

$f(m) = \underbrace{x + \lceil a \rceil}_{\text{این عددی}} \rightarrow \text{جمع تابع اول عددی تا تابع عددی}$
 $x + \lceil a \rceil \rightarrow x \rightarrow \lceil a \rceil$
 $\rightarrow$ $0 < x < 1$ $\rightarrow$ ی است
 نقطه

ج. $f \circ f^{-1}(x) = 2x - \frac{x}{f} \rightarrow x = 2x - \frac{x}{f} \rightarrow x = \frac{x}{f} \rightarrow \text{جواب} = \emptyset$
 $\rightarrow x + [x] = \frac{x}{f} \rightarrow \text{در برد ناممکن}$

$$\int \frac{ax+b}{\varepsilon a+b} \rightarrow \begin{aligned} &\rightarrow \text{جانب تانق} = -\frac{b}{\varepsilon} \\ &\rightarrow \text{جانب ابق} = \frac{a}{\varepsilon} \end{aligned} \xrightarrow{\text{رکبیت}} -\frac{b}{\varepsilon} + \frac{a}{\varepsilon} \rightarrow a-b$$

$\rightarrow a^{-b}$ ✓ $\rightarrow f(x) = f^{-1}(x)$ $\rightarrow f \circ f^{-1}(0-\sqrt{4}) = f \circ f^{-1}(0-\sqrt{4})$
 $\xrightarrow{f \circ f^{-1}(x) = x} f \circ f^{-1}(0-\sqrt{4}) = 0-\sqrt{4}$

$$\frac{m\alpha + \mu}{\alpha + m + \mu} = f \xrightarrow{\text{yellow}} f^{-1}(\alpha) = \frac{\mu - (m + \mu)\alpha}{\alpha - m}$$

$$\frac{\alpha + m + p}{p - (m+p)\alpha} \cdot \frac{m\alpha + p}{\alpha + m + p} \xrightarrow[\text{Clos}]{\text{Clos}} (p+m+p)(\alpha) + (4m+9)\alpha - (4m+9) = 0$$

$$\frac{1}{\alpha} + \frac{1}{\beta} = \frac{\alpha + \beta}{\alpha\beta} = \frac{-b}{\frac{c}{a}} = \frac{-b}{c} = \frac{-(9m+9)}{-(4m+9)} = 1$$

$$f(\omega) = \sqrt{(\omega + \omega_c)^p} - \sqrt{(\omega_c - \omega)^p} \quad \approx |\omega_c + \omega| - |\omega_c - \omega|$$

$$a \geq \frac{r}{\delta} \rightarrow f = K\alpha + \omega - \alpha K + r = -K\alpha + V \rightarrow a \geq \frac{r}{\delta} \rightarrow -K\alpha \leq -\frac{q}{\delta}$$

$$-V_a + V_s - \frac{q}{C} + V \rightarrow R = \left(-\frac{19}{0} \right)$$

$$\rightarrow f^{-1}(a) = -\frac{1}{\mu} a + \frac{1}{\mu} \quad D_{f^{-1}} = R_f \cdot \begin{bmatrix} -\infty & \frac{1}{a} \end{bmatrix}$$

$$g(n) = f(n) - 1 \rightarrow \frac{g(n) + 1}{1} = f(n) \xrightarrow{g(n) = y} \frac{g(n) + 1}{1} = y$$

$$f(r) = \frac{y+1}{r} \rightarrow f^{-1}\left(\frac{y+1}{r}\right) = r\alpha = r g^{-1}(y) \rightarrow f^{-1}\left(\frac{\alpha+1}{r}\right) = r g^{-1}(\alpha)$$

$$\rightarrow g^{-1}(a) = \frac{1}{p} f^{-1}\left(\frac{n+1}{p}\right) \rightarrow \begin{matrix} a = 1 \\ b = 1 \\ c = 1 \\ d = 1 \end{matrix}$$

$$\frac{ac+d}{fb} \cdot \frac{\frac{f}{f} + \cdot}{f} = \frac{1}{f}$$

$$f(x) = x + 2\sqrt{x} \rightarrow f(x) = (\sqrt{x+1})^2 - 1 \rightarrow x \geq 0$$

$$\rightarrow y+1 = (\sqrt{x+1})^2 \rightarrow \pm\sqrt{y+1} = \sqrt{x+1} \xrightarrow{\sqrt{x+1} \geq 0} \sqrt{y+1} - 1 = \sqrt{x}$$

$$\pm(\sqrt{y+1} - 1)^2 = x \xrightarrow{x \geq 0} (\sqrt{y+1} - 1)^2 \xrightarrow{x \geq 0} f^{-1}(x) = (\sqrt{x+1} - 1)^2$$

$$\rightarrow (\sqrt{x+1})^2 - 1 = f(x) \quad x \geq 0 \rightarrow (\sqrt{x+1})^2 \geq 1 \rightarrow f(x) \geq 0 \rightarrow R_f = P_f^{-1} = [0, +\infty)$$

$$y = \underbrace{x-1}_{\text{الجزء السالب}} + \underbrace{2x}_{\text{الجزء الموجب}}$$

نلاحظ ان الجزء الموجب هو $2x$ والجزء السالب هو $x-1$ و $y \geq x$

$$2x + x - 1 = x \rightarrow 2x \geq 1$$

$$\rightarrow x \geq 0 \rightarrow \text{نقطة لا يوجد (0,0) است} \rightarrow \boxed{\text{انقطة}}$$

$$f(x) = x^3 + \varepsilon x \rightarrow y = \sqrt[3]{f^{-1}(x) - \varepsilon}$$

$$f^{-1}(x) - \varepsilon \geq 0 \rightarrow f^{-1}(x) \geq \varepsilon \xrightarrow{\text{نلاحظ ان } f^{-1}(x) \geq \varepsilon} f^{-1}(x) \geq f^{-1}(\varepsilon)$$

$$\rightarrow \frac{x^3 + \varepsilon x}{\varepsilon} \rightarrow f^{-1}(x) \geq \varepsilon \rightarrow x \geq f(x) \rightarrow x \geq x^3 + \varepsilon x$$

$$x^3 + \varepsilon x \leq 0 \rightarrow x(x^2 + \varepsilon) \leq 0 \rightarrow x \leq 0 \rightarrow \text{ليست صالحة}$$

$$f(x) = x - \sqrt{x+1} \quad x \geq -1 \rightarrow \text{نلاحظ ان } f^{-1}(x) = g(x) \quad \text{نلاحظ ان } f^{-1}(x) = g(x)$$

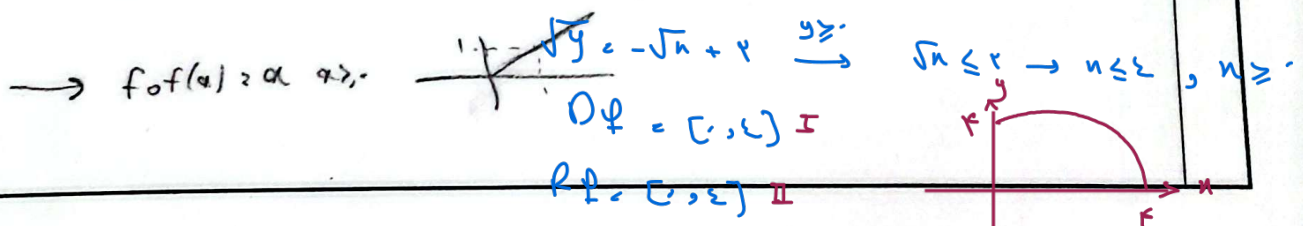
$$g(x) = f^{-1}(x+1) = x-1 \rightarrow f(x-1) = x+1 \rightarrow -x+1 + \sqrt{x+1} = x+1$$

$$\sqrt{x+1} \geq 2x+1 \xrightarrow{x \geq -1} x+1 \geq 4x^2+4x+1 \rightarrow \varepsilon x^2 + 3\varepsilon x \geq 0 \rightarrow \varepsilon(x^2 + 3x) \geq 0$$

$$x \geq -1 \rightarrow D_f \geq -1 \Rightarrow R_f = [-1, +\infty) \quad f^{-1}(x+1) = x-1 \quad \text{نلاحظ ان } f^{-1}(x) = g(x)$$

$$\sqrt{x} + \sqrt{y} \geq 2 \rightarrow f^{-1}(x) = \sqrt{x} + \sqrt{y} \geq 2 \rightarrow f(x) = f^{-1}(x)$$

$$\rightarrow f \circ f(x) = f^{-1} \circ f(x) \rightarrow D_{f \circ f} = D_f = x \geq 0$$



$$I \cap II \rightarrow Df = Rf \rightarrow f(u) = f^{-1}(u)$$

$$f \circ f(u) = f \circ f^{-1}(u) = u$$

جواب لیا کی

