نام و نام خانوادگی ...زهرا ایزدابنا... پاسخنامه تشریحی تکلیف شماره ...۸... کلاس ...یازدهم دختر B...

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$f(x) = \{(-1,0)(0,1)(1,0)\}$

$2g - 3f = \{(-1,2)(0,5)(1,4)\} \rightarrow 2+5+4 = \boxed{11}$

(۲)

۲

$f(x) = 2x-1 \qquad g(x) = \frac{1}{3}x+3$

$D = [3,+\infty) \qquad D = (-\infty,3]$

$R = [5,+\infty) \quad \cup \quad R = (-\infty,4] \quad = \boxed{\mathbb{R} - (4,5)}$

(۲)

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$-\frac{x^2}{2} + x + 3 > \frac{3}{2} \rightarrow -\frac{x^2}{2} + x + \frac{3}{2} > 0 \rightarrow -(x-3)(x+1) > 0$

$-1 \qquad 3$

$- \quad + \quad - \rightarrow (-1,3) = (a,b)$

$\sqrt{b-a} = \sqrt{4} = \boxed{2}$

(۳)

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$|x-1| + |x-3| + |2x-4|$

$0 \qquad 1 \qquad 2 \qquad 3 \qquad 4$

$-4x+8 \qquad -2x+6 \qquad 2x-2 \qquad 4x-8$

$8 \qquad 4 \qquad 2 \qquad 4 \qquad 8 \rightarrow \boxed{2}$

(۲)

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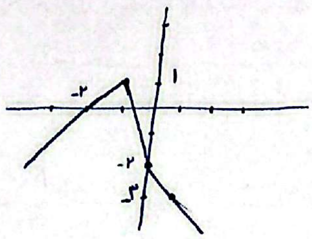
$y = |x| - 2|x+1|$

$-2 \qquad -1 \qquad 0 \qquad 1$

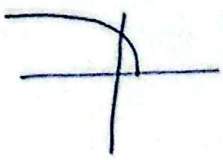
$x+2 \qquad -3x-2 \qquad -x-2$

$0 \qquad 1 \qquad -2 \qquad -3$



$(-\infty,1]$

(۳)

$\frac{x^2+5x+4m}{x+1} \longrightarrow \frac{(x+4)(x+1)}{(x+1)} \longrightarrow m=4$ $x^2+(5-y)x+m-y=0 \longrightarrow x=\frac{y-5\pm\sqrt{(5-y)^2-4(m-y)}}{2} \longrightarrow \geq 0$ $\hookrightarrow y^2-6y+25-4m \geq 0$ $\begin{cases} a>0 \longrightarrow 1>0 \\ \Delta<0 \longrightarrow m<4 \longrightarrow \end{cases}$ m نمی‌تواند برابر ۴ باشد $m=1,2,3$	0	6
$x\geq 3 \longrightarrow x+2 \longrightarrow [5,+\infty)$ $0\leq x<3 \longrightarrow x^2-2x+2 \longrightarrow [1,+\infty)$ $x<0 \longrightarrow \lvert x\rvert+2 \longrightarrow (2,+\infty)$ $\boxed{[1,+\infty)}$	2	7
$x^2+4x+3 \longrightarrow x\leq 0 \longrightarrow [-1,+\infty)$ $[2x]-2x \longrightarrow x>0 \longrightarrow (-1,0]$ $\boxed{[-1,+\infty)}$	2	8
$a+1-\sqrt{2x+3} \longrightarrow D:[b,+\infty)$, $R:(-\infty,5]$ $2x+3\geq 0$ $x\geq -\frac{3}{2} \longrightarrow \text{if } x=-\frac{3}{2} \longrightarrow a+1-\sqrt{0}=5 \longrightarrow a=4$ $ab=-\frac{3}{2}\times 4=\boxed{-6}$	2	9
$f(x)+g(x)=3\sqrt{2+2\sqrt{1-x^2}}=3\sqrt{(\sqrt{1-x}+\sqrt{1+x})^2}=3\sqrt{1-x}+3\sqrt{1+x}$ $D=[-1,1]$ $g(x)=3\sqrt{1-x}+3\sqrt{1+x}-2\sqrt{x+1}-4\sqrt{1-x}=\sqrt{1+x}-\sqrt{1-x}$ $\frac{f(x)-2g(x)}{9}=\frac{2\sqrt{x+1}+4\sqrt{1-x}-2\sqrt{x+1}+2\sqrt{1-x}}{9}=\sqrt{1-x}$  $\rightarrow \boxed{[\cancel{0},+\infty)}$ $R=[0,\sqrt{2}]$	1,5	10