

$$(3, 2) (m, 2) \Rightarrow m = 3$$

$$(2, 2) (2, n-1) \Rightarrow n = -1$$

غیر ممکن

$$\begin{cases} (m, 2) \\ (2, 2) \end{cases} \Rightarrow m = 2$$

$$\begin{cases} (-1, 1) \\ (a, m-1) \end{cases} \Rightarrow a = -1$$

$$\begin{cases} (1, 2) \\ (a+1, n) \end{cases} \Rightarrow n = 2$$

$$3(1) - 1 = 2$$

$$x < 1, x = a < 2 \Rightarrow a < 1$$

$$a \in (-\infty, 1)$$

$$3x - 1 \rightarrow 3(1) - 1 = 2$$

$$ax + a - 1 < 2$$

$$ax + a < 3, a > 0$$

$$0 < a < 3$$

$$\begin{cases} y_1 = x_1^3 + 2 \\ y_2 = x_2^3 + 2 \\ y_1 = y_2 \end{cases}$$

$$x_1^3 = x_2^3$$

$$x_1 = x_2$$

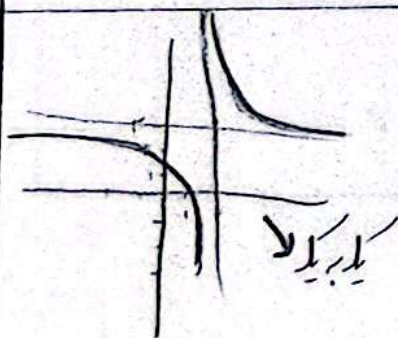
$$x = \sqrt[3]{y-2}$$

$$x^2 - 4x + 2 = 0$$

$$x = 1 \quad y = -1$$

$$x = 3 \quad y = -1$$

غیر یک به یک



$$y = \frac{x+1}{x-2}$$

$$y = \frac{x+1}{x-2} = 2$$

غیر یک به یک

توان $y = \sqrt{x-3} \Rightarrow x \geq 3$ $y_1^2 = x_1 - 3 \quad y_2^2 = x_2 - 3$ $y_1^2 = y_2^2 \Rightarrow y_1 = \pm y_2 \Rightarrow x_1 - 3 = x_2 - 3$ $x_1 = x_2 \checkmark$ منفی و مثبت زیرا $0 \leq y$ $y = x^2 + 3$	$\frac{-b}{2a} = 2 \Rightarrow x \in [2, +\infty)$ یک به یک است $y = (x-2)^2 - 1$ $y+1 = (x-2)^2 \quad y = \sqrt{x+1} + 2$ $\sqrt{y+1} = x-2$ $x = \sqrt{y+1} + 2 \nearrow$
$(\sqrt{x} + \frac{1}{x})^2 = x + \sqrt{x} + \frac{1}{x}$ $f(x) = (\sqrt{x} + \frac{1}{x})^2 - \frac{1}{x}$ $f(x) + \frac{1}{x} \pm \sqrt{x} + \frac{1}{x}$ $\sqrt{f(x) + \frac{1}{x}} = \sqrt{x} + \frac{1}{x}$ $\sqrt{x} = \sqrt{f(x) + \frac{1}{x}} - \frac{1}{x} \Rightarrow x = f(x) + \frac{1}{x} + \frac{1}{x} - \frac{1}{x} \sqrt{f(x) + \frac{1}{x}} \Rightarrow y = x + \frac{1}{x} - \sqrt{x + \frac{1}{x}}$	$a=1$ $b=\frac{1}{x} \quad a, 2b + 4c = 1$ $c=\frac{1}{x}$
$y_1 = \frac{x_1^2}{x_1^2 - 2}$ $y_2 = \frac{x_2^2}{x_2^2 - 2}$ $y_1 = y_2$ $D_f = \mathbb{R} - (-\sqrt{2}, \sqrt{2})$ $(x, x_2)^2 x_1^2 = (x, x_2)^2 x_2^2 \Rightarrow x x_1^2 = x x_2^2 \quad x_1 = x_2 \checkmark$	$y = \frac{x^2}{x^2 - 2}$ $\frac{1}{y} = 1 - \frac{2}{x^2}$ $\frac{2}{x^2} = 1 - \frac{1}{y}$ $x^2 = \frac{1}{0.5 - \frac{1}{y}}$ $x = \sqrt{\frac{1}{0.5 - \frac{1}{y}}}$ $y = \sqrt{\frac{1}{\frac{1}{2} - \frac{1}{y}}}$ $D_f = \mathbb{R} - [1, 1]$
$-\frac{2}{\omega} = \frac{x}{1+x}$ $-0x = 2 + 2 x $ $x = -\frac{2}{3} = f(-\frac{2}{3})$	$\sqrt{x-1} = -\frac{2}{\omega}$ $\Delta \sqrt{x-1} = -2$ $\Delta \sqrt{x} = 3$ $x = \frac{9}{10} = g^{-1}(-\frac{2}{\omega})$ $-\frac{2}{3} + \frac{9}{10} = -\frac{22}{10}$
$(f^{-1}(x))^2 = x-1$ $x = (f^{-1}(x))^2 + 1$ $f(x) = x^2 + 1$ $g(x) = x^2 + 1 + \sqrt{x^2 + 1}$	$g^{-1}(12) = 2 \checkmark$ $x^2 + 1 + \sqrt{x^2 + 1} = 12 \Rightarrow x = 2$