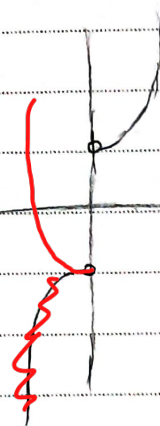




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$y = \ln(x^2 + \frac{1}{x})$ $x=0$ $x > 0$ $y = x^2 + 1$
 $x < 0$ $y = -x^2 - 1$



٣ - تابع نفيذا ✓

(V)

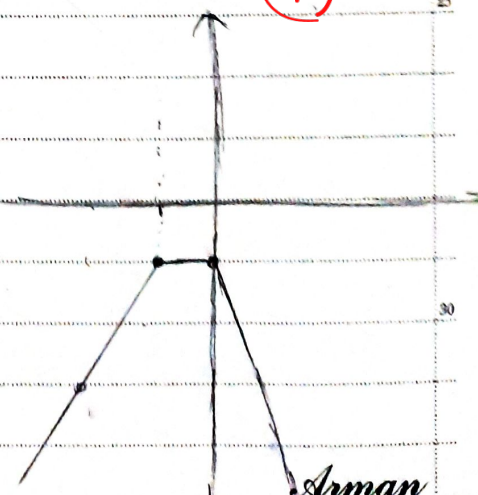
$x > 0 \rightarrow f(x) = \frac{x^2 + 1}{x - (x+1)} = \frac{x^2 + 1}{-1} = -x^2 - 1$

$x = 0 \rightarrow f(x) = \frac{1}{-1} = -1$

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

$x = -1 \rightarrow f(x) = \frac{-1}{1} = -1$

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



(-2003) → a=0 ✓

Arman

$$y = \log \frac{m^2 - 2m - 1}{m}$$

$$m^2 - 2m - 1 > 0 \rightarrow (m-1)(m+1) > 0$$

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$$\frac{-2}{1} = \frac{2}{1}$$

توابع صعودی
توابع نزولی

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$$a^2 - 3 > 1 \rightarrow a^2 > 4 \rightarrow \frac{a}{2} > 2$$

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$$a^2 - 3 > 1 \rightarrow a^2 > 4 \rightarrow \frac{a}{2} > 2$$

سوال نهمه
تابع نمایی!

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$$f \circ f(m) \leq f(\sqrt{m}) \rightarrow f(m) \leq \sqrt{m}$$

$$f(m) = m > 0 \quad I$$

$$f(m) = m > 0 \quad I$$

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$$f(m) = m > 0 \quad I$$

$$f(m) = m > 0 \quad I$$

$$f(m) = m > 0 \quad I$$

$$f(m) = m > 0 \quad I$$

$$f(m) = m > 0 \quad I$$

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