

$$\begin{aligned} \text{الف) } \gamma v' &= (\alpha) \text{ Rad} & \frac{\gamma v'}{1 \text{ rad}} &= \frac{\alpha}{\pi} \rightarrow \alpha = \frac{\gamma v' \pi}{\gamma} \\ \text{ب) } \gamma \omega &= (\alpha) \text{ Rad} & \frac{\gamma \omega}{1 \text{ rad}} &= \frac{\alpha}{\pi} \rightarrow \alpha = \frac{\gamma \omega \pi}{\gamma} \\ \text{ج) } \frac{\omega \pi}{2} \text{ rad} &= \alpha & \frac{\omega \pi}{2} &= \frac{\alpha}{\pi} \rightarrow \alpha = \frac{\omega \pi^2}{2} \\ \text{د) } \frac{v \omega}{a} &= \alpha & \frac{v \omega}{a} &= \frac{\alpha}{\pi} \rightarrow \alpha = \frac{v \omega \pi}{a} \end{aligned}$$

$\frac{1}{\omega} = \frac{1}{\omega_0}$

$a \cdot \frac{1}{\omega} = \frac{1}{\omega_0}$

$a = \frac{\omega_0}{\omega}$

$a = 1$

(P) ✓

(الف) $\frac{1}{2} \sqrt{\frac{3}{2}} - \sqrt{\frac{3}{2}} \cdot \frac{1}{2} - 1 + 2 \times 1$ (1)

$$= \frac{\frac{1}{r} + \frac{1}{r}}{\frac{1}{r} - \frac{1}{r}} = \frac{\frac{2}{r}}{\frac{0}{r}} = \frac{2}{0} = \infty$$

$$-\sin 3^\circ \cdot \cos 54^\circ + \cos 3^\circ \cdot \sin 54^\circ = \sin 57^\circ$$

$$-\frac{1}{r} \times \frac{1}{r} + \sqrt{\frac{r}{r}} \times \sqrt{\frac{r}{r}} = \sin^2 \theta = 1 \Rightarrow \sin^2 \theta = \frac{1}{r^2} + \frac{r}{r} = \frac{1}{r^2} + r$$

$\tan \theta = 1$

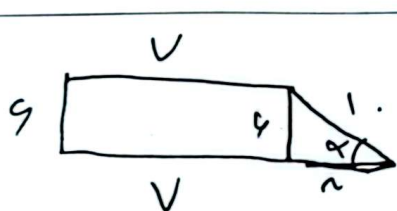
(2) ✓

$$\frac{r \tan^2 \theta (1 - \tan^2 \theta)}{(1 - \cot^2 \theta)^2} = \frac{r \frac{\sqrt{\mu}}{\mu} (1 - \frac{1}{\mu})}{(1 - \frac{1}{\mu})(1 - \frac{1}{\mu})} = \frac{\frac{r \sqrt{\mu}}{\mu}}{\frac{1}{\mu}} = \sqrt{\mu} \Rightarrow \theta = 4.0^\circ$$

$$\frac{4.0^\circ}{1 \text{ n.}} = \frac{\text{Rad}}{\pi} \Rightarrow \text{Rad} = \frac{\pi}{\mu}$$

$$\tan \theta = \omega \Rightarrow \frac{\sin \theta}{\cos \theta} = \omega \Rightarrow \sin \theta = \omega \cos \theta$$

$$\frac{\sin \theta - \cos \theta}{\sin \theta - 2 \cos \theta} = \frac{10 \cos \theta - \cos \theta}{\cos \theta - 2 \cos \theta} = \frac{14 \cos \theta}{-\cos \theta} = -14$$



$$\sin \alpha = \frac{3}{5} = \frac{\text{مقابلہ}}{\text{ہیپوتنوز}} = \frac{3}{5} = 1 \text{ دہر} = 1$$

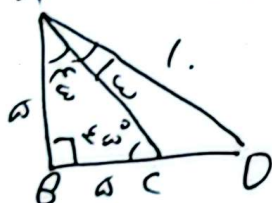
$$\sin^2 \alpha + \cos^2 \alpha = 1 \Rightarrow 0.36 + \cos^2 \alpha = 1$$

$$\cos^2 \alpha = 1 - 0.36 = 0.64 \Rightarrow \cos \alpha = 0.8 \text{ (مقابلہ ہیپوتنوز)} = \frac{4}{5}$$

$$\Rightarrow \text{ضلع مجاور} = 4$$

$$P = 4 + 3 + 3 + 1 + 1 = 12$$

$$A \quad \Delta ADD: A + B + D = 180^\circ \Rightarrow 14^\circ + A + D = 180^\circ \Rightarrow D = 66^\circ$$



$$AB = BC = AD (\cos 45^\circ) = 1 \times \frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}}$$

$$DC = BD - BC = 1 (\sin 45^\circ) - \frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}} - \frac{1}{\sqrt{2}} = 0$$

الف) انفرادی θ -
 - کاہتی $\sin$ - 3^{ویں} جانب
 - انفرادی $\cos$ - 3^{ویں} جانب

ب) انفرادی θ -
 - کاہتی $\sin$ - 3^{ویں} جانب
 - کاہتی $\cos$ - 3^{ویں} جانب

$$1. \quad 1 + \tan^2 x = \frac{1}{\cos^2 x} \Rightarrow 1 + \frac{1}{9} = \frac{1}{\cos^2 x} \Rightarrow \cos^2 x = \frac{9}{10} \Rightarrow \cos x = \frac{3}{\sqrt{10}}$$

$$\sin^2 x + \cos^2 x = 1 \Rightarrow \sin^2 x + \frac{9}{10} = 1 \Rightarrow \sin^2 x = \frac{1}{10} \Rightarrow \sin x = \frac{1}{\sqrt{10}}$$

$$\frac{1}{\sqrt{10}}$$