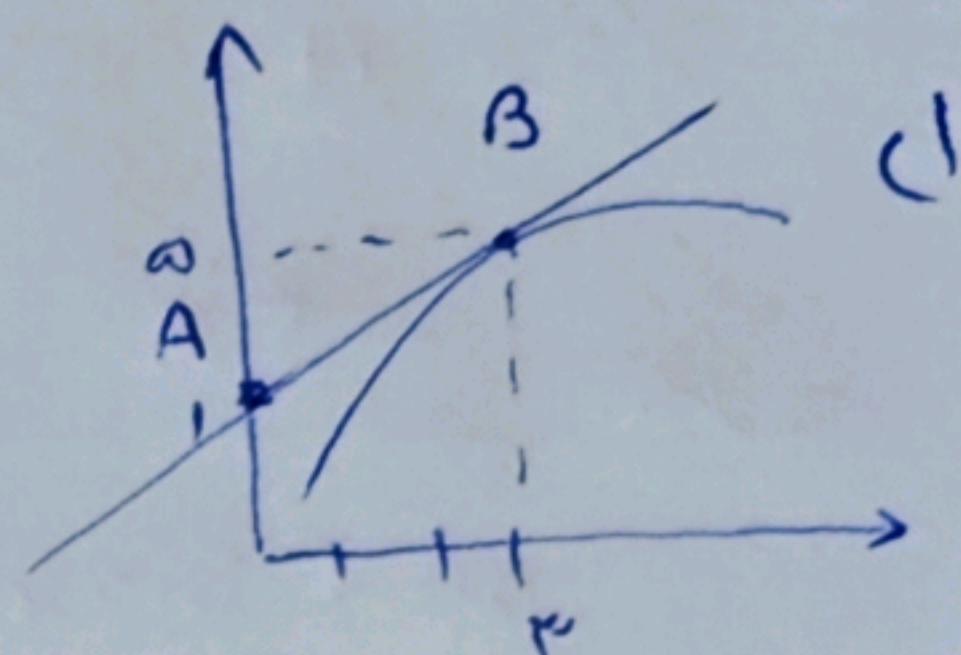


B- μ \rightarrow ϵ \rightarrow δ

مشتق \rightarrow ϵ \rightarrow δ

$$f(x) = a, \quad f'(x) = \frac{y_B - y_A}{x_B - x_A} = \frac{a-1}{x-0} = \frac{a-1}{x}$$



$$m = \frac{1}{x} \rightarrow \frac{x + \epsilon}{x} = \sqrt{ax-1} \rightarrow x^2 + x(a-1) + \epsilon = 0 \rightarrow (x)$$

$$1 - a = \pm 1 \rightarrow \boxed{a=2} \quad x = -\frac{\epsilon}{a}$$

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

$$y' = \frac{x}{\epsilon} = \frac{(x+m)(\epsilon) - (x+m)}{\epsilon^2} \rightarrow m = x$$

$$\frac{x^2 + 2mx + 1}{x+m} \xrightarrow{x=1} y=1 \Rightarrow y = \frac{n+2x}{x} \xrightarrow{y=1} 1 = \frac{n+2}{x} \Rightarrow n=1$$

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

$$\Rightarrow (g-f)(x) = -\sin^2 x \rightarrow (g-f)'(x) = -\cos^2 x$$

$$\Rightarrow (g-f)'(x) = -\cos^2 x = -\frac{1}{2}$$

$$x > 0 \rightarrow \begin{cases} f(x) = \frac{1}{\sqrt{x}} \\ g(x) = \frac{1}{x} \end{cases} \rightarrow f \circ g(x) = -x \rightarrow (f \circ g)'(x) = -1$$

$$\Rightarrow (f \circ g)'(\sqrt{x}) = -1$$

$$\left(\frac{\sin x - 1}{\sin x + 1}\right)^{\alpha} = x g(x) + 1 \quad \lim_{x \rightarrow \dots} g(x) = \frac{-f \sin x}{(x)(\sin x + 1)^{\alpha}}$$

$$\frac{-fx}{x(\sin x + 1)^{\alpha}} = -f$$

$$y = -x^{\alpha} - 1 \rightarrow y' = -\alpha x^{\alpha-1} \quad \begin{cases} \alpha = -\alpha \\ -\alpha = \alpha \end{cases}$$

بدرجه α

$$\rightarrow -\alpha = -\frac{1}{\alpha} \rightarrow \alpha = \pm \frac{1}{\alpha} \rightarrow \alpha = \frac{1}{\alpha} \Rightarrow y = -\frac{\delta}{\epsilon}$$

تعیین به اید نوبت

$$y = mx = f(x) \Rightarrow \frac{f(x)}{x} = f'(x) \rightarrow \alpha(\epsilon n^{\alpha} + \mu) = \mu \cdot x^{\alpha + \mu}$$

$$\Rightarrow x = \pm \frac{1}{\epsilon} \xrightarrow{ns.} x = \frac{1}{\epsilon} \rightarrow m: \frac{\epsilon \sqrt{\alpha} \times \alpha}{1} = \boxed{\sqrt{\alpha}}$$

$$f(x) = mx \Rightarrow \frac{f(x)}{x} = f'(x) \Rightarrow \frac{\sqrt{x}}{(-\alpha x^{\alpha} + x + 1)x} = \frac{9x^{\alpha} - x + 1}{x\sqrt{x}(-\alpha x^{\alpha} + x + 1)}$$

$$\Rightarrow 10x^{\alpha} - \alpha x - 1 = 0 \rightarrow x = \frac{1}{\epsilon} \rightarrow \frac{1}{\delta} \times \rightarrow \frac{1}{\delta} \rightarrow \frac{1}{\sqrt{\alpha}} \Rightarrow \boxed{m = \sqrt{\alpha}}$$

$$(f \circ g)' \left(\frac{\sqrt{\delta}}{\epsilon}\right) = \frac{-fx}{\sqrt{(x^{\alpha} - 1)^{\alpha}}} \left(f' \left(\frac{1}{\sqrt{x^{\alpha} - 1}}\right)\right) = \frac{-\sqrt{\delta} \times \alpha}{\alpha} (\alpha)(1)$$

$$\Rightarrow \frac{-\epsilon \sqrt{\delta} \times \alpha^{\alpha}}{-\epsilon \sqrt{\delta}} = \alpha^{\alpha}$$