

$$\left. \begin{matrix} A(\cos \alpha, \sin \alpha) \\ B(1, \sin \alpha) \end{matrix} \right\} AB = |1 - \cos \alpha| = \boxed{1 - \sqrt{1 - \sin^2 \alpha}}$$

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$$\left. \begin{aligned} \frac{AD}{\sin B} &= \frac{5}{\frac{\sqrt{2}}{2}} \rightarrow AD = 5\sqrt{2} \sin B \\ \frac{AD}{\sin C} &= \frac{2}{\frac{1}{2}} \rightarrow AD = 2 \sin C \end{aligned} \right\} \sin C = \sqrt{2} \sin B$$

$$\frac{AC}{\sin B} = \frac{AB}{\sin C} \rightarrow \frac{AB}{AC} = \frac{\sqrt{2} \sin B}{\sin B} = \boxed{\sqrt{2}}$$

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الف) $\left. \begin{aligned} \angle AOB &= \frac{1}{4} \\ \angle BOC &= \frac{\sqrt{3}}{4} \\ \angle COA &= \frac{1}{4} \end{aligned} \right\} \angle \mu' = \boxed{\frac{2 + \sqrt{3}}{4}}$

ب) $AB + AC + BC = \sqrt{2 - \sqrt{3}} + \sqrt{2 + \sqrt{3}} + \frac{\sqrt{2}}{2} = \boxed{\sqrt{6} + \sqrt{3}}$

جمله خطی طولانی در
دیکه طهرافا جواب
هر خطی روش شسته

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$$\frac{2 \log_2 2}{\frac{1}{2}} = \frac{4 \log_2 2}{\sin B} \rightarrow \sin B = \frac{2 \log_2 2}{2 \log_2 2}$$

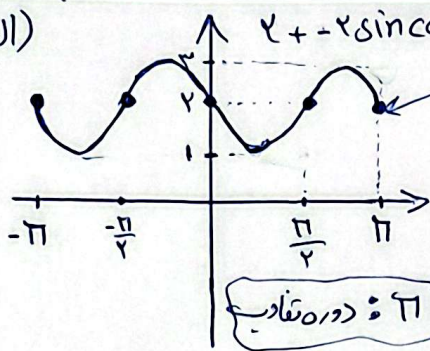
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$$\begin{aligned} \sin^2 \alpha - \cos^2 \alpha &= \sin^2 \alpha - 2 \sin^2 \alpha \rightarrow 2 \cos^2 \alpha - 2 \sin^2 \alpha - 1 = 1 \\ \cos^2 \alpha - \sin^2 \alpha &= 1 \rightarrow \cos^2 \alpha = 1 \rightarrow \cos^2 \alpha - 1 = \sin^2 \alpha \\ \rightarrow \sin^2 \alpha &= \sin^2 \pi = \boxed{0} \end{aligned}$$

$-\sin^2 \alpha = \sin^2 \alpha$
 $\alpha = \pi, 2\pi$

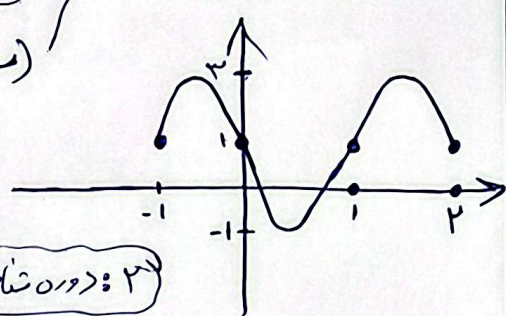
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الف)



$$y = 2 + 2 \sin \cos x = -\sin^2 x + 2$$

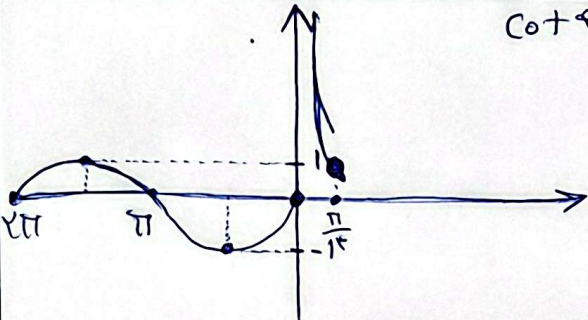
ب)



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$$\cos(\theta) = 1$$

$$R = [-1, +\infty)$$



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$$\sin(cx) \cos(cx) = \frac{\sin(2cx)}{2} \rightarrow \frac{\sin(2cx)}{2} \times \frac{2 \cos(2cx)}{2} = \frac{\sin 4cx}{2}$$

$$f(x) = a + \frac{b \sin^2 cx}{2}$$

$$\begin{cases} a = 2 \\ b = 2 \\ c = \frac{2\pi}{2} = \pi \end{cases}$$

$$f(x) = 2 + 2 \sin^2 \pi x$$

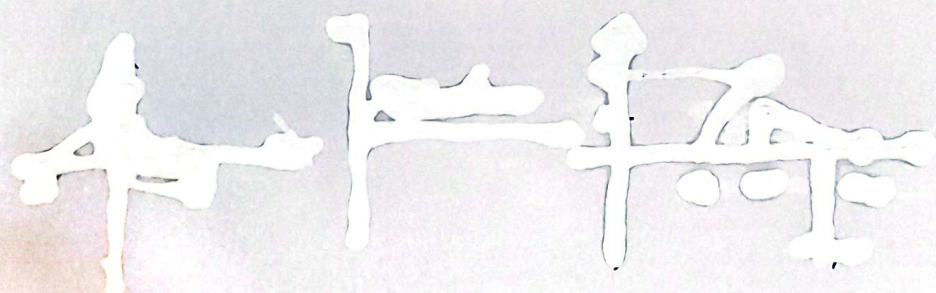
$$\frac{bc}{a} = \left(\frac{2}{2} \right)$$

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$$\left. \begin{aligned} a &= 2 \\ b &= \frac{2\pi}{b} = \pi \rightarrow b = 2 \\ c &= -1 \end{aligned} \right\} f(x) = 2 \cos^2 x - 1 = 0 \rightarrow \cos^2 x = \frac{1}{2}$$

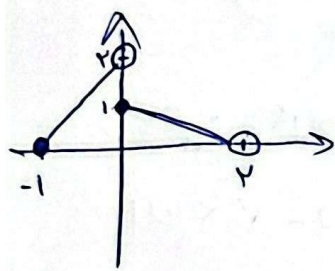
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$$\frac{1 - \tan^2 \alpha}{1 + \tan^2 \alpha} = \frac{1}{2} \rightarrow 1 - \tan^2 \alpha = \frac{1 + \tan^2 \alpha}{2} \rightarrow \tan^2 \alpha = \frac{1}{2} \rightarrow \tan \alpha = \frac{\sqrt{2}}{2}$$

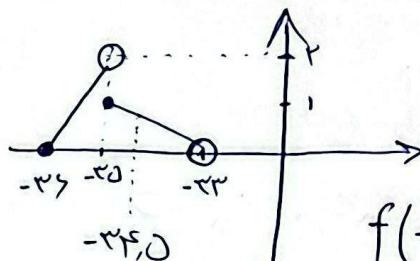


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در صورتی که: ۳



$$f(-3/4, 0) = f(1/4) = \boxed{\frac{3}{4}}$$

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