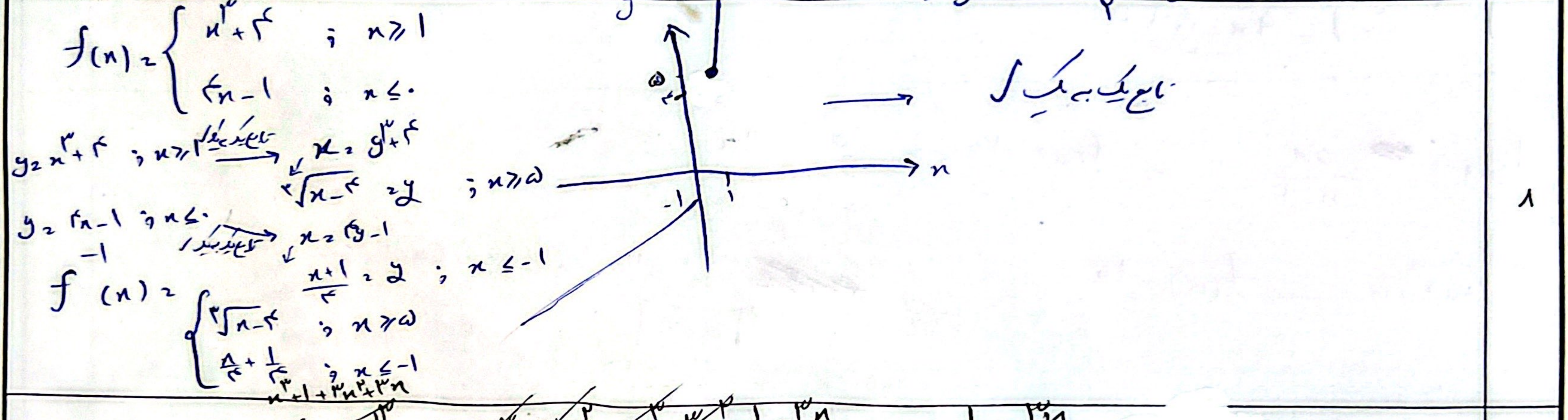
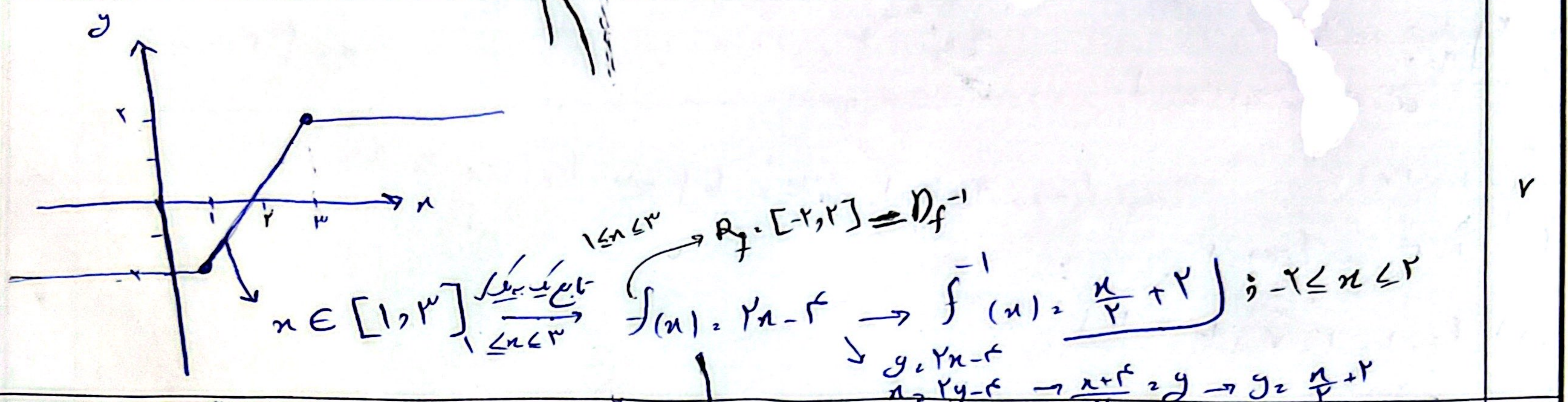
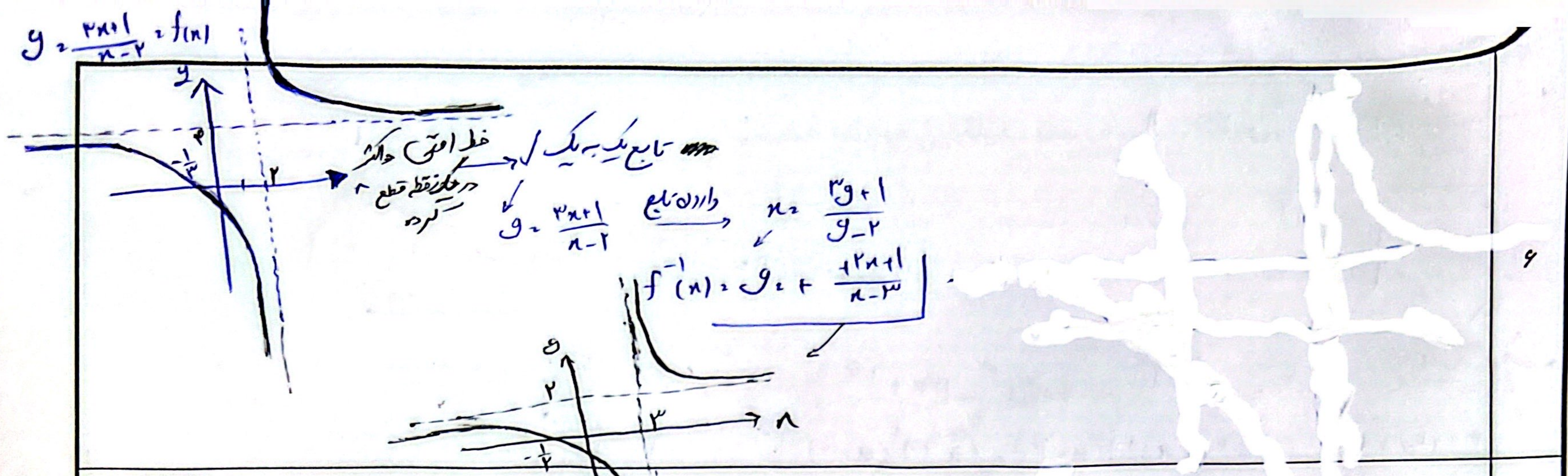




$f(x) = x^2 - \frac{(x+1)^2}{x+3} = \frac{x^2 + 3x^2 - x^3 - 2x^2 - x - 1}{x+3} = \frac{-x^3 + x^2 - x - 1}{x+3}$

$f^{-1}(x) = f^{-1}(-1) = \frac{-x^3 - 2x^2 - x - 1}{x+3} = \frac{1}{x} = 1$

$\frac{-x^3 - 2x^2 - x - 1}{x+3} = \frac{1}{x} \rightarrow -x^3 - 2x^2 - x - 1 = 1 \rightarrow -x^3 - 2x^2 - x - 2 = 0$

$\frac{-x^3 - 2x^2 - x - 2}{x+3} = \frac{1}{x} \rightarrow -x^3 - 2x^2 - x - 2 = \frac{x+3}{x} = 1 + \frac{3}{x}$

$-x^3 - 2x^2 - x - 2 = 1 + \frac{3}{x} \rightarrow -x^3 - 2x^2 - x - \frac{5}{x} = 0$

$-x^4 - 2x^3 - x^2 - 5 = 0$

$f^{-1}(x) = \frac{-x-2}{x+3}$

$x+1$ علامت $x, y \in \mathbb{R}$

$f(x) = \frac{x}{x^2+1}$ پارامتر $x = \frac{y}{y^2+1}$

$xy^2 - y + x = 0 \rightarrow y = \frac{1 \pm \sqrt{1-4x^2}}{2x}$

$R_f = [-1/\omega, 1/\omega]$
 $D_f = \mathbb{R} \rightarrow R_{f^{-1}} = \mathbb{R}$
 $D_{f^{-1}} = [-1/\omega, 1/\omega]$

$f^{-1}(x) = \frac{1 \pm \sqrt{1-4x^2}}{2x}$

علامت x, y $\rightarrow$ $\frac{1 + \sqrt{1-4x^2}}{2x} = y = f^{-1}(x)$

البته $f^{-1}(x) = \frac{1 - \sqrt{1-4x^2}}{2x}$

است پس علامت $\rightarrow$ نیز می تواند
در تابع قرار بگیرد