

پارامیتر نیژارده ، دوازههم دخترب B

«تکلیف شکار ۲۵»
 ۱۹،۱۷۵

$$\frac{f(\mu) - f(1)}{\mu - 1} = \frac{(1 - \frac{a}{\mu}) - (1 - a)}{\mu - 1} = \frac{\frac{\mu a}{\mu} - a}{\mu - 1} = \frac{a}{\mu} = \frac{a}{1,175}$$

$$f'(x) = (-ax^{-1})' = \frac{a}{x^2} \quad \frac{a}{x^2} = \frac{a}{\mu} \quad x = \pm \sqrt{\mu}$$

نسی $x = \sqrt{3}$ تبا قابل قبول است!

$$f'(A) = 1 \rightarrow \epsilon a A - \delta = 1 \rightarrow aA = \frac{4}{\epsilon} = 1,1\delta$$

$$A < 0 \quad f(A) = A \rightarrow \mu a A^2 - \delta A + 11a = A \rightarrow \mu a A^2 - 4A + 11a = 0$$

$$\underline{aA = 1,1\delta} \rightarrow \mu A(1,1\delta) - 4A + 11a = 0 \quad \mu A = 11a$$

$$A = 4a \rightarrow a(4a) = 4a^2 = \frac{\mu}{\mu} \quad \mu a = \pm \frac{1}{\mu}$$

$$A < 0, aA > 0 \Rightarrow a < 0 \quad a = -\delta/8$$

$$f' = \mu x^2 - 12 = 0 \quad x = \pm 2 \quad (12)$$

	$-\infty$	-2	2	$+\infty$		
y'	+	0	-	0	+	
y		↗		↘		↗
		max		min		

$$\min \Rightarrow y = 11 - 2\epsilon + 2 = -1\epsilon$$

$$\min (2, -1\epsilon)$$

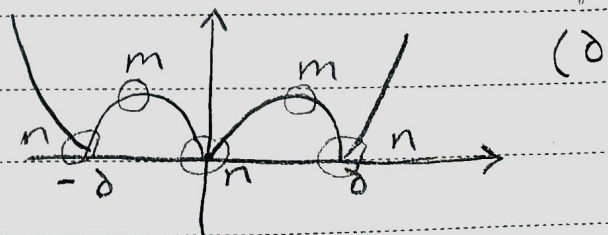
$$f' = \mu x^2 + \mu a x - \mu b = 0 \quad x = 0, -2 \quad (13)$$

$$f'(0) = 0 \Rightarrow b = 0 \quad f'(-2) = 12 - \epsilon a = 0 \quad a = \mu$$

$$f(0) = -\epsilon \quad f(-2) = -11 + \mu^2(\epsilon) - \epsilon = 0$$

$$\text{best condition} = \sqrt{\epsilon + 14} = \sqrt{2} = 2\sqrt{2}$$

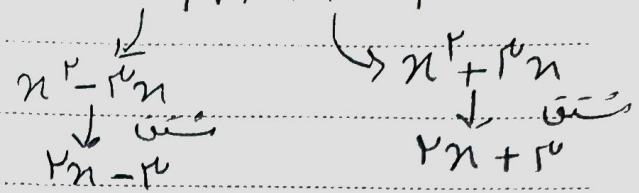
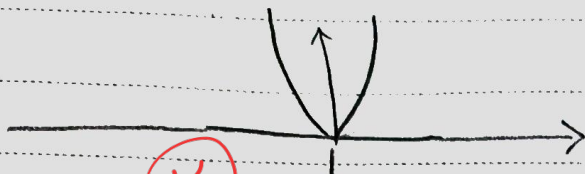
$$y = |x^2 - \delta| |x|$$



$$m = 2 \quad n = \mu$$

$$\frac{n}{m} = 2/1\delta$$

$$y = \sqrt{x|x| + \mu x} \quad \left| \frac{-x^2 + \mu x}{x^2 + \mu x} \right| \quad (4)$$



مشتق موجود $f'_-(0) = -\mu$ $f'_+(0) = \mu$

$$[0, a] \xrightarrow{x-\alpha} y = x^{\frac{\mu}{\nu}} (a-x) = ax^{\frac{\mu}{\nu}} - x^{\frac{\mu}{\nu} + 1}$$

$$y' = \frac{\mu a}{\nu \sqrt[\nu]{x}} - \frac{\mu \sqrt[\nu]{x}}{\nu} = \frac{\mu a - \delta x}{\nu \sqrt[\nu]{x}} \rightarrow x = \frac{\mu a}{\delta}$$

x	0	0/εa	a
y'	∕∕∕	+	-
y	∕∕∕	↗	↘

max

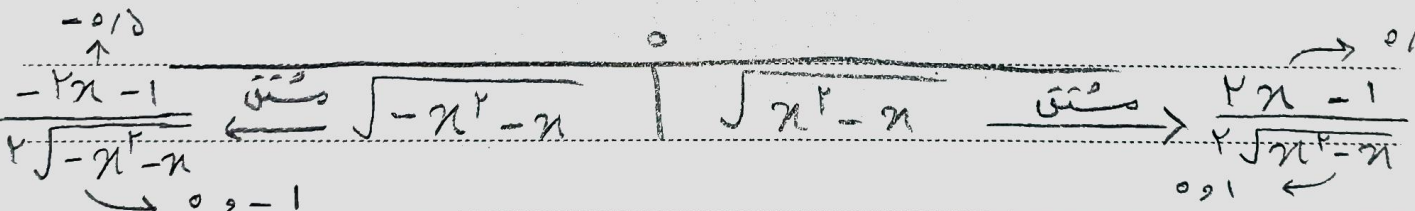
$$f(0/\epsilon a) = 1/\delta$$

$$f\left(\frac{\mu a}{\delta}\right) = \sqrt[\nu]{\frac{\epsilon a^\delta}{\nu}} \left(\frac{+\mu a}{\delta}\right) = 1/\delta \rightarrow \sqrt[\nu]{\frac{\epsilon a^\delta}{\nu}} = \nu/\delta$$

تواند $\rightarrow \frac{\epsilon a^\delta}{\nu} = \frac{\nu \delta}{\nu} \quad a^\delta = \frac{\delta^\delta}{\nu^\delta} \quad \checkmark a = \nu/\delta$

$$x(|x|-1) \geq 0 \quad \frac{-}{-} \frac{+}{+} \frac{-}{-} \frac{+}{+} \quad (A)$$

$$Df = [-1, 0] \cup [1, +\infty)$$



x	-1	-1/ν	0	1/ν	1
y'	∕∕∕	+	0	-	∕∕∕
y	0	↗	0	↘	0

$\left\{ -1, \frac{1}{\nu} \right\} = K$ $\emptyset = n$ $\left(\frac{1}{\nu}, \frac{1}{\nu} \right) = m$

$$\frac{km + n}{k - n} = \frac{\epsilon(1) + 0}{\epsilon - 0} = 1$$

$$y' = \frac{m^2 - m - 1}{(x + m - 1)^2} \leq 0 \Rightarrow (m-1)(m+1) \leq 0 \quad (9)$$

$$m = [-1, 1]$$

مقدار $x = 1 - m$ Ⓟ $1 - m \leq 1 \rightarrow m \geq 0$

$\cap \rightarrow m = [0, 1] - \{1\} = [0, 1)$ مقدار صیح

$Df \Rightarrow 1 - x/|x| \neq 0 \quad x \neq 1$ (10)

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

x	-1	1
y'	-	+

Ⓟ تابع f در $x = -1$ ~~بزرگترین~~ است