

$$\frac{\pi}{101} = \frac{\pi}{p} \rightarrow A \text{ No}$$

$$\frac{\pi}{p} \times 1 = \frac{\pi}{p} \rightarrow A \text{ No}$$

$$\frac{\pi}{9} - \frac{p \sin \alpha}{p} - \frac{1}{p} (1 - \sin^2 \alpha) \Rightarrow \frac{\pi}{9} - \frac{p \sin \alpha}{p} - \frac{1}{p} + \frac{\sin^2 \alpha}{p} = 0$$

$$\frac{\sin^2 \alpha}{p} - \frac{p \sin \alpha}{p} - \frac{1}{p} + \frac{\pi}{9} = 0 \quad \frac{\sin^2 \alpha}{p} - \frac{p \sin \alpha}{p} + \frac{9\pi - 4}{p} \times p$$

$$9 \sin^2 \alpha - p \sin \alpha + 1 = 0 \quad \sin \alpha = \frac{1}{p} \quad \text{و } \cos \alpha = \frac{1}{p}$$

$$\sin \alpha = \frac{1}{p} \rightarrow \cos \alpha = \frac{p \sqrt{1 - \frac{1}{p^2}}}{p} = \frac{1}{p} = \frac{1}{9} \Rightarrow \frac{1}{9} = \frac{1}{p} \Rightarrow p = 9$$

$$\log(\sin \alpha) - \log(1 - \cos \alpha) = \log p \quad \sin \alpha > 0 \quad -\cos \alpha > 0 \quad \cos \alpha < 0$$

$$\frac{\sin \alpha}{-\cos \alpha} = p \quad -\tan \alpha = p \quad \tan \alpha = -p \quad 1 + \tan^2 \alpha = \frac{1}{\cos^2 \alpha}$$

$$1 + 9 = 10 = \frac{1}{\cos^2 \alpha} \quad \cos \alpha = -\sqrt{\frac{1}{10}}$$

$$-p \cos \alpha = \sin \alpha \quad -p \cos \alpha - \cos \alpha = -p \cos \alpha = \frac{1}{\sqrt{10}}$$

$$\sin^2 \alpha + 1 - \sin^2 \alpha - \frac{p}{\omega} = 0 \quad \sin^2 \alpha - \sin^2 \alpha + 1 = \frac{p}{\omega}$$

$$\sin^2 \alpha - \sin^2 \alpha + 1 = \frac{p}{\omega} \Rightarrow 1 = \frac{p}{\omega} \Rightarrow p = \omega$$

$$\cos^2 \alpha + \sin^2 \alpha = \sin^2 \alpha + (1 - \sin^2 \alpha) = \sin^2 \alpha + 1 + \sin^2 \alpha - p \sin^2 \alpha =$$

$$\sin^2 \alpha - \sin^2 \alpha + 1 = \frac{p}{\omega}$$

فرض کنیم $\frac{p}{\omega} = 1$

$$\frac{\sin(\mu + \cos \alpha)}{\mu(1 - \cos \alpha)} < 0 \quad \frac{\sin(\mu + \cos \alpha)}{\mu \sin \alpha} = \frac{\mu + \cos \alpha}{\mu \sin \alpha} < 0 \quad \sin \alpha < 0 \quad -\omega$$

$$\sin \alpha < 0 \quad \frac{\sin \mu - 1}{\cos \alpha} > 0 \quad \frac{-(1 - \sin \mu)}{\cos \alpha} > 0 \quad -\cos \alpha > 0 \quad \cos \alpha < 0$$

مربع هو

$$\frac{\mu}{\sin \alpha} + \frac{\mu}{\cos \alpha} = 0 \quad \frac{\mu \cos \alpha + \mu \sin \alpha}{\sin \alpha \cos \alpha} = 0 \quad \mu \cos \alpha + \mu \sin \alpha = 0 \quad -\eta$$

$$\mu \cos \alpha = -\mu \sin \alpha \quad \tan = -\frac{\mu}{\mu} \quad \cot = -\frac{\mu}{\mu}$$

$$-\frac{\mu}{\mu} + -\frac{\mu}{\mu} = -\frac{\mu - \eta}{\mu} = -\frac{1\mu}{\mu} \quad \checkmark$$

$$\sin^2 \alpha + \cos^2 \alpha + \mu \sin \alpha \cos \alpha = (\sin^2 \alpha \cos^2 \alpha) \mu =$$

$$|\sin \alpha \cos \alpha| = \sin \alpha \cos \alpha$$

$$\sqrt{1 + \sin \alpha} = \sqrt{1 + \cos \alpha} \quad \sqrt{1 + \sin \alpha} = \sqrt{1 + \cos \alpha} \quad \sqrt{1 + \sin \alpha} = \sqrt{1 + \cos \alpha} \quad \sqrt{1 + \sin \alpha} = \sqrt{1 + \cos \alpha}$$

$$\sin \alpha + \sin \alpha = \sin(\alpha + \alpha) + \sin(\alpha - \alpha) =$$

$$\sin \alpha \cos \alpha + \sin \alpha \cos \alpha + \sin \alpha \cos \alpha - \sin \alpha \cos \alpha = 2\left(\frac{1}{2}\right) \cos \alpha = \cos \alpha$$

$$\frac{2 \cos \alpha}{\cos \alpha} = \boxed{2}$$

$$(\cos 10)(\cos 20) \left(\frac{1 - \frac{\sin 20}{\cos 20}}{\frac{1}{\cos 20}} \right) = \frac{\cos 20 - \sin 20}{\cos 20} = \cos 20 - \sin 20 \quad -\lambda$$

$$\cos 10 \cos 20 \cos 20 = \frac{1}{\sin 10} \sin 20 \cos 20 \cos 20 = \frac{1}{\sin 10} \sin 20 \cos 20$$

$$\frac{1}{\sin 10} \sin 20 = \frac{1}{\sin 10} \cos 10 = \frac{1}{\sin 10} \cos 10 \quad \checkmark$$

$$\div \cos \quad \sin \alpha + p \cos \alpha = p \quad \tan \alpha + p = \frac{p}{\cos \alpha} \quad \tan \alpha = \frac{p - p \cos \alpha}{\cos \alpha} \quad 9$$

$$1 + \tan^2 \alpha = \frac{1}{\cos^2 \alpha} \quad \left(\frac{p - p \cos \alpha}{\cos \alpha} \right)^2 + 1 = \frac{1}{\cos^2 \alpha}$$

$$\frac{p + 4 \cos^2 \alpha - 12 \cos \alpha}{\cos^2 \alpha} + 1 = \frac{1}{\cos^2 \alpha} \quad \frac{p + 4 \cos^2 \alpha + \cos^2 \alpha - 12 \cos \alpha}{\cos^2 \alpha} = \frac{1}{\cos^2 \alpha}$$

$$p + 4 \cos^2 \alpha - 12 \cos \alpha = 1 \quad 4 \cos^2 \alpha - 12 \cos \alpha + p = 0 \quad 4 \cos^2 \alpha - 12 \cos \alpha = -p$$

~~$$\frac{4 \cos^2 \alpha - 12 \cos \alpha + p}{4} = \frac{4 \cos^2 \alpha - 12 \cos \alpha + p}{4}$$~~

$$4(\cos^2 \alpha - 1) - 12 \cos \alpha = 4 \cos^2 \alpha - 4 - 12 \cos \alpha$$

$$4 \cos^2 \alpha - 12 \cos \alpha = -p \quad -p - 4 = -12$$

$$\sin B \sin C = \frac{1 + \cos A}{p} \quad p \sin B \sin C = 1 + \cos A \quad -10$$

$$B + C + A = \pi \quad \pi - (B + C) = A$$

$$p \sin B \sin C = 1 + \cos(\pi - (B + C)) \quad p \sin B \sin C = 1 - \cos(B + C)$$

$$p \sin B \sin C = 1 - \cos B \cos C - \sin B \sin C \quad p \sin B \sin C = 1 - \cos B \cos C + \sin B \sin C$$

$$\sin B \sin C + \cos B \cos C = 1 \quad \cos(B - C) = 1 \rightarrow B - C = 2\pi \quad B - C = 0 \checkmark$$

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$$B = C \quad B = 72 \quad 120 - (72)2 = 72 \rightarrow A \checkmark$$