نام و نام خانوادگی ...علی الهیاری... پاسخنامه تشریحی تکلیف شماره ...۲۵... کلاس ...یازدهم ریاضی...

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$(0,2) \to 1-\log_c^{-b}=2 \to \log_c^{-b}=-1 \to \frac{+1}{c}=-b \to \underbrace{cb}_{P}=-1$

$x^2-Sx+P=0 \to x^2+\frac{3}{2}x-1=0 \to (x+2)(x-\frac{1}{2})=0 \to x=-2 , x=+\frac{1}{2}$

$\to c>0 \to c=\frac{1}{2} , b=-2 \Rightarrow (-\frac{3}{2},0) \to 1=\log_{\frac{1}{2}}^{-\frac{3}{2}a+2} \to -\frac{3}{2}a+2=\frac{1}{2}$

$\to \frac{3}{2}a=\frac{3}{2} \to a=1$

$(a+c)b=(\frac{3}{2})(-2)=-3$

۲

$(1,0) \to 1+c\times 3^{a+b}=0 \to c\times 3^{a+b}=-1$

$(0,\frac{2}{3}) \to 1+c\times 3^{a}=\frac{2}{3} \to c\times 3^{a}=-\frac{1}{3}$

$\overset{\div}{\Rightarrow} 3^b=3 \to b=1$

$f(-1)=1+\underbrace{c\times 3^{a-b}}_{-\frac{1}{9}}=\frac{8}{9}$

۳

$(0,2) \to c+\log_5^{b}=2$

$(2.4,0) \to c+\log_5^{2.4a+b}=0$

$\overset{\ominus}{\to} \log_5^{\frac{b}{2.4a+b}}=2 \to \frac{b}{2.4a+b}=25$

$\to 60a+25b=b \to 60a=-24b \to \frac{a}{b}=\frac{-24}{60}=\frac{-2}{5}$

۴

$|x^2-2|-x>0$

$-\sqrt{2}$	$\sqrt{2}$	
x^2-x-2	$-x^2-x+2$	x^2-x-2
$(x-2)(x+1)\geq 0$	$-(x-1)(x+2)>0$	$(x-2)(x+1)>0$
$-1 \quad 2$; $+ \; - \; +$	$-2 \quad 1$; $- \; + \; -$	$-1 \quad 2$; $+ \; - \; +$ $\to (2,+\infty)$
$(-\infty,-\sqrt{2}]$	$[-\sqrt{2},1)$	

$\Rightarrow D_f=(-\infty,1)\cup(2,+\infty)$

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$g(1)=4$

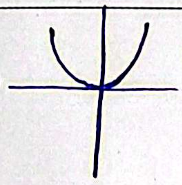
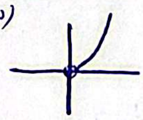
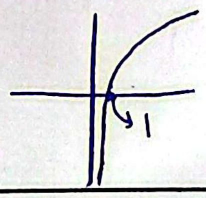
$f(1)=4 \to 2=2^{b-a} \Rightarrow b-a=1$

$f(-1)=10 \to 2^{b+a}=2^3 \Rightarrow b+a=3$

$\oplus \; 2b=4 \Rightarrow b=2$

$a=1$

$2b-a=4-1=3$

$y = x^2 - x = g(x)$ $g(1) = 0 \quad f(1) = 0 \to -2 + \left(\frac{1}{2}\right)^{A+B} = 0 \to 2^{-(A+B)} = 2^1 \Rightarrow A+B = -1$ $g(2) = 2 \quad f(2) = 2 \to -2 + \left(\frac{1}{2}\right)^{2A+B} = 2 \to 2^{-(2A+B)} = 2^2 \Rightarrow 2A+B = -2$ $\Rightarrow A = -1, B = 0 \quad f(3) = -2 + \left(\frac{1}{2}\right)^{-1(3)} = -2 + 8 = 6$	
$\frac{1}{6}\cancel{A_1} = \cancel{A_1} \times \left(\frac{8}{9}\right)^{\frac{t}{40}} \to 6 = \left(\frac{9}{8}\right)^{\frac{t}{40}} \xrightarrow{\log_5} \log_5 6 = \frac{t}{40} \log_5 \frac{9}{8}$ $\Rightarrow \underbrace{\log_5 3}_{\frac{5}{7}} + \underbrace{\log_5 2}_{\frac{5}{12}} = \frac{t}{40}\left(2\underbrace{\log_5 3}_{\frac{10}{7}} - 3\underbrace{\log_5 2}_{\frac{15}{12}}\right) \Rightarrow \frac{\cancel{95}^{19}}{\cancel{12 \times 7}} = \frac{t}{\cancel{40}_{20}}\left(\frac{\cancel{15}^{3}}{\cancel{12 \times 7}}\right) \Rightarrow t = 380$	۷
$\frac{1}{7}\cancel{A_1} = \cancel{A_1} \times \left(\frac{7}{8}\right)^{\frac{t}{7}} \to \frac{1}{7} = \left(\frac{7}{8}\right)^{\frac{t}{7}} \to 7 = \left(\frac{8}{7}\right)^{\frac{t}{7}} \xrightarrow{\log_3} \log_3 7 = \frac{t}{7} \log_3 \frac{8}{7}$ $\to \frac{10}{6} = \frac{t}{7}\left(\frac{30}{14} - \frac{10}{6}\right) = \frac{\cancel{10}^{5}}{\cancel{6}_{3}} = \frac{t}{7}\left(\frac{\cancel{20}^{5}}{42}\right) \Rightarrow t = 56$	۸
$\frac{1}{3} = \left(\frac{96}{100}\right)^{\frac{t}{1}} \to 3 = \left(\frac{100}{96}\right)^{t} \to \log 3 = t \log \frac{100}{96}$ $\Rightarrow \frac{48}{100} = t(2 - \underbrace{\log 96}_{\underbrace{5\log 2}_{1.5} + \underbrace{\log 3}_{0.48}}) \Rightarrow \frac{\cancel{48}^{24}}{\cancel{100}} = t\left(\frac{2}{\cancel{100}}\right) \Rightarrow t = 24$	۹
الف) $9^{\log_3 x} = x^{\log_3 9} = x^2 \to$  $\xrightarrow{D = (0, +\infty)}$  $y = 2\log x \to$ 	۱۰