

۲. آزین

۱- میانگونی درازدهم ریاضی
 $y_s \frac{K}{M} \lambda + 1 \rightarrow f'(s) \frac{K}{M}$
 $d \rightarrow (s) \frac{K}{M}$
 $\rightarrow (s) \frac{K}{M}$

۲

$$d \approx \frac{1}{\omega} \lambda + \frac{\kappa}{\omega}$$

-N

$$\sqrt{a\lambda - 1} \approx \frac{1}{\omega} \lambda + \frac{\kappa}{\omega}$$

$$\rightarrow \lambda + \kappa = \omega \sqrt{a\lambda - 1}$$

$$\rightarrow \lambda^2 + \lambda\kappa + 14 = 9a\lambda - 9$$

$$\lambda^2 + \lambda(\kappa - 9a) + 14 = 0$$

$$\Delta = 0 \quad (\kappa - 9a)^2 - 4(14) = 0$$

$$\textcircled{1} \quad \kappa - 9a = 10 \rightarrow a \approx -\frac{\kappa}{9}$$

$$\kappa - 9a = 10 \rightarrow a \approx \frac{\kappa}{9} \quad f(\omega) \approx \sqrt{10} - 1 \approx \mu$$

$$ns \rightarrow \begin{matrix} \nearrow \\ \leftarrow \end{matrix} \begin{matrix} g \\ s \end{matrix} \frac{m+\mu}{\kappa}$$

$$\frac{y' s (\mu_{n+m}) (\lambda + \mu) - (\lambda^{\mu} + m \lambda + 1)}{(\lambda + \mu)^{\mu}}$$

$$f'(1) s \frac{(\lambda + m)(\kappa) - (m + \mu)}{14}$$

$$s \frac{\lambda + (\kappa m - m - \mu)}{14} s \frac{\mu m + 4}{14} s \frac{\mu}{\kappa}$$

$$\mu_{m+4} s | \mu \rightarrow \boxed{m s \mu}$$

(1,1) →
(2,1)

$$\kappa - \mu s n \rightarrow \boxed{n s 1}$$

$$m+n = \mu$$

✓ ⊙

$$f(x) = \frac{(p \sin x)(9 + p \sin x + \sin^2 x)}{(p \sin x)(p \sin x)} = \frac{\sin^2 x + p \sin x + 9}{\sin x + p}$$

$$p'g(x) - f(x) = \frac{9}{p + \sin x} - \frac{\sin^2 x + p \sin x + 9}{\sin x + p} = \frac{-\sin^2 x - p \sin x}{p + \sin x}$$

$$= \frac{-\sin x(\sin x + p)}{\sin x + p} = -\sin x \rightarrow$$

$$p'g(x) - f'(x) = -\cos x$$

$$p'g\left(\frac{2\pi}{p}\right) - f'\left(\frac{2\pi}{p}\right) = -\cos\left(\frac{2\pi}{p}\right) = -\frac{1}{p}$$

Q



$f_{og}(\lambda) s$

$$\frac{-1}{\sqrt{\frac{1}{\lambda^2 + |\lambda|} + \frac{1}{\lambda^2 + |\lambda|}}}$$

$s \rightarrow \lambda$
 ✓ \ominus

\ominus

$-\omega$

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

$$g(x) = f'(0)$$

$f'(x)$

$$P \left(\frac{1}{\cos x (1 + \sin x)} - \frac{1}{\cos x (-1 + \sin x)} \right)$$

$$\frac{(1 + \sin x)^P}{-1 + \sin x}$$

$$s \quad P x \quad \frac{P}{1} x - 1 \quad s \quad (-r) \quad \text{D}$$

✓

متنبرسي $\rightarrow y's - \lambda^p - 1 \rightarrow$

$g's \mu n$

$\mu \sqrt{-1-k} \times \mu \sqrt{-1-k} s - 1$

$\sqrt{-1-k} s$

$-1-k s \frac{1}{k} \rightarrow k s - \frac{1}{k}$

$-\lambda^p - 1 s k \rightarrow \lambda^p s - 1 - k$

$\lambda_1 = \sqrt{-1-k}$

$\lambda_2 s = \sqrt{-1-k}$

$\rightarrow d \rightarrow g s - \frac{1}{k} \Rightarrow$ صدها روبرو اوجنقتان

$\frac{1}{k} =$

Ⓟ

dsan ①

-A

$$\Rightarrow \mu\sqrt{\lambda}(\kappa\lambda^{\mu} + \mu) = a\lambda$$

$$\text{Case} \rightarrow \frac{\mu}{\mu\sqrt{\lambda}}(\kappa\lambda^{\mu} + \mu) + (\lambda\lambda)(\mu\sqrt{\lambda}) \text{ sa}$$

$$\Rightarrow \frac{\lambda\lambda^{\mu}}{\kappa\lambda^{\mu} + \mu + 14\lambda^{\mu}} = a$$

$\Rightarrow \mu\lambda^{\mu} + \mu = a\sqrt{\lambda}$ ①
 $\mu\lambda^{\mu} + \mu = a\sqrt{\lambda}$ as $14\sqrt{\lambda} = \mu(\kappa\lambda^{\mu} + \mu)$ ②
 $\mu\lambda^{\mu} + \mu = \lambda\lambda + 4 \Rightarrow |\mu\lambda^{\mu} + \mu| \rightarrow \lambda\lambda + 4$
 $\lambda\lambda + 4$ ✓

dbos y sar

$A(m, ma)$

-9

$$\frac{\sqrt{m}}{-m^p + m + 1} = \sqrt{m} a$$

$$\rightarrow \sqrt{m} a (-m^p + m + 1) s b$$

$$\rightarrow -\sqrt{m} a m^p + a m^{\frac{p}{2}} + a m^{\frac{1}{2}} s b$$

$$\rightarrow -\omega a m^{\frac{p}{2}} + \frac{\omega}{p} a m^{\frac{1}{2}} + \frac{1}{p} a m^{-\frac{1}{2}} s b$$

$$-\omega m^{\frac{p}{2}} + \frac{\omega}{p} m^{\frac{1}{2}} + \frac{1}{p} m^{-\frac{1}{2}} s b$$

$$x m^{\frac{1}{2}} - \omega m^{\frac{p}{2}} + \frac{\omega}{p} m + \frac{1}{p} = 0 \Rightarrow$$

$$m s - \frac{\omega}{p} \pm \sqrt{\frac{\omega^2}{p^2} + 10}$$

$$s \frac{-\frac{\omega}{p} \pm \frac{\omega}{p}}{-10} s \frac{1}{p}$$

$$\rightarrow f\left(\frac{1}{p}\right) s$$

$$\frac{-10}{\sqrt{p}}$$

$$-\frac{\omega}{p} \times \frac{1}{p} + \frac{\omega}{p} s$$



$$(f \circ g)' \left(\frac{\sqrt{\omega}}{p} \right) = g' \left(\frac{\sqrt{\omega}}{p} \right) f'(g \left(\frac{\sqrt{\omega}}{p} \right))$$

$$g'(\lambda) = \frac{-k\lambda}{\lambda^p - 1} \quad \text{and} \quad \frac{-\frac{\sqrt{\omega}}{p} \times p}{\lambda^p} = -k\sqrt{\omega}$$

$$\lambda < \frac{\sqrt{\omega}}{p} \quad \lambda^p - 1 < \frac{1}{k} \Rightarrow \sqrt{\lambda^p} < \frac{1}{p} \Rightarrow \frac{1}{\sqrt{\lambda^p - 1}} > p \Rightarrow f'(\lambda) = p k \lambda^p$$

$$\frac{-k\sqrt{\omega} \times p k \lambda^p}{-k\sqrt{\omega}} = p k \lambda^p$$

$$\lambda > \frac{\sqrt{\omega}}{p} \Rightarrow f(\lambda) = (k\lambda)^p \Rightarrow \lambda^p$$

$$f'(\lambda) = p k \lambda^{p-1}$$