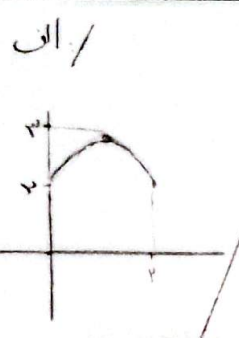
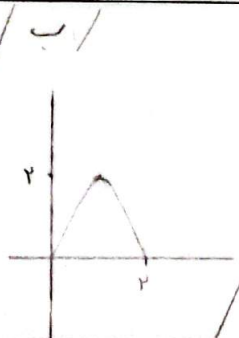
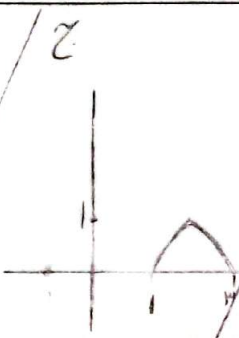
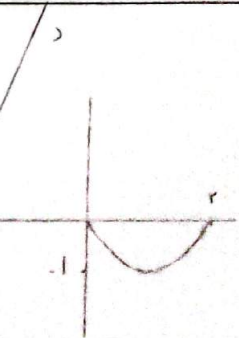
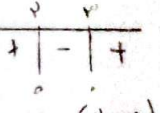
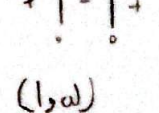
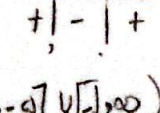
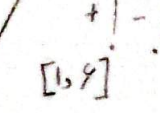
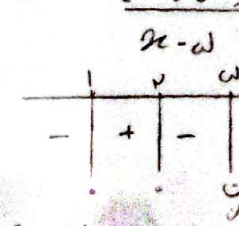
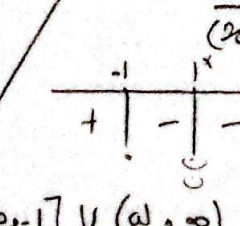
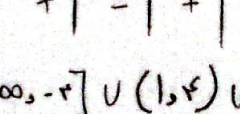


نام و نام خانوادگی زیر آبیان پاسخنامه تشریحی تکلیف شماره (۱۸) کلاس A

۱	الف /  ب /  ج /  د / 
۲	الف $x^2 - 5x + 4 > 0$  ب $x^2 - 6x + 5 \leq 0$  ج $x^2 + 7x + 12 \geq 0$  د $x^2 - 7x + 6 \leq 0$ 
۳	الف $\frac{(x-2)(x-1)}{x-3} < 0$  ب $\frac{(x-1)(x+1)}{(x-2)(x-1)} \geq 0$ 
۴	الف $\frac{\sqrt{x^2+1}}{x(x-1)(x+1)}$  ب $\frac{\sqrt{(x-4)(x+4)}}{(x-1)(x-5)}$ 
۵	الف $x-2 \geq 0$ $x \leq 2$ $x-\sqrt{4-x} \geq 0$ $\sqrt{4-x} \leq x$ $x-2 \leq 1$ $x \leq 3$ ب $x-2 \geq 0$ $x \geq 2$ $3-\sqrt{4-x} \geq 0$ $\sqrt{4-x} \leq 3$ $x-2 \leq 9$ $x \leq 11$ ج $2 \leq x \leq 11$

ا) $\sqrt{r(r-x^2)} \geq 0$ $\sqrt{r(\sqrt{r}-x)(\sqrt{r}+x)} \geq 0$ $\begin{array}{c c c} -\sqrt{r} & \sqrt{r} & \\ \hline - & + & - \\ \hline [-\sqrt{r}, \sqrt{r}] \end{array}$	ب) $\sqrt{r^3(x -r^3)} \geq 0$ $\begin{array}{c c c} -r^3 & r^3 & \\ \hline + & - & + \\ \hline \end{array}$ $(-\infty, -r^3] \cup [r^3, \infty)$	٦
ا) $R = [-r^3]$	ب) $\sqrt{x} - r^3 \neq 0$ $\sqrt{x} = r^3$ $x = 9$ $R = [9]$	٧
ا) $r \cos x - 1 \neq 0$ $\cos x \neq \frac{1}{r}$ $R = [rk\pi + \frac{\pi}{r}, rk\pi + \frac{6\pi}{r}]$	ب) $\sin x \neq -\frac{1}{r}$ $R = [rk\pi + \frac{7\pi}{r}, rk\pi + \frac{11\pi}{r}]$ ج) $\tan x = \frac{\sin x}{\cos x}$ $\cos \neq 0$ $\frac{\cos x}{\sin x} - 1 \neq 0$ د) $\sin x \neq \pm \frac{\sqrt{r}}{r}$ $R = [k\pi \pm \frac{\pi}{\sqrt{r}}]$ $R = [\frac{k\pi}{r}, k\pi + \frac{\pi}{r}]$	٨
$r x-r - \frac{1}{r} > 0$ $r x-r > \frac{1}{r}$ $x-r > \frac{1}{r^2}$ $x > \frac{9}{r^2}$ $x < \frac{1}{r^2}$ $D_f \Rightarrow \begin{cases} x < \frac{1}{r^2} \\ x > \frac{9}{r^2} \end{cases}$		٩
ا) $4 - r x \geq 0$ $r x \leq 4$ $x \leq \frac{4}{r}$ $-\frac{4}{r} \leq x \leq \frac{4}{r}$	ب) $R = [0]$	١٠