

۱۹، ۵
ایان و میان یازدهم
Page : ()

SUBJECT

Year:

Month: _____

Day:

$$D_f = [-1, 1] \quad D_g = \{-1, 0, 1\} \quad D_f \cap D_g = \{-1, 0, 1\} \quad (2) \quad (1)$$

$$g(-1) = 1 \quad f(-1) = 0 \rightarrow \begin{bmatrix} 1 \\ 0 \end{bmatrix} \quad g(0) = 1 \quad f(0) = 1 \rightarrow \begin{bmatrix} 1 \\ 1 \end{bmatrix}$$

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

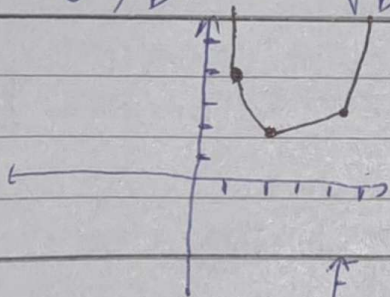
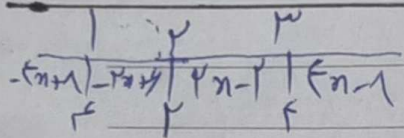
$(\omega_{\text{max}})_{\text{gibf}} \rightarrow R_f = [\Gamma(r) @ 1 \text{ } q + \infty) = [\omega \text{ } q + \infty)$ (2) (5)

$$(-\infty, \mu] \text{ mapping} \rightarrow Rg = \underbrace{(-\infty, \mu] \cap (\mu, \mu)}_{\emptyset} = (-\infty, \mu]$$

$$\mathbb{R} \cap \mathbb{R}_0(-\infty, \epsilon] \cup [\omega, +\infty)$$

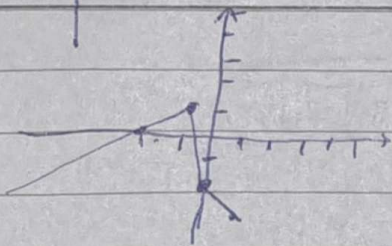
$$-\frac{1}{r} 2n^r + n + \frac{r}{r} > \frac{r}{r} \rightarrow -\frac{1}{r} n^r + n + \frac{r}{r} > 0 \rightarrow \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = -r \quad (r) \quad (r)$$

$$= 0 + 1 \rightarrow a = -1, b = 1 \rightarrow \sqrt{b-a} = \sqrt{1-(-1)} = \sqrt{2} = \sqrt{2} \quad \checkmark$$



$\text{تقریر صفا} = 2$

$$\begin{array}{r|rr} -1 & 0 \\ \hline x+1 & -x-1 & -x-1 \\ \hline & 1 & -1 \end{array}$$



$$R_f = [-\infty, 1]$$

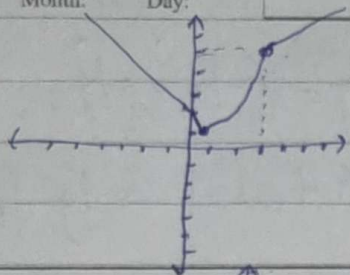
$$y_{n+1} = x^r + \omega x + m \rightarrow x^r + x(\omega - y) + m - y = 0 \rightarrow \frac{y - \omega \pm \sqrt{(\omega - y)^r - (m - y)}}{1}$$

$$r\omega + y^r - \log y - f_m + \frac{1}{m} \geq 0 \rightarrow \Delta \leq 0 \rightarrow r\omega - \log y + \frac{1}{m} = \frac{1}{m} - \frac{1}{m} \leq 0 \quad (1, \delta)$$

→ $m, \uparrow$ → $m = \{1, 2, 3, 4\}$ → $m, \downarrow$

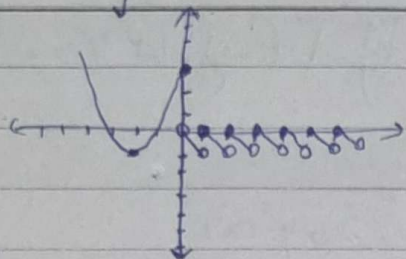
انچه $m = 4$ باشد از بد خذف می‌شود

دیکھ R میں $\{1, 2, 3\}$ میں



$$x^2 - 2x + 1 \geq 0 \rightarrow \frac{-b}{a} = 1 \rightarrow x = 1 \rightarrow y = 1 \quad (2) \quad (1)$$

$$R_f = [1, +\infty) \quad \checkmark$$



$$\frac{-b}{2a} = -1 \rightarrow x = -1 \rightarrow y = -1 \quad (2) \quad (1)$$

$$[1] - 1 \rightarrow R_f = [-1, +\infty) \quad \checkmark$$

$$D_y \rightarrow 2x + 1 \geq 0 \rightarrow x \geq -\frac{1}{2} \rightarrow D_y = [-\frac{1}{2}, +\infty) \quad (2) \quad (9)$$

$$\rightarrow b = -\frac{1}{2} \quad \checkmark$$

$$R_y \rightarrow \sqrt{x+1} \text{ کثیر الجواب } \rightarrow \text{معر} \rightarrow R_y = (-\infty, +1] \rightarrow a = 1 \quad \checkmark$$

$$ab = -\frac{1}{2} \quad \checkmark$$

$$D_f \Rightarrow \left. \begin{array}{l} x+1 \geq 0 \rightarrow x \geq -1 \\ 1-x \geq 0 \rightarrow 1 \geq x \end{array} \right\} \Rightarrow D_f = D_g = [-1, 1] \quad (2) \quad (10)$$

$$g(x) = 3\sqrt{2+2\sqrt{1-x}} - 2\sqrt{x+1} - 5\sqrt{1-x}$$

$$\frac{f(x)}{x} - \frac{g(x)}{x} = \frac{2\sqrt{x+1} + 5\sqrt{1-x}}{x} - \frac{3\sqrt{2+2\sqrt{1-x}} - 2\sqrt{x+1} - 5\sqrt{1-x}}{x}$$

$$\frac{\sqrt{x+1}}{x} + \frac{5\sqrt{1-x}}{x} + \frac{2\sqrt{x+1}}{x} + \frac{5\sqrt{1-x}}{x} - \frac{3\sqrt{2+2\sqrt{1-x}}}{x}$$

$$= \sqrt{x+1} + 5\sqrt{1-x} - \frac{3\sqrt{2+2\sqrt{1-x}}}{x} = \sqrt{x+1} + 5\sqrt{1-x} - \frac{3\sqrt{2(1+\sqrt{1-x})}}{x}$$

$$= \sqrt{x+1} + 5\sqrt{1-x} - \frac{3\sqrt{2(1+\sqrt{1-x})}}{x} - \sqrt{1-x} - \sqrt{x+1} = \sqrt{1-x} = \text{معر}$$

$$\rightarrow D = [-1, 1] \rightarrow R = [0, \sqrt{2}] \quad \checkmark$$