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نام و نام خانوادگی ..پرنیان حاجی‌زاده.......... پاسخنامه تشریحی تکلیف شماره ..۲۵.. کلاس ..یازدهم..

۱

$y = \log_c^{(ax-b)}$ → $x=0 \Rightarrow y=2 \rightarrow 2 = 1 - \log_c^{(-b)} \rightarrow \log_c^{-b} = -1 \rightarrow \frac{1}{c} = -b$

$-\frac{1}{c} + c = -\frac{3}{2} \rightarrow 2c^2 + 3c - 2 = 0 \rightarrow c = -2$ (غ ق ق) , $c = \frac{1}{2}$ ✓ $\rightarrow b = -2 \rightarrow$

$y=0 \rightarrow 1 - \log_{\frac{1}{2}}^{ax+2} = 0 \rightarrow ax+2 = \frac{1}{2}$ (به ازای) $\rightarrow ax = -\frac{3}{2} = -\frac{3}{2} \rightarrow a = 1$ [illegible] $x = -3$

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$f(0) = 1 + c \times 3^{a} = \frac{2}{3} \rightarrow c \times 3^{a} = -\frac{1}{3}$ و $f(1) = 0 = 1 + c \times 3^{a+b} \rightarrow 3^{a+b} \times c = -1$

$\frac{c \times 3^{a+b}}{c \times 3^{a}} = \frac{-1}{-\frac{1}{3}} \Rightarrow 3^{b} = 3 \Rightarrow b = 1 \rightarrow f(-1) = 1 + c \times 3^{a-1} = a + b \times$ [illegible] $= 1 + c \times 3^{a} \times \frac{1}{3}$

$\frac{2}{3} \times \frac{1}{3} = \frac{2}{9}$

۳

$x=0 \rightarrow 2 = c + \log_5^{b}$ و $0 = c + \log_5^{a \times 2.4 + b} \rightarrow c = -\log_5^{2.4a+b} \rightarrow 2 = -\log_5^{2.4a+b} + \log_5^{b}$

$\log_5^{\frac{b}{2.4a+b}} = 2 \rightarrow \frac{b}{2.4a+b} = 25 \rightarrow b = 25b + 25(2.4a) \rightarrow -24b = 25(2.4a)$

$\frac{b}{a} = -2.5 \rightarrow \frac{a}{b} = \frac{-10}{25}$

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$|x^2-2| - x > 0 \rightarrow |x^2-2| > x \rightarrow x^2-2 > x$ یا $x^2-2 < -x$

$x^2 - x - 2 > 0 \rightarrow x > 2 \lor x < -1$; $x^2 + x - 2 < 0$

$(x-2)(x+1)$; $(x+2)(x-1)$; $1 > x > -2$

$\cap$

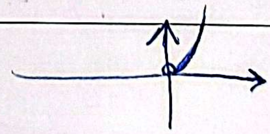
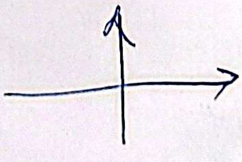
$R_f: -2 < x < -1$

۵

$g(1) = f(1) \rightarrow 2 + 2^{b-a} = -1 - 1 + 8$ (+4) $\rightarrow 2^{b-a} = 2 \rightarrow b - a = 1$

$f^{-1}(10) = -1 \rightarrow f(-1) = 10 = 2 + 2^{b+a} = 10 - 8 \rightarrow 2^{b+a} = 8 \rightarrow b + a = 3$; $b = 2$ ، $a = 1$

$2b - a = (2 \times 2) - 1 = 3$

$x=1 \Rightarrow y=x^2-x=f(x) \Rightarrow \log ... =f(1)=-2+\left(\frac{1}{2}\right)^{A+B}=0 \Rightarrow \left(\frac{1}{2}\right)^{A+B}=2 \Rightarrow A+B=-1$ $x=2 \Rightarrow x^2-x=2=f(2)=-2+\left(\frac{1}{2}\right)^{2A+B} \Rightarrow \left(\frac{1}{2}\right)^{2A+B}=4 \Rightarrow 2A+B=-2$ $A=-1$ $B=0$ $f(3)=-2+\left(\frac{1}{2}\right)^{3A}=-2+\left(\frac{1}{2}\right)^{-3}=6$ شش	۶
x ماه ⟶ $\frac{8}{9}x$ ماه ⟶ $\frac{64}{81}x$ ماه ⟶ $x\left(\frac{1}{9}\right)^t=$	۷
$\frac{...}{1...}=\frac{1}{8} \Rightarrow \left(\frac{1}{8}\right)^t=\frac{6}{7}$ ⟶	۸
[illegible]	۹
الف) $y=9^{\log_3 x} \Rightarrow x^{\log_3 9} \Rightarrow y=x^2$ ⟶  ب) $y=\log x^2$ ⟶ $D_f=R-\{0\}$ ⟶ 	۱۰