نام و نام خانوادگی ......نیوشا هاشم پور...... پاسخنامه تشریحی تکلیف شماره ..۷.... کلاس ......یازدهم تجربی......

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$f(x) = \sqrt{1-x^2}$

$D_f = \sqrt{(x+1)(1-x)}$

$\begin{array}{ccccc} & -1 & & 1 & \\ \hline - & \phi & + & \phi & - \end{array}$

$D_f = [-1,1]$

$2g = \{(-1,2)(0,8)\ (2,0)(1,4)\}$

$3f(x) = \{(-1,0),(0,3),(1,0)\}$

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

$2+5+4 = \boxed{11}$

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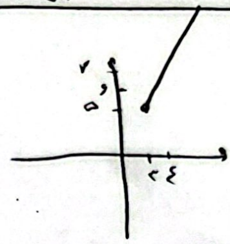
$f(x) = 2x-1 \qquad D_f = [3,+\infty)$

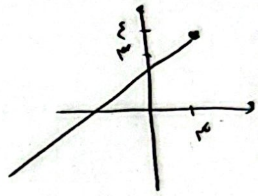
$g(x) = \frac{1}{2}x+2 \qquad D_g = (-5,3)$

$R_f + R_g = ?$

$(-\infty,4] \cup [5,+\infty)$



$[5,+\infty)$



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$y = \frac{-x^2}{2} + x + 3 \qquad R_y \longrightarrow (a,b) \rightarrow (\frac{3}{2},+\infty)$

$\frac{-x^2}{2} + x + 3 > \frac{3}{2}$

$\max \sqrt{b-a}$

$\sqrt{3-(-1)} = \sqrt{4} = 2$

$-x^2+2x+6 > 3$

$-(x^2-2x-3) > 0$

$-(x-3)(x+1) > 0$

$\begin{array}{ccccc} & -1 & & 3 & \\ \hline - & \phi & + & \phi & - \end{array}$

$a=-1 \quad b=3 \qquad (-1,3) \rightarrow \frac{3}{2}$

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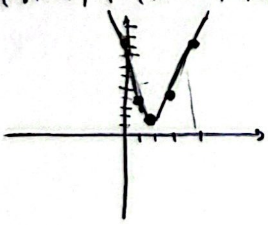
$y = ?$ (Min)

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



$\begin{array}{ccccccc} & 1 & & 2 & & 3 & \\ \hline -4x+8 & (4) & -2x+6 & (2) & 2x-2 & (4) & 4x-8 \end{array}$

$\min y = 2$

x	0	1	2	3	4
y	8	4	2	4	8

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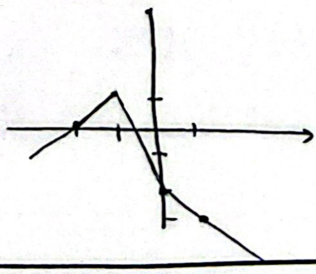
$R_y =$ بازه

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



$\begin{array}{ccccc} & -1 & & 0 & \\ \hline x+2 & (1) & -3x-2 & (-2) & -x-2 \end{array}$

$R_y = (-\infty,1]$

x	-2	-1	0	1
y	0	1	-2	-3

$x^2+(5-y)x+m-y=0$ $x=\dfrac{y-5\pm\sqrt{(5-y)^2-4m+4y}}{4} \rightarrow y^2-10y+25-4m+4y$

$y^2-6y+25-4m \xrightarrow{\Delta\leq 0} 36-4(25-4m)\leq 0 \rightarrow 16m\leq 64 \quad y^2-6y+25-4m\geq 0$ 6

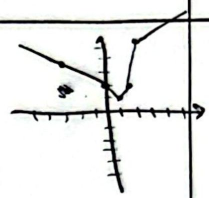
$m\leq 4$

$m<4 \rightarrow \{1,2,3\}$

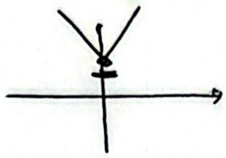
$R-\{-1\} \leftarrow$ برد $\leftarrow x^2+5x+4 \xrightarrow{m=4} \dfrac{(x+1)(x+4)}{x+1}$

$f(x)=\begin{cases} x+2 & x\geq 3 \\ x^2-2x+2 & 0\leq x\leq 3 \\ |x|+2 & x<0 \end{cases}$

$R_1=[5,+\infty)$ $\begin{array}{c|cc} x & 3 & 4 \\ y & 5 & 6 \end{array}$



$y=(x-1)^2+1 \rightarrow S\begin{vmatrix}1\\1\end{vmatrix}$

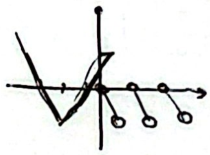


$R_{y_2}=[2,+\infty)$ 7

$\begin{array}{c|cc} x & 3 & 0 \\ y & 5 & 2 \end{array}$ $\begin{array}{c|cc} x & 0 & -1 \\ y & 2 & 3 \end{array}$

$R_f=[1,+\infty)$

$f(x)=\begin{cases} x^2+4x+3 & x\leq 0 \rightarrow S\begin{vmatrix}-2\\-1\end{vmatrix} \\ [2x]-2x & x>0 \rightarrow R_2(-1,0] \end{cases}$



$R_1=[-1,\infty)$ 8

$R_1\cup R_2=[-1,+\infty)$

$y=a+1-\sqrt{2x+3}$

$D_g=[b,+\infty)$ $R_f=2x+3\geq 0 \rightarrow x\geq -\frac{3}{2} \rightarrow \boxed{b=-\frac{3}{2}}$

$R_g=(-\infty,5]$

$y_{max} \longrightarrow \sqrt{2x+3} \rightarrow$ min بشه $\rightarrow \sqrt{2x+3} \rightarrow 0$ 9

$ab=?$ $x=-\frac{3}{2}$

$(-\frac{3}{2})\times 4=-6$ $y=a+1 \rightarrow 5$ $y=5$

$\boxed{a=4}$

$f(x)=2\sqrt{x+1}+4\sqrt{1-x}$ $x+1\geq 0 \rightarrow x\geq -1$ $x\in[-1,1]$

$f(x)+g(x)=3\sqrt{2+2\sqrt{1-x^2}}$ $1-x\geq 0 \rightarrow x\leq 1$

$D_f=D_g$ $f(1)=2\sqrt{2},\ f(-1)=4\sqrt{2}$ $f(0)=6$

$R_y=?$ $y=\dfrac{f(x)}{6}-\dfrac{g(x)}{3}$ $f(1)+g(1)=3\sqrt{2+2\sqrt{1-(1)^2}}=g(1)=3\sqrt{2}-2\sqrt{2}=\sqrt{2}$ 10

$f(-1)+g(-1)=3\sqrt{2+2\sqrt{1-(-1)^2}}=g(-1)=3\sqrt{2}-4\sqrt{2}=-\sqrt{2}$

$y(1)=\dfrac{2\sqrt{2}}{6}-\dfrac{\sqrt{2}}{3}=0$

$R_y=[0,+\sqrt{2}]$ $y(-1)=\dfrac{4\sqrt{2}}{6}-\dfrac{-\sqrt{2}}{3}=\dfrac{6\sqrt{2}}{6}$