

$$OB^P = OT^P + BT^P$$

-1

$$\rightarrow OB^P = 1 + \tan B^P \rightarrow OB = \sqrt{1 + \tan^2 B}$$

$$= \sqrt{\frac{1}{\cos^2 B}} = \frac{1}{\cos B}$$

$$\alpha + B = 90^\circ$$

$$= \frac{1}{\sin \alpha} \Rightarrow AB = OB - OA = OB - 1$$

$$= \frac{1}{\sin \alpha} - 1$$

(1)

(2)

مسئله ۱۲

$$\frac{DC}{\sin 110^\circ} = \frac{AC}{\sin \alpha}$$

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$$\frac{AC}{\sin \alpha} = 4$$

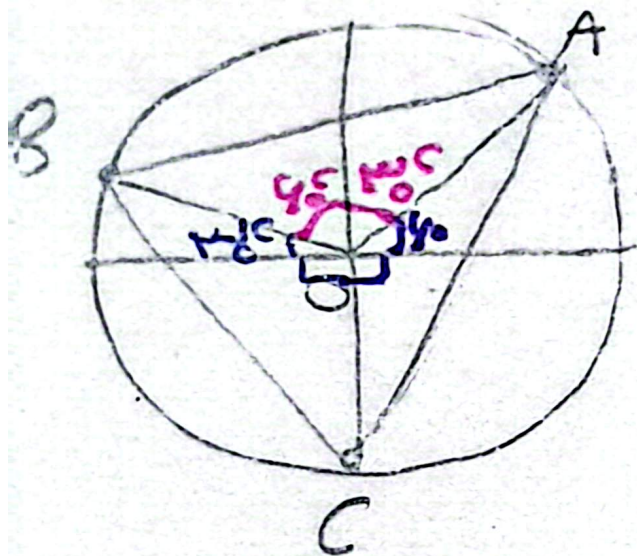
$$\frac{BD}{\sin 70^\circ} = \frac{AB}{\sin(110^\circ - \alpha)}$$

$\sin \alpha$

→

$$\frac{AB}{\sin \alpha} = 4\sqrt{2}$$

$$\rightarrow \frac{AB}{AC} = \sqrt{2}$$



$$\cos \hat{A} = \frac{1}{\sqrt{2}} \rightarrow \hat{A} = 45^\circ$$

$$\sin \hat{B} = \frac{1}{\sqrt{2}} \rightarrow \hat{B} = 100^\circ$$

$$S_{\triangle OAB} = \frac{1}{2} \times OA \times OB = \frac{1}{2} \times 1 \times 1 = \frac{1}{2}$$

$$S_{\triangle OBC} = \frac{1}{2} \times OB \times OC \sin 100^\circ = \frac{1}{2} \times 1 \times 1 \times \frac{\sqrt{2}}{2} = \frac{\sqrt{2}}{4}$$

$$S_{\triangle OAC} = \frac{1}{2} \times OA \times OC \sin 100^\circ = \frac{1}{2} \times 1 \times 1 \times \frac{1}{\sqrt{2}} = \frac{1}{2\sqrt{2}}$$

$$S_{\triangle ABC} = \frac{1}{2} + \frac{1}{2\sqrt{2}} + \frac{\sqrt{2}}{4} = \frac{2 + \sqrt{2}}{4}$$

$$S_{ABC} = \frac{1}{\mu} AC AB \sin \theta^C$$

$$S_{ABC} = \frac{1}{\mu} \log_{\mu} 14 \log_{\mu} \mu^{\nu} \times \frac{1}{\mu} - \mu$$

$$= \frac{1}{\mu} \times \frac{\log 14}{\log \mu} \times \frac{\log \mu^{\nu}}{\log \mu} \times \frac{1}{\mu}$$

$$= \frac{1}{\mu} \times \frac{\cancel{\mu} \log \mu}{\log \mu} \times \frac{\mu \log \mu}{\log \mu} \times \frac{1}{\mu} = \mu$$

$$n = \cos \alpha$$

$$P \cos^N \alpha - \cos^N \alpha - \sin^N \alpha (P \sin^N \alpha - 1)$$

$$= \cos^N \alpha \left(\underbrace{P \cos^N \alpha - 1}_{\cos^N \alpha} \right) - \sin^N \alpha \left(\underbrace{P \sin^N \alpha - 1}_{-\cos^N \alpha} \right)$$

$$\cos^N \alpha (\cos^N \alpha + \sin^N \alpha) = \cos^N \alpha$$

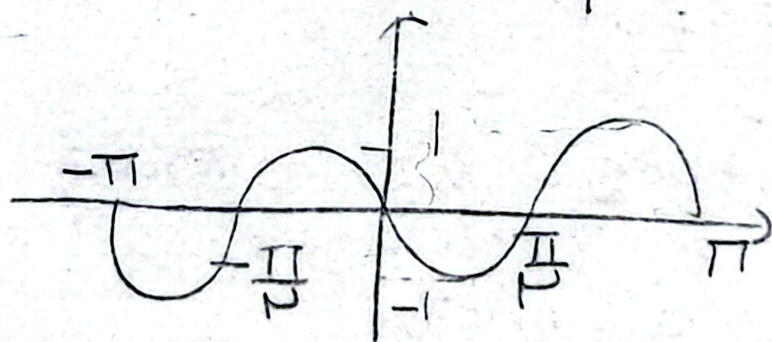
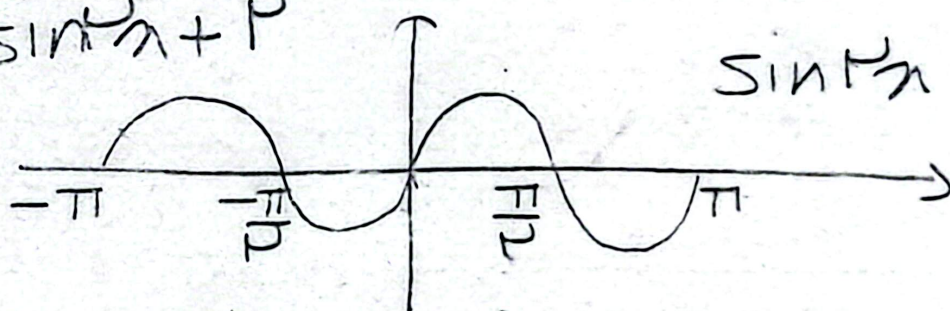
$$\rightarrow \cos^N \alpha = 1 \rightarrow \sin^N \alpha = 0$$

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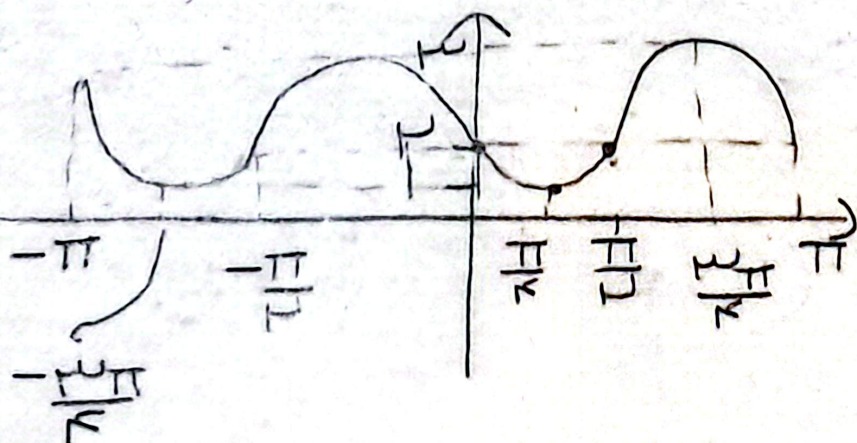
$$y = -P \sin \lambda \cos \lambda + P$$

$$T = \frac{2\pi}{P} = \pi$$

$$= -\sin 2\lambda + P$$



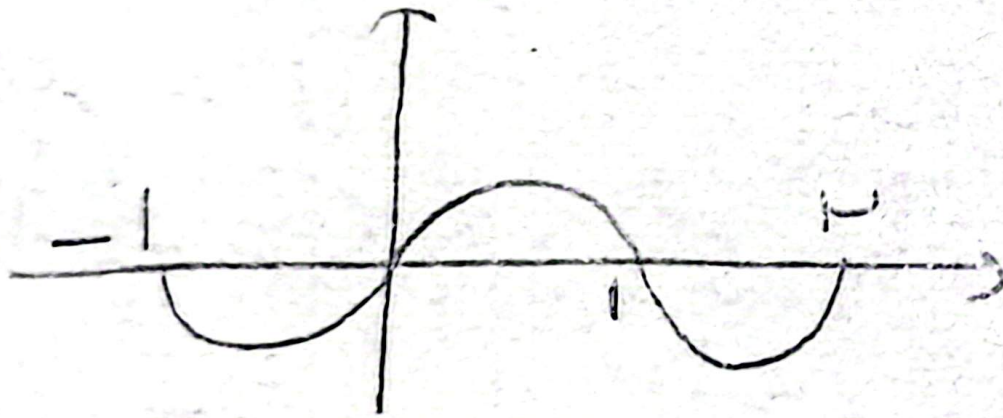
$$-\sin 2\lambda$$



$$-\sin 2\lambda + P$$

$$c) \mu \cos\left(\frac{\pi}{\mu} + \pi x\right) + 1$$

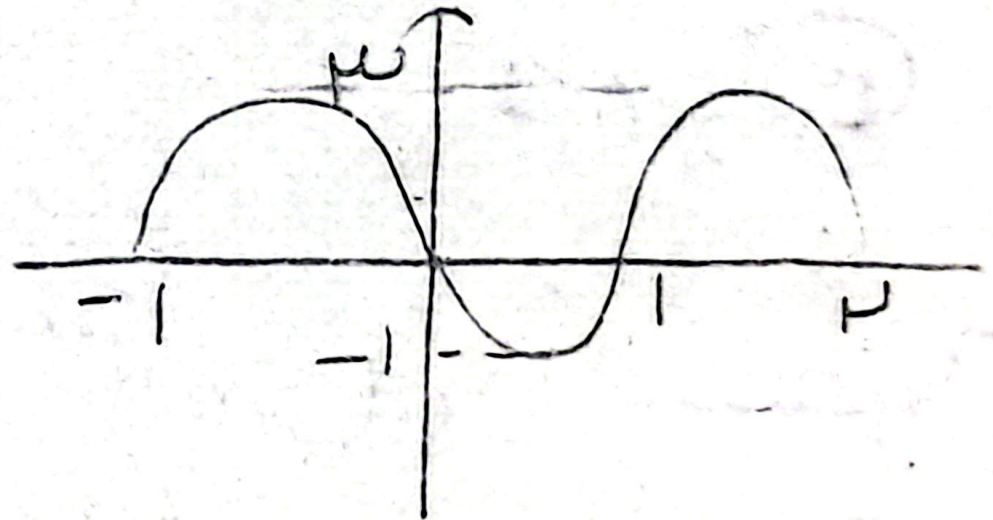
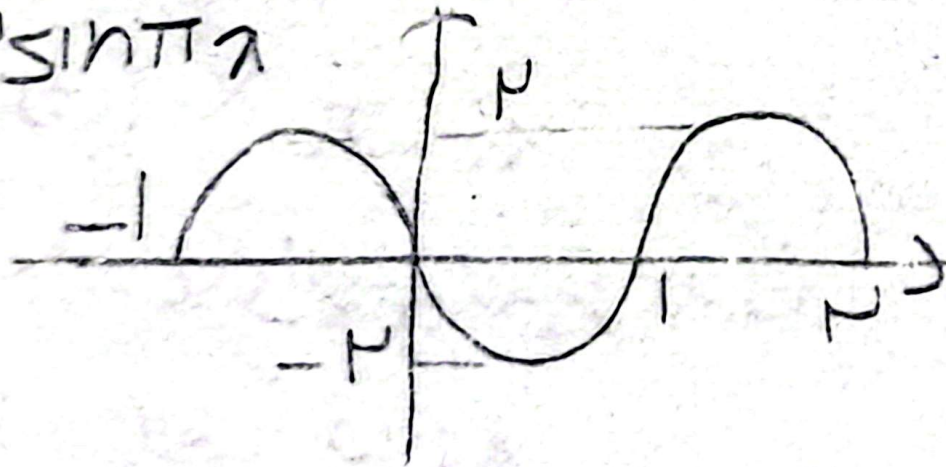
$$= -\mu \sin \pi x + 1 \quad T = \frac{\mu \pi}{\pi} = \mu$$

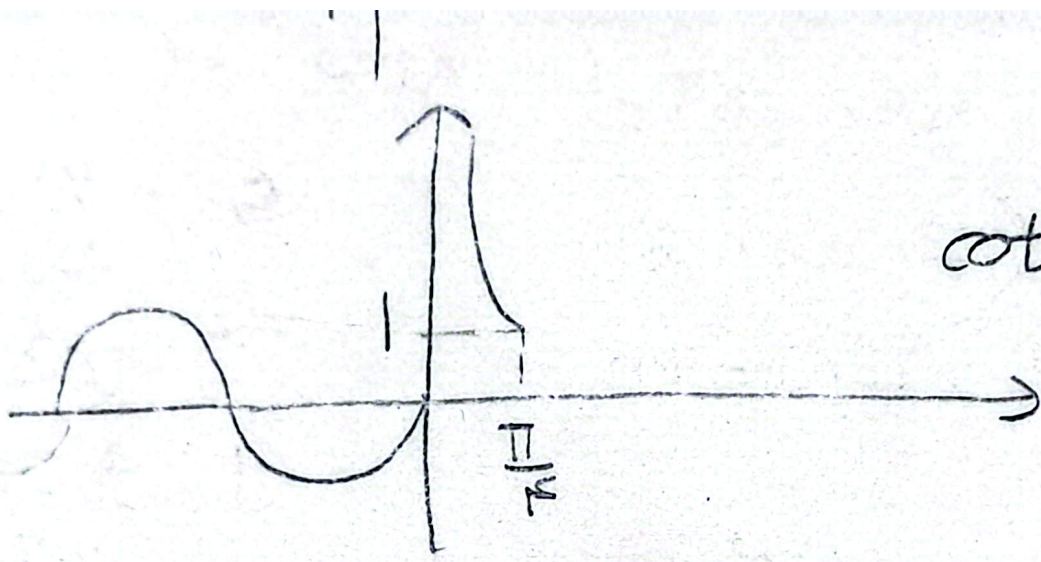


$\sin \pi x$

$-\mu \sin \pi x + 1$

$-\mu \sin \pi x$





$$\cos \frac{\pi}{\kappa} = 1$$

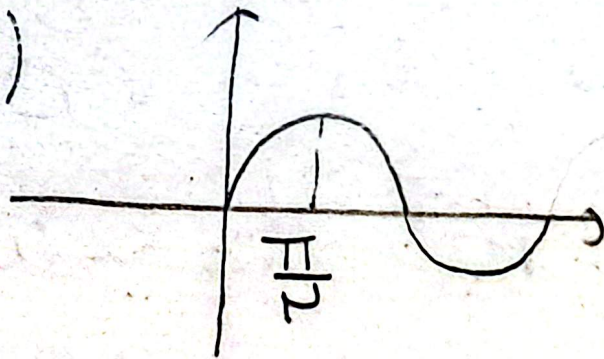
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$$\text{بردار} = [-1, +\infty)$$

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$$a + \frac{b}{\mu} \sin(\kappa x) \cos(\kappa x) \\ = a + \frac{b}{\kappa} \sin(\kappa x)$$

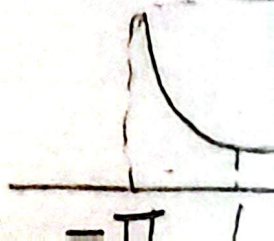
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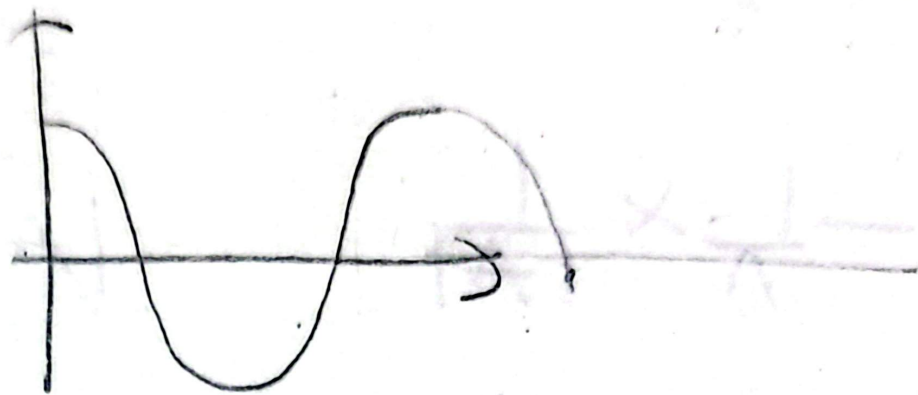


$$T = \frac{\frac{\pi}{\kappa}}{C} = \frac{\pi}{\mu C} = \frac{\kappa \pi}{10} \rightarrow C = \frac{3\kappa}{\pi}$$

$$\frac{b}{\mu} = \mu \rightarrow b = \kappa \quad a = \mu$$

$$\frac{3\kappa}{\pi} \times \frac{\pi}{2} = \frac{3\kappa}{2}$$





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$$a < 0 \quad T = \pi \rightarrow \frac{\pi}{b} = \pi$$

$$x = \pi + \frac{T}{\pi} = \frac{\omega \pi}{\pi}$$

$$\Rightarrow b = \pi$$

$$|a| + c = \pi$$

$$\omega \quad -|a| + c = -\pi \Rightarrow$$

$$\begin{cases} c = -1 \\ a = -\pi \end{cases}$$

$$\frac{1}{\omega} \times \frac{1}{\omega} \tan \frac{\omega \pi}{\pi} = \left| \tan \frac{\pi}{\pi} \right| =$$

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①

$$\mu \sim \omega \quad -\mu \leq \omega = -1 \times \mu + 1 \times \omega$$

سی تاثیر

$$f(-\mu \leq \omega) = f(1 \times \omega)$$

$$0 \leq n < \mu \rightarrow f(n) = -\frac{1}{\mu}n + 1$$

$$f\left(\frac{\mu}{\mu}\right) = -\frac{\mu}{\mu} + 1 = 0$$

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