

Date:

Sub:

11, 17, 18

تکالیف 12

باران نسیمی

$$a \sin \frac{\pi}{4} + b \cos \frac{\pi}{4}$$

و $\frac{b}{a}$ معلوم

$$\frac{a \sin \frac{\pi}{4} + b \cos \frac{\pi}{4}}{a \sin \frac{11\pi}{4} + b \cos \frac{11\pi}{4}} = \tan \frac{\alpha}{4} = -1$$

$$\frac{\pi}{4} = 45^\circ \rightarrow \sin \frac{\pi}{4} = \frac{\sqrt{2}}{2}$$

$$\frac{11\pi}{4} = 315^\circ \rightarrow \cos \frac{11\pi}{4} = \frac{\sqrt{2}}{2}$$

$$\frac{\alpha}{4} = 135^\circ \rightarrow \tan \frac{\alpha}{4} = -\frac{\sqrt{3}}{3}$$

$$\frac{11\pi}{4} = 315^\circ \rightarrow \sin \frac{11\pi}{4} = -\frac{1}{2}$$

$$\cos \frac{\pi}{4} = \frac{1}{2}$$

$$\frac{-\frac{\sqrt{2}}{2}a + \frac{-\sqrt{2}}{2}b}{-\frac{1}{2}a + \frac{1}{2}b} = \frac{-\sqrt{2}}{1}$$

$$-\frac{\sqrt{2}}{2}a + \frac{-\sqrt{2}}{2}b = -\sqrt{2}$$

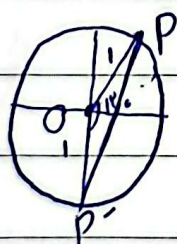
$$\frac{\pm \sqrt{2}}{2} (a+b) = \frac{-1}{1}$$

$$\frac{\pm 1}{2} (a-b)$$

$$2a + 2b = b - a$$

$$3a = -2b \rightarrow \frac{b}{a} = \frac{-2}{3} = \boxed{-\frac{2}{3}}$$

$$P' = 210^\circ + 40^\circ = 250^\circ$$



$$P(\frac{1}{r}, y)$$

$$\cos \alpha = \frac{1}{r}$$

$$\alpha = \frac{\pi}{4} = 45^\circ$$

$$c^2 = a^2 + b^2 - 2ab \cos \hat{c}$$

$$c^2 = 1 + 1 - 2 \cos 120^\circ = 3$$

$$c^2 = 3 \rightarrow c = \sqrt{3}$$

$$\text{مساحت} \Rightarrow 2 + \sqrt{3}$$

$$OP = OP' = \text{شعاع دایره محیطی} = 1$$

$$PP' = \sqrt{1^2 + 1^2 - (1)(1) \times \frac{1}{2} (\cos 120^\circ)} = \sqrt{2 + \sqrt{3}}$$

$$\frac{1}{2} = 1 + 1 + \sqrt{2 + \sqrt{3}}$$

PITICO

Date:

Sub:

$$\frac{\pi}{2} < \frac{180^\circ}{\lambda} = 20^\circ \rightarrow \text{بازار کی نصف دہریہ} \quad - \mu$$

$$\Rightarrow \mu = 20^\circ \quad \checkmark$$

$$\mu_0 = \left| \frac{11\mu}{\mu} - \mu_0(\mu) \right| \quad \alpha = \left| \frac{11\mu}{\mu} - \mu_0 H \right| \quad - \mu$$

$$\mu_0 = \left| \frac{11\mu}{\mu} - 90 \right|$$

$$\textcircled{1} \quad \frac{11\mu}{\mu} - 90 = \mu_0 \quad \frac{11\mu}{\mu} = 110 \rightarrow 11\mu = 2\mu_0 \quad \mu_1 = 20$$

$$\textcircled{2} \quad \frac{11\mu}{\mu} - 90 = -\mu_0 \quad \frac{11\mu}{\mu} = 70 \rightarrow 11\mu = 140 \quad \mu_2 = 12, 72$$

بازار μ_0 (نصف دہریہ) = جواب

$$-\frac{\pi}{4} < \lambda \leq \frac{\omega\pi}{4} \rightarrow -\frac{1}{\mu} < \sin \mu \leq \frac{1}{\mu} \quad \downarrow \text{مطلوبہ یابی} \quad - \mu$$

$$-\frac{1}{\mu} < \frac{m-\mu}{\omega} \leq \frac{1}{\mu} \rightarrow -\frac{\omega}{\mu} < m-\mu \leq \frac{\omega}{\mu}$$

$$\frac{1}{\mu} < m \leq \frac{11}{\mu}$$

مثال اعداد صحیح ω ، μ ، μ ، μ است (یعنی)

$$? K \text{ کیوں} \quad \frac{\sin(10\omega) + K \cos(20\omega)}{\cos(14\omega) + \mu \sin(19\omega)} = \mu \quad \tan 10^\circ = 0.176 \quad - \mu$$

$$\tan 10^\circ = \frac{1}{\mu}$$

$$\frac{\cos 10^\circ - K \sin(10^\circ)}{-\cos 10^\circ - \mu \sin(10^\circ)} = \mu \quad \sin 10^\circ \propto 1$$

$$\cos 10^\circ \propto \mu$$

$$\frac{\mu - K}{-\mu - \mu} = \frac{\mu - K}{-\mu} = \mu \quad \checkmark$$

$$\mu - K = -11 \rightarrow K = 22$$

$$-\frac{1}{\mu} < \sin \mu \leq 1 \rightarrow -\frac{10}{\mu} \leq \frac{m-\mu}{\Delta} \leq 1 \rightarrow -2.0 \leq m-\mu \leq \Delta$$

$$-1.0 \leq m \leq 1 \rightarrow \text{مطلوبہ}$$

Date:

Sub:

$$V + V \cos \alpha = 1 - \cos \alpha$$

$$V \cos \alpha = -1$$

$$\cos \alpha = \frac{-1}{V}$$

$$\frac{1 - \cos \alpha}{1 + \cos \alpha} = V \quad -V$$

$$\frac{\cot(\alpha) + \cot(\alpha)}{\tan(\alpha) - V \tan(\alpha)} = \frac{V \cot(\alpha)}{-\tan(\alpha)} = -V \times \frac{1}{\tan \alpha} \quad \textcircled{V}$$

$$\Rightarrow -V \times \frac{1}{\tan \alpha} = \left(\frac{-1}{V} \right)$$

$$\frac{1}{q} + \sin^2 \alpha = 1$$

$$\sin^2 \alpha = \frac{1}{q}$$

$$\rightarrow \sin \alpha = \pm \frac{\sqrt{q}}{V}$$

$$\left(\frac{\sin \alpha}{\cos \alpha} \right)^2 = \left(\frac{\frac{\sqrt{q}}{V}}{\frac{-1}{V}} \right)^2 = 1 = \tan^2 \alpha$$

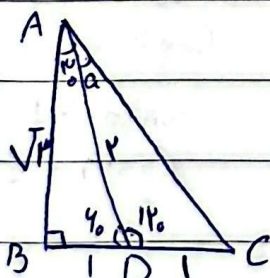
$$\frac{I_0 \alpha}{I_P} \times \frac{\pi}{\frac{1}{I_0}} = \frac{I_P \pi}{I_0} = \frac{V \pi}{\omega}$$

$$L = \alpha \cdot R$$

$$\frac{V \pi}{\omega} \times R_A = \frac{q \pi}{I_0} \times R_B$$

$$\frac{R_A}{R_B} = \left(\frac{\frac{q}{V}}{\frac{1}{V}} \right)^2 = \frac{q}{V}$$

$$\frac{S_A}{S_B} = \left(\frac{R_A}{R_B} \right)^2 = \frac{q}{V}$$



$$V + \Sigma = V \rightarrow AC = \sqrt{V}$$

$$\sin^2 \alpha = \frac{V \times \sqrt{q}}{\sqrt{q}} = \frac{V \sqrt{q}}{V}$$

$$\frac{\sqrt{q} \times V}{V} = \sqrt{q}$$

$$\sin^2 \alpha = V \sin^2 \alpha \cos^2 \alpha$$

$$\sin^2 \alpha = V \sqrt{\frac{1}{q}}$$

$$1 + V^2 = V$$

$$V^2 = V \rightarrow V = \sqrt{q}$$

$$\frac{\sqrt{q}}{\sin \alpha} = \frac{V}{\sin \alpha}$$

$$\frac{V \sqrt{q}}{V} = \frac{V}{\sin \alpha}$$

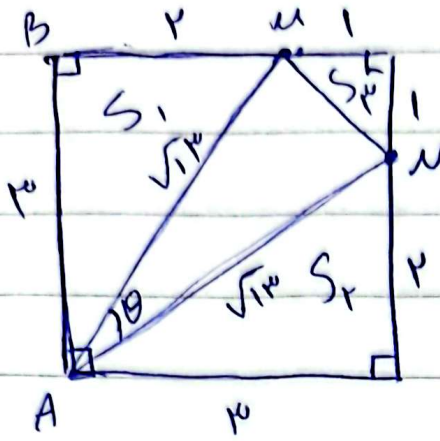
$$\cos \alpha = \sqrt{\frac{V}{q}}$$

$$\sqrt{q} \sin \alpha = \sqrt{q}$$

$$\sin \alpha = \sqrt{\frac{q}{V}}$$

$$\sin^2 \alpha + \cos^2 \alpha = 1$$

PITICO



$$AM^2 = 9 + 4 \rightarrow AM = \sqrt{13} = AN$$

$$S = 3 \times 3 = 9$$

اذا كانت مساحة كل مربع مساوية لـ 4، فإن مساحة المثلث ΔAMN هي 1.5.
 المساحة الكلية هي 9.

$$S_1 = \frac{3 \times 1}{2} = 1.5$$

$$S_3 = 1.5$$

$$S_3 = \frac{1 \times 1}{2} = 0.5$$

$$S_1 + S_2 + S_3 = 4.5$$

$$9 - 4.5 = 4.5$$

$$S_{\Delta} = \frac{1}{2} ab \sin \theta$$

$$4.5 = \frac{1}{2} \times \sqrt{13} \times \sqrt{13} \times \sin \theta$$

$$4.5 = 13 \sin \theta \rightarrow \sin \theta = \frac{4.5}{13}$$