0$ $r \cos n \neq 1$ $\cos n \neq \frac{1}{r}$ $D_f = \mathbb{R} - \{rkn + \frac{\pi}{r}, rkn + \frac{\pi}{r}\}$	ب) $y = \frac{\cos n + 1}{r \sin n + 1}$ $r \sin n + 1 \neq 0$ $r \sin n \neq -1$ $\sin n \neq -\frac{1}{r}$ $D_f = \mathbb{R} - \{rkn + \frac{\pi}{r}, rkn + \frac{\pi}{r}\}$ <u>1, VB</u>	ج) $y = \frac{\tan n + r}{\cot n - 1}$ $\cot n \neq 1$ $\cos n \neq 0$ $\sin n \neq 0$ $D_f = \mathbb{R} - \{rkn + \frac{\pi}{r}, rkn + \frac{\pi}{r}\}$	د) $y = \frac{\sin n + 1}{r \sin^2 n - r}$ $r \sin^2 n - r \neq 0$ $\sin^2 n \neq \frac{r}{r} \Rightarrow \sin n \neq \pm \frac{1}{r}$ $D_f = \mathbb{R} - \{rkn + \frac{\pi}{r}, rkn + \frac{\pi}{r}\}$	8
$y = \frac{1}{\sqrt{r n-r - \frac{1}{r}}}$ $r n-r - \frac{1}{r} > 0 \rightarrow r n-r > \frac{1}{r} \Rightarrow n-r > \frac{1}{r} \Rightarrow \begin{cases} n-r > \frac{1}{r} \rightarrow n > r + \frac{1}{r} \\ n-r < -\frac{1}{r} \rightarrow n < r - \frac{1}{r} \end{cases}$ $D_f = (\frac{r}{r} + \frac{1}{r}, +\infty) \cup (-\infty, \frac{r}{r} - \frac{1}{r})$ <u>1, VB</u> ✓			9	
الف) $y = \sqrt{r - r n }$ $r - r n \geq 0 \rightarrow r n \leq r \rightarrow n \leq r$ $-r \leq n \leq r$ $D_f = [-r, r]$ <u>1, VB</u> ✓	ب) $y = \sqrt{\frac{ n }{ n }}$ $n \neq 0$ $D_f = \mathbb{R}^+ \cup \mathbb{R} - \{0\}$	10		