

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

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

$D_{f^{-1}} = [-1, +\infty)$

معوضه $L_{f^{-1}} = x + 1 - 2\sqrt{y+1}$ معوضه $L_{f^{-1}} = x + 1 - 2\sqrt{y+1}$ معوضه $L_{f^{-1}} = x + 1 - 2\sqrt{y+1}$
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$$x - 1 + \sqrt{x} = x \rightarrow \sqrt{x} = 1 \rightarrow x = 1 \rightarrow \text{نقطه}$$

$$f^{-1}(y) \geq x$$

از نمودار f

$$x \leq 0 \rightarrow \text{یک عدد معوضه معنی}$$

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

چون معوضه $x + 1 - 2\sqrt{y+1}$ معوضه $x + 1 - 2\sqrt{y+1}$ معوضه $x + 1 - 2\sqrt{y+1}$

$$y = f^{-1}(x + 1)$$

$$f(x + 1) = x + 1 - 2\sqrt{x + 1}$$

$$f \circ y \leq f \circ f^{-1}(x + 1)$$

$$x + 1 - 2\sqrt{x + 1} \leq x + 1 \rightarrow \sqrt{x + 1} \leq 1 \rightarrow x + 1 \leq 1 \rightarrow x \leq 0$$

$$\sqrt{y} \leq \sqrt{x}$$

بزرگترین معوضه

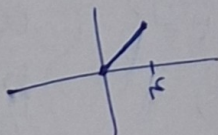
$$y = x - \sqrt{x}$$

$$\sqrt{(x - \sqrt{x})^2}$$

$$f \circ f(x - \sqrt{x}) = x - \sqrt{x} - 2\sqrt{x - \sqrt{x}} = x$$

بزرگترین معوضه

$$x \geq \sqrt{x}$$



معوضه