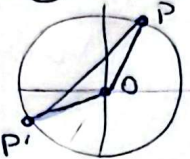


$$\begin{aligned} a \sin \frac{\pi}{6} &= \frac{\sqrt{3}}{2} \times a \\ b \cos \frac{\pi}{4} &= \frac{\sqrt{2}}{2} \times b \\ a \sin \frac{11\pi}{4} &= -\frac{1}{2} \times a \\ b \cos \frac{\pi}{6} &= +\frac{1}{2} \times b \end{aligned} \Rightarrow \tan \frac{\pi}{4} = \frac{-\sqrt{3}}{2} = \frac{\sqrt{3}a + \sqrt{2}b}{a - b} \rightarrow \frac{1}{\sqrt{3}} = \frac{\sqrt{3}a + \sqrt{2}b}{b - a}$$

$$\rightarrow b - a = \sqrt{3}a + \sqrt{2}b \rightarrow \Sigma a = -\sqrt{2}b \Rightarrow \frac{b}{a} = -\sqrt{2}$$

درایرکتی $(\cos, \sin) \rightarrow \cos P = \frac{1}{2} \Rightarrow P = 60^\circ \rightarrow \sin P = y = \frac{\sqrt{3}}{2}$ و $\sin P = 40^\circ$

درایرکتی $10^\circ \rightarrow 10^\circ + 40^\circ = 50^\circ$



$\rightarrow \sin(50^\circ) = \sin 50^\circ \cos 40^\circ + \cos 50^\circ \sin 40^\circ \rightarrow \frac{\sqrt{3}}{2} \times \frac{\sqrt{3}}{2} + \frac{1}{2} \times \frac{1}{2} = \frac{\sqrt{3} + \sqrt{3}}{2} \Rightarrow P = \frac{\sqrt{3} + \sqrt{3}}{2}$

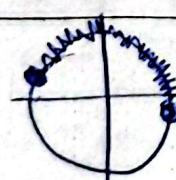
$\frac{\pi}{4} \times \frac{11\pi}{4} = 10^\circ \rightarrow$ درایرکتی 10° درایرکتی 40° درایرکتی 50°

$\rightarrow \Sigma = 50^\circ$

$\rightarrow \Sigma = 50^\circ$

$a = \left| \frac{11\mu}{2} - 30H \right|$ ساعت $10^\circ \rightarrow 40^\circ \rightarrow 50^\circ$

$\rightarrow \frac{11\mu}{2} = 7 \rightarrow \mu = \frac{14}{11} \rightarrow \frac{11\mu}{2} = 11 \rightarrow \mu = 20^\circ$ درایرکتی 10° درایرکتی 40° درایرکتی 50°



$\rightarrow \sin \pi \in (-\frac{1}{2}, 1] \Rightarrow -\frac{1}{2} < \frac{m-4}{8} \leq 1$

$\rightarrow -\frac{1}{2} < m - 4 \leq 1 \Rightarrow \frac{1}{2} < m \leq 5 \Rightarrow m = \{1, 2, 3, 4, 5\} \Rightarrow n(m) = 5$

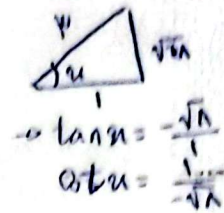
$$\mu = \frac{\sin(90+10) + k \cos(170-10)}{\cos(110-10) + \mu \sin(110+10)} = \frac{\cos 10^\circ + k \sin 10^\circ}{-\cos 10^\circ + \mu \sin 10^\circ}$$

$$\xrightarrow{\cos 10^\circ \approx \frac{1}{2}} \quad \frac{1 - \frac{k}{2} = \mu}{-1 - \frac{\mu}{2}} \rightarrow \frac{k-2}{2} = \mu \rightarrow \frac{k-2}{2} = \frac{k-2}{1} \rightarrow k = 2 \rightarrow \mu = \frac{1}{2}$$

$$\frac{1 - \cos \alpha}{1 + \cos \alpha} = \mu \rightarrow 1 - \cos \alpha = \mu + \mu \cos \alpha \rightarrow 1 = -\mu \cos \alpha \rightarrow \cos \alpha = -\frac{1}{\mu}$$

$$\frac{\tan(\frac{\pi}{2} - \alpha) - \cot(\pi - \alpha)}{\cot(\frac{\pi}{2} - \alpha) + \mu \tan(\pi - \alpha)} = \frac{\cot \alpha + \cot \alpha}{\cot \alpha + \mu \tan \alpha}$$

$$= \frac{\mu \cot \alpha}{-\tan \alpha} = -\mu \cot^2 \alpha = -\frac{1}{2}$$



$$\frac{1}{2} \times \frac{\pi}{180} \times R_A = \frac{9\pi}{1} \times R_B \rightarrow \frac{1}{2} R_A = 9 R_B \rightarrow R_A = 18 R_B$$

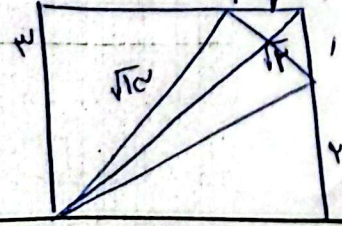
$$\rightarrow \frac{R_A}{R_B} = 18 \rightarrow \frac{\pi R_A}{\pi R_B} = \frac{9}{2}$$

$$\cot 45^\circ = \sqrt{2} \rightarrow \frac{AB}{BD} = AB = \sqrt{2} \rightarrow \frac{AB \times BC}{\sqrt{2}} = \sqrt{2} \rightarrow \sqrt{2} BC = 2\sqrt{2}$$

$$\rightarrow BC = 2 = BD + DC \rightarrow DC = 1 \rightarrow \sqrt{2} \times \frac{1}{\sqrt{2}} \rightarrow \sin C = \mu \sin \theta \cos \theta$$

$$= \mu \times \frac{\sqrt{2}}{\sqrt{2}} \times \frac{1}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

به ۲.۰۰۰ کیلومتر مربع در حدود ۱۰۰ کیلومتر مربع مساحت سابقه است به طرفین



$$\rightarrow AM = AN \rightarrow \text{مربع } MN \text{ در وسط } AC \text{ قرار دارد}$$

$$\sin \mu \left(\frac{\pi}{2} \right) \sin \theta \cos \theta$$

$$= \mu \times \frac{\sqrt{2}}{\sqrt{2}} \times \frac{\sqrt{2}}{\sqrt{2}} = \frac{\sqrt{2}}{2}$$

$$13 = \frac{1}{2} + AO^2 \rightarrow AO = \frac{13}{2} = AO^2 = \frac{13}{2}$$

این مسئله را حل کنید
مسئله بسیار آسان است
حل کنید