

نام و نام خانوادگی پریشان (شهری)



$\rightarrow \text{if } f \in C^1(\mathbb{R}^n) \text{ and } f(x) = 0 \text{ for all } x \in \mathbb{R}^n, \text{ then } f'(x) = 0 \text{ for all } x \in \mathbb{R}^n$

ب) فوسفور

$$y = \frac{ax + b}{cx + d}$$

→ خوددردی نیست از ناحیه او

$$\rightarrow b + (-b) = 0$$

$$y = \sqrt{(rx+\Delta)^2} - \sqrt{(\Delta x-r)^2} = \underbrace{|rx+\Delta|}_{-\frac{\Delta}{r}} - \underbrace{|\Delta x-r|}_{\frac{r}{\Delta}} \rightarrow \frac{-rx-\Delta+\Delta x-r}{rx-\sqrt{\quad}} \bigg| \frac{rx+\Delta+\Delta x-r}{rx+\sqrt{\quad}} \bigg| \frac{rx+\Delta-\Delta x+r}{-rx+\sqrt{\quad}}$$

$$\rightarrow f^{-1}(x): y = -x^2 + 4$$

$$\rightarrow f^{-1}(m) = \frac{-x}{\mu} + \frac{V}{\mu}$$

$y = x + \sqrt{x} \xrightarrow{+1-1} y = x + \sqrt{x+1} - 1 = (\sqrt{x+1})^2 - 1 \rightarrow y = (\sqrt{x+1})^2 - 1$ $\rightarrow y+1 = (\sqrt{x+1})^2 \rightarrow \sqrt{y+1} = \sqrt{x+1} \rightarrow \sqrt{x} = \sqrt{y+1} - 1 \rightarrow x = (\sqrt{y+1} - 1)^2$ $\rightarrow f^{-1}(y) = (\sqrt{y+1} - 1)^2 \quad \circ \quad D_{f^{-1}} = x > -1$	٦
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$\sqrt{x} + \sqrt{y} = 2 \rightarrow \sqrt{y} = 2 - \sqrt{x} \rightarrow y = (2 - \sqrt{x})^2$ $\rightarrow f(f(x)) = (2 - \sqrt{(2 - \sqrt{x})^2})^2 = (2 - 2 - \sqrt{x})^2$ $\begin{cases} x < 4 \rightarrow (2 - (2 - \sqrt{x}))^2 = (\sqrt{x})^2 = x \\ x > 4 \rightarrow (2 - (\sqrt{x} - 2))^2 = (4 - \sqrt{x})^2 \end{cases}$ $\rightarrow \begin{cases} x < 4 \\ x > 4 \end{cases}$ ١٠	