

$x_5 = \frac{1}{\omega} \rightarrow \frac{1}{\omega} + \alpha = 1 \Rightarrow \alpha = \frac{1-\omega}{\omega}$
 $y_5 = \frac{1}{\omega} \rightarrow \frac{1}{\omega} + \beta = 1 \Rightarrow \beta = \frac{1-\omega}{\omega}$
 $\Rightarrow y_1 = -\frac{1}{\omega} x^2 + \frac{1}{\omega} x - \frac{1}{\omega} \Rightarrow -\frac{1}{\omega} x^2 + \frac{1}{\omega} x - \frac{1}{\omega} = 0 \Rightarrow a+b+c=0$
 $\boxed{x=1}$
 $\boxed{x=1}$

$x \xrightarrow{x+1} x+1 \xrightarrow{x+1} 1+x \Rightarrow y_5 = \begin{cases} 1 \Rightarrow \frac{1-1}{1} = 0 \\ 1 \Rightarrow (1-1) + 1 = 1 \end{cases}$
 $y_5(x-1) + 1$
 $y_5 \mid \frac{1}{\omega} \Rightarrow \alpha \beta = -\frac{1}{\omega} \alpha - 1 = \boxed{\frac{1}{\omega}}$

$\textcircled{1} x \text{ مثبت} = -\sqrt{2x+1} + 3$ $\textcircled{2} x \text{ مثبت} = \sqrt{2x+1} - 3$ $\textcircled{3} y \text{ مثبت} = \sqrt{2x+1} + 3$
 $\sqrt{2x+1} + 3 = \frac{1}{\omega} \Rightarrow \sqrt{2x+1} = \frac{1}{\omega} - 3 \Rightarrow 2x+1 = \left(\frac{1}{\omega} - 3\right)^2 \Rightarrow 2x = \frac{1}{\omega^2} - \frac{6}{\omega} + 8 \Rightarrow \boxed{x = \frac{1}{\omega^2} - \frac{3}{\omega} + 4}$

$Df(x-1) = (a+1, \omega]$ و $Dg(x+1) = [-2, b-1)$
 $h(x) = f(x-1) + g(x+1) \Rightarrow D_h = Df(x-1) \cap Dg(x+1)$
 $\Rightarrow (a+1, \omega] \cap [-2, b-1) = (-2, m, \omega)$
 $a+1 = -2 \Rightarrow a = -3$ $a-b = -3-4 = -7$
 $b-1 = \omega \Rightarrow b = \omega+1$

$\frac{x}{2} + 1 \xrightarrow{x+1} x+1 \xrightarrow{x+1} x$
 $Df = [-\frac{1}{2}, \frac{1}{2}]$
 $R_f = [-1, 1]$
 $D_h \Rightarrow |2f(x-1)| \geq 0 \Rightarrow x \in \mathbb{R} \Rightarrow D_h = D_f$
 $\Rightarrow [-\frac{1}{2}, \frac{1}{2}] \cap [-1, 1] = [-\frac{1}{2}, \frac{1}{2}]$
 $([-1, 1]) \cap [-\frac{1}{2}, \frac{1}{2}] = [-\frac{1}{2}, \frac{1}{2}]$
 $|2f(x-1)| = [-1, 1] \Rightarrow R_{|2f(x-1)|} = [-1, 1]$

$$0 \leq ax < 1 \rightarrow 0 \leq x < \frac{1}{a} \quad \times \rightarrow \frac{1}{a} < x \leq 1 \Rightarrow [ax] = 0$$

$$y = 0$$

$$1 \leq ax < 1+r \rightarrow \frac{1}{a} < x \leq \frac{1}{a} + \frac{r}{a} \rightarrow a < \frac{1}{x} \Rightarrow \left(\frac{1}{x} = \frac{x}{a} \right)$$

$$[ax] = 1 \Rightarrow A\left(\frac{1}{a}, \frac{1}{a} + \frac{r}{a}\right) \rightarrow \frac{1}{a} = \frac{1}{a+r} = \frac{1}{r}$$

$$\Rightarrow a+r = r \Rightarrow \boxed{a = -r} \Rightarrow y = -\frac{x}{r} [-rx] \Rightarrow b = r \times \frac{1}{r} = 1$$

$$b - a = 1 + r = r$$

$$1 \text{ واحد } = \log_y^{x+2} \quad \text{قرینه به محور } x = -\log_y^{x+2} \quad \text{قرینه به محور } y = -\log_y^{x+2} + 3$$

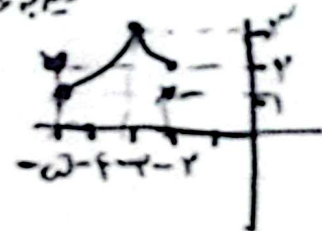
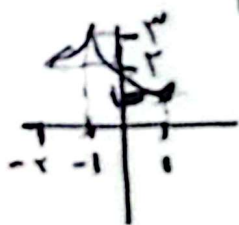
$$g = -\log_y^{-x+2} + 3 = g(x) \Rightarrow g(-1) + g(-9)$$

$$= (-\log_y^{14} + 3) + (-\log_y^{42} + 3) = (-4 + 3) + (-6 + 3)$$

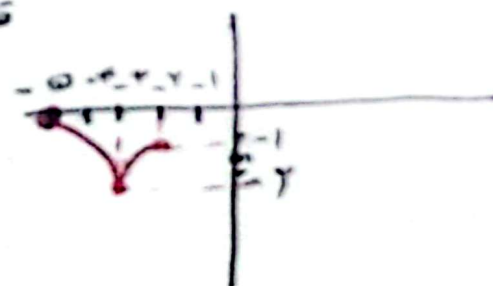
$$= (-1) + (-3) = \boxed{-4}$$

$$1 - f(x-x)$$

قرینه به محور y

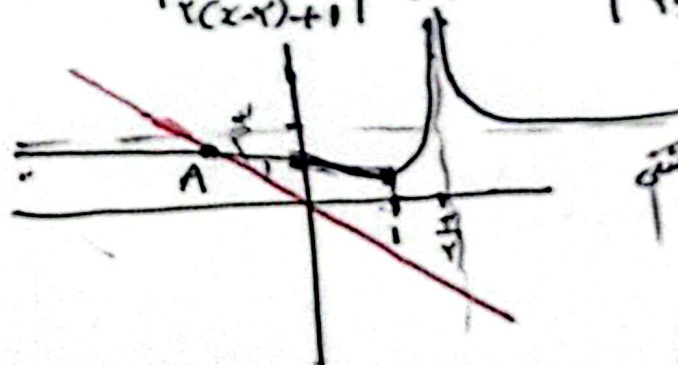


قرینه به محور x



$$g(x) = \left| \frac{(x-2)+1}{2(x-2)+1} \right| + 1 = \left| \frac{x-1}{2x-3} \right| + 1 \Rightarrow x + g(x) < 0 \Rightarrow g(x) < -x$$

$$\Rightarrow \text{جواب ناممکن} = (-\infty, \infty)$$



$$\begin{aligned} \Rightarrow \frac{x-1}{2x-3} &= (-x-1) \Rightarrow -2x^2 + x + 3 = x-1 \\ -2x^2 &= -4 \Rightarrow x^2 = 2 \Rightarrow x = \sqrt{2} \end{aligned}$$

$$\Rightarrow \text{جواب} = (-\infty, -\sqrt{2})$$

$$f(x) = (x-3)^2 + 21$$

انگشتها را انتقال یافته است | بگیریم

$$g(x) = \sqrt{-f(x)(f(x)-21)} \Rightarrow \frac{-1}{-1} + \frac{1}{1} \Rightarrow [D_g] = \{0, 1, 2, 3\}$$

در صورت برداشت دیگر از نمودار

۴ تا

۱۰
نقشه
در صورت
برداشت
دیگر

بدین اشیان شکل ۱۰ را نقطه عطف می گیریم (از استاد پرسیم) پس می نویسیم $\frac{2}{27}$ انتقال یافته است | است پس

$$f(x) = (x-2)^2 + 27 \Rightarrow g(x) = \sqrt{-f(x)(f(x)-21)}$$

اصلی

$$\Rightarrow \frac{-1}{-1} + \frac{1}{1} \Rightarrow Dg = [-1, 3] \Rightarrow \{ -1, 0, 1, 2, 3 \} = \text{نمودار صحیح}$$

۱۰