

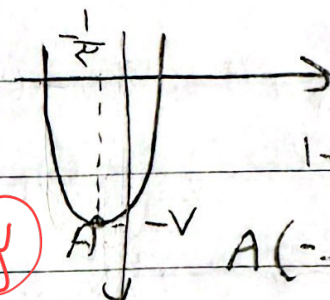
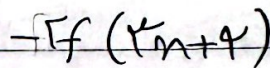
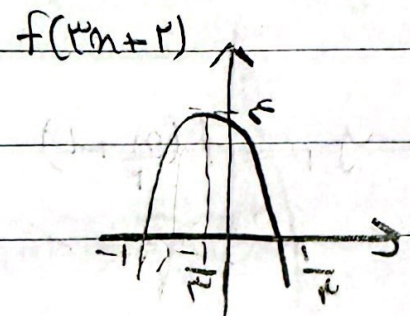
مرم و کالی

سوال ۱)

(κ, ν)

⑦

(Folger)



$$A\left(-\frac{1}{p}, -V\right)$$

$$\alpha/\beta = \frac{-1}{\mu} \times (-V) = \boxed{\frac{V}{\mu}} \quad \checkmark$$

$$y = \mu - \sqrt{\mu n}$$

سوال (۲)

مجلس

Log

$$\Rightarrow \sqrt{r_m + r} = \frac{r}{r} \rightarrow r_m + r = \frac{r}{\varepsilon} \rightarrow r_m = \frac{1}{\varepsilon} \Rightarrow \boxed{n = 1}$$

⑤

آپادانا

$$Df = (a, 5] \quad Dg = [-1, b)$$

(سوال ۴)

$$y = f(n-1) + g(n+1) \rightarrow D = (-2, 5) \quad a-b=?$$

$$-1 \leq n+1 < b \rightarrow -2 \leq n < b-1$$

$$\Rightarrow Dg(n+1) = [-2, b-1)$$

$$a < n-1 \leq 4 \rightarrow a+1 < n \leq 5 \Rightarrow Df(n-1) = (a+1, 5]$$

استدلال مشترک
(از صورت سوال متوجه می شویم)

$$(a+1, b-1) \rightarrow b-1=5 \Rightarrow \underline{b=6}$$

$$\rightarrow a+1 = -2 \Rightarrow \underline{a=-3} \rightarrow a-b = -3-6 = -9$$

$$y_1 = f\left(\frac{n}{p} + 1\right) \quad y_2 = \sqrt{|2f(n) - 3|}$$

(سوال ۵)

زیر سوال باید بررسی کنیم که آیا تابع

$$!! \text{ تابع } f \text{ و } g \Rightarrow D_{y_2} = Df(n)$$

$$y_1 = f\left(\frac{n}{p} + 1\right) \Rightarrow y = f(n)$$

$$D_1 = [-2, 5] \Rightarrow Df=? \rightarrow -2 \leq n \leq 5 \rightarrow -\frac{2}{p} \leq \frac{n}{p} \leq \frac{5}{p}$$

$$\rightarrow -\frac{1}{p} \leq \frac{n}{p} + 1 \leq \frac{5}{p} \Rightarrow Df = \left[-\frac{1}{p}, \frac{5}{p}\right] \Rightarrow \boxed{D_2 = \left[-\frac{1}{p}, \frac{5}{p}\right]}$$

$$-1 \leq y_1 \leq 2 \rightarrow -2 \leq 2y_1 \leq 4$$

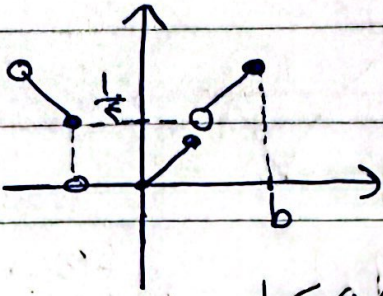
$$\rightarrow -2 \leq 2y_1 - 3 \leq 1 \rightarrow 0 \leq |2y_1 - 3| \leq 4$$

$$\rightarrow 0 \leq \sqrt{|2y_1 - 3|} \leq 2 \Rightarrow \boxed{Rg = [0, 2]}$$

$$y = \frac{n}{a} [an]$$

$$b - a = ?$$

(40 سوال)



$$0 \leq an < 1 \Rightarrow 0 \leq n < \frac{1}{a} \Rightarrow [an] = 0$$

$$\frac{1}{a} < n \leq 1 \Rightarrow [an] = 1$$

$$1 \leq an < 2 \Rightarrow \frac{1}{a} < n < \frac{2}{a} \Rightarrow an = 1 \Rightarrow \frac{1}{a} = 1$$

$$[an] = 1$$

$$A\left(\frac{1}{a}, \frac{1}{\varepsilon}\right) \Rightarrow \frac{1}{a} = \frac{1}{\varepsilon}$$

$$\Rightarrow a^r = \varepsilon \rightarrow a = \varepsilon^{\frac{1}{r}} \rightarrow a = -r \text{ (or } a < 0)$$

$$y = -\frac{n}{r} [-r] \rightarrow \frac{a, b}{\text{بعضی}} = \frac{1}{r} \rightarrow b = r \times \frac{1}{r} = 1 \rightarrow b - a = 1 + r = r$$

$$f(n) = \log_r n$$

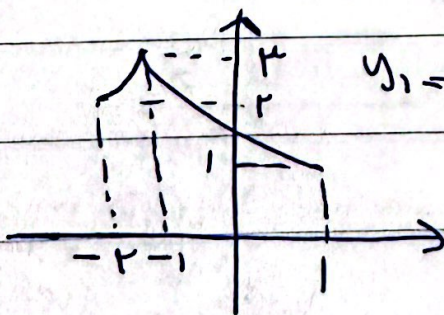
$$f(n) = \log_r n \xrightarrow{\text{نویز}} y = \log_r n+r \xrightarrow{\text{نویز}} y = -\log_r n+r$$

$$\xrightarrow{\text{نویز}} y = -\log_r n+r + r \xrightarrow{\text{نویز}} y = -\log_r n+r+r$$

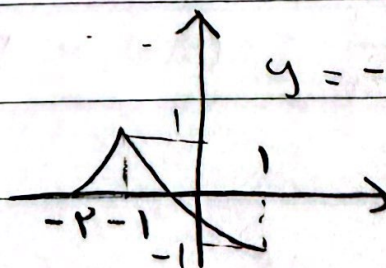
$$\Rightarrow g(n) = -\log_r n+r+r \rightarrow g(-r) = -\log_r r+r+r = -r+r+r = r$$

$$-r-1 = \boxed{-\varepsilon} \quad \checkmark \quad g(-1\varepsilon) = -\log_r 1\varepsilon+r+r = -\varepsilon+r+r = -1$$

(1 سوال)



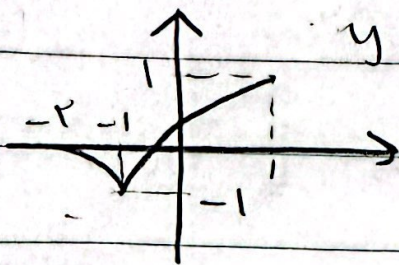
$$y_1 = r - f(r-n)$$



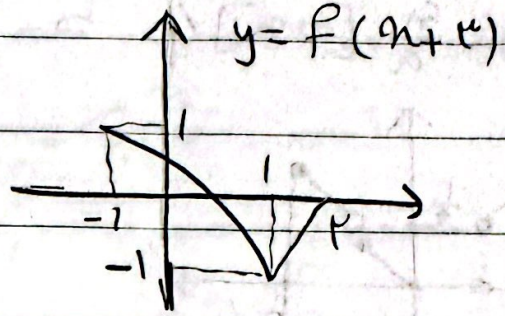
$$y = -f(r-n)$$

* (1 سوال)

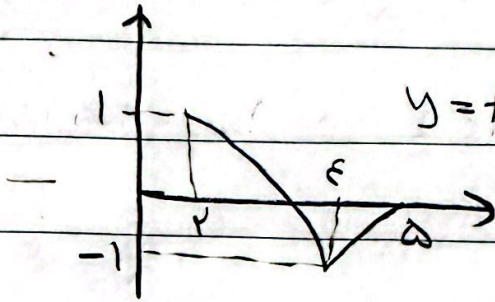
آبادنا



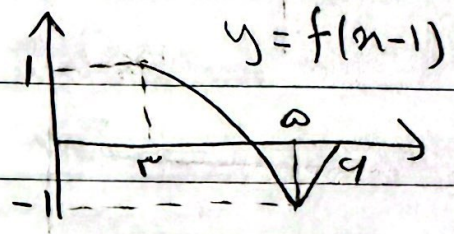
$$y = f(r-n)$$



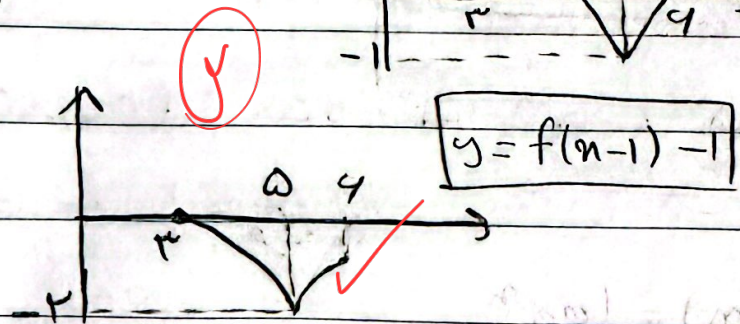
$$y = f(n+r)$$



$$y = f(n)$$



$$y = f(n-1)$$



$$y = f(n-1) - 1$$

$$f(n) = \left| \frac{n+1}{r_{n+1}} \right|$$

$$n + g(n) <$$

(9 clg)

Case 1, Case 2, Case 3

$$f(n) = \left| \frac{(n-r)+1}{r(n-r)+1} \right| \xrightarrow{\text{problem}} g(n) = \left| \frac{n-1}{r_{n-r}} \right| + 1$$

$$n + g(n) < \Rightarrow n+1 + \left| \frac{n-1}{r_{n-r}} \right| < \Rightarrow \left| \frac{n-1}{r_{n-r}} \right| < -(n+1)$$

$$\begin{aligned} \rightarrow \frac{n-1}{r_{n-r}} < -(n+1) &\Rightarrow \frac{r_{n-r}^2 - 1}{r_{n-r}} < 0 \quad \frac{-\sqrt{r} \sqrt{r}}{r} = -1 + 1 = 0 \\ &(-\infty, -\sqrt{r}) \cup (\sqrt{r}, \frac{r}{r}) \\ \rightarrow \frac{n-1}{r_{n-r}} > n+1 &\Rightarrow \frac{r_{n-r}^2 - n - 1}{r_{n-r}} > 0 \quad \frac{\frac{1-\sqrt{r}}{r} \sqrt{r}}{r} = \frac{1-\sqrt{r}}{r} \\ &(\frac{1-\sqrt{r}}{r}, \frac{r}{r}) \cup (\frac{1+\sqrt{r}}{r}, +\infty) \end{aligned}$$

$$n \in (-\infty, -\sqrt{r})$$

آپادانا

$$y = x^r$$

$$g(x) = \sqrt{r \lambda f(x) - f^r(x)}$$

(سوال ۱۰)

$$f(x) = \underbrace{(x-r)^r}_{\text{قسمت اول}} + \underbrace{r\lambda}_{\text{قسمت دوم}} \Rightarrow \text{الیکٹرونیکی}$$

(۱)

$$g(x) = \sqrt{r \lambda f(x) - f^r(x)} \Rightarrow g(x) = \sqrt{-f(x)(f(x) - r\lambda)}$$

$$\hookrightarrow f(x) = r\lambda$$

$$\Rightarrow x = r$$

$$\text{قسمت اول} \Rightarrow \frac{-1}{-1 + \frac{r}{x}} \Rightarrow Dg = [-1, r]$$

$$f(x) = 0 \Rightarrow x = -1$$

$$\text{قسمت دوم} \Rightarrow r - (-1) + 1 = \boxed{5}$$

$$f(x) = \frac{r\lambda}{x} (x-r)^r + r\lambda \Rightarrow Df = [0, \frac{1}{r}]$$

قسمت اول $\frac{1}{r}$