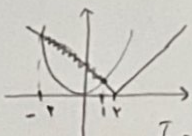
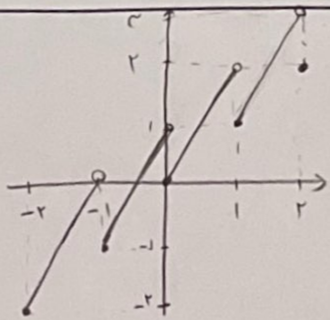
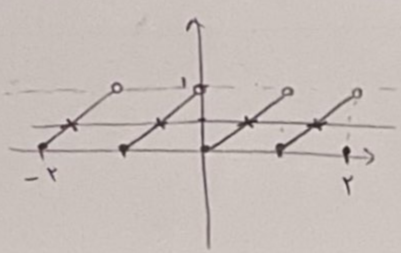
نام و نام خانوادگی ....عارفه پورمیری...... **پاسخنامه تشریحی تکلیف شماره** ...۲... **کلاس** ....دوازدهم....

$x^2+2x+1+9x^2-6x+1$ $(10)x^2 (-4)x + (2)$ $m=-10 \quad n=4$ $g(x)=\{(4,-10),(4,p+1),(-9,-1),(-9,p+k)\}$ $p+1=-10 \Rightarrow p=-11$ $-1=-11+k \Rightarrow k=10$ $m+n+p+k \to -10+4-11+10 = \boxed{-7}$	۱
الف) $y=\sqrt{\frac{x-2}{x^4-2x^2-8}}$ $\quad D_f=(-2,+\infty)-\{2\}$ $\frac{x-2}{x^4-2x^2-8}\geq 0$ $\quad$ $-2 \quad 2$: $- \quad + \quad +$ $t^2-2t-8=0$ $(t-4)(t+2) \to x^2=4$, $x=\pm 2$ $t=4$, $t=-2$ غق ب) $\frac{2x^2+1}{4-2[-x]}$ $4-2[-x]\neq 0 \to 2\neq [-x]$ $x\neq(-3,-2]$ $\boxed{D_f=(-\infty,-3]\cup(-2,+\infty)}$	۲
الف) $x(x^2-1)\geq 0$ $\quad -1 \quad 0 \quad 1$: $- \quad + \quad - \quad +$ (I) $\lvert x\rvert+x>0 \to$ $x>0$; $x<0$ ✗ $\quad \mathbb{R}^+$ $I\cap II \Rightarrow \mathbb{R}^+\cap II \Rightarrow [1,+\infty)$ $\boxed{D_f=[1,+\infty)}$ ب) $\lvert x-2\rvert-x^2\geq 0 \to \lvert x-2\rvert \geq x^2$  $I: [-2,1]$ $0\geq x^2-x+2$ ✗ $0\geq x^2+x-2$ $(x+2)(x-1)$: $-2 \quad 1$ $II: \lvert x\rvert\neq 1 \Rightarrow x\neq\pm 1$ $I\cap II \Rightarrow [-2,1)-\{-1\} \to \boxed{D_f=[-2,1)-\{-1\}}$	۳
$\lvert\lvert x-2\rvert-1\rvert\neq K$ $\lvert x-2\rvert-1\neq\pm K$ $\lvert x-2\rvert\neq\pm K+1$ $x-2 \to \pm K+1,\ \pm K-1 \overset{x\neq}{\Rightarrow} \pm K+3,\ \pm K+1$ $\Rightarrow K+3=K+1$ ✗ / $-K+3=K+1$, $2=2K$, $1=K$ / $K+3=-K+1$, $2K=-2$, $K=-1$ $K \to -1$ غق ، 1 $\boxed{K=1}$	۴
$y=2x-[x]$ $[-2,-1)\to 2x+2$ $[-1,0)\to 2x+1$ $[0,1)\to 2x$ $[1,2)\to 2x-1$ $[2]\to 2$ 	۵

$\frac{x^2-4x+3}{x+a} + b = x - b \Rightarrow (x-b)(x+a) = x^2 - 4x + 3$ $b \quad -a$ $S = \frac{-b}{a} = 4 = b - a \Rightarrow \boxed{a - b = -4}$	۶
$\begin{array}{l} x^3 + 2x^2 - x - 2 \;\big|\; x^2 - 1 \\ -x^3 \pm x \qquad\quad\; x + 2 \\ \hline 2x^2 - 2 \end{array}$ $f(x) = x + 2$ $g(x) = x + c$ $x = 1 \rightsquigarrow 3 = \frac{a+2}{1+b} \Rightarrow 3 + 3b = a + 2$ $x = -1 \rightsquigarrow 1 = \frac{-a+2}{-1+b} \Rightarrow b - 1 = 2 - a$ $2 + 4b = 4$ $b = \frac{1}{2}$ $b + c = 2 + \frac{1}{2} = \boxed{2.5}$	۷
$D_f \cap D_g = \{1\}$ $b - 4x = -(4x - 3a)$ $4x - b = 4x - 3a$ $b = 3a$ $2f - g = 2\sqrt{4x - 3a} + 2k - 2 - \sqrt{b - 4x} - 2k = k$ $-k - 2 = k$ $\boxed{-1 = k}$ $x = 1 \rightarrow b - 4 = 0 \rightarrow b = 4$ $a = \frac{4}{3}$ $3a - \frac{b}{2} - k \Rightarrow \frac{3a}{2} + 1 \Rightarrow \boxed{3}$ جواب	۸
$f - g(c) = 6\sqrt{2}$ $D_g = 2x + 2 \geq 0 \rightarrow x \geq -1$ $D_f = (-\infty, 7]$ $m - x \geq 0 \quad \boxed{m = 7}$ $7 \leftarrow m \geq x$ $x = 3 \Rightarrow \sqrt{7 - 3} + n - 2\sqrt{2} = 6\sqrt{2}$ $\boxed{n = 8\sqrt{2} - 2}$ $n + m = \boxed{5 + 8\sqrt{2}}$	۹
$y = x - [x] = \frac{1}{2}$  ۴ جواب	۱۰