

15, 5

عرفان حقیقی یا زدهم سیر A

$$\frac{1}{\sqrt{\cos^2 \alpha}} - \frac{1}{\cot \alpha} = \frac{1 - \sin \alpha}{|\cos|} \quad (1) \quad (1)$$

$$\Rightarrow \frac{1}{|\cos \alpha|} - \tan \alpha = \frac{1}{|\cos \alpha|} - \frac{\sin \alpha}{\cos \alpha} = \frac{1 - \sin \alpha}{|\cos \alpha|}$$

$$\Rightarrow \cos \alpha > 0 \quad \checkmark \quad \cot \alpha = \frac{\cos \alpha}{\sin \alpha} = \frac{\cos \alpha}{\sqrt{1 - \cos^2 \alpha}} = \frac{\cos \alpha}{|\sin \alpha|}$$

$$\frac{\cos \alpha}{\sqrt{1 - \cos^2 \alpha}} = \frac{\cos \alpha}{\sqrt{\sin^2 \alpha}} = \frac{\cos \alpha}{|\sin \alpha|} \Rightarrow \text{چون این کسر برابر}$$

$$= \cot \alpha \text{ است سیر} \leftarrow \sin \alpha \leftarrow \text{در نماند} \leftarrow \text{مستقیم است}$$

$$-\frac{\pi}{12} < n < \frac{11\pi}{12} \Rightarrow -\frac{\pi}{6} < m < \frac{11\pi}{6} \quad (2) \quad (2)$$

$$\Rightarrow -\frac{1}{2} < \sin m \leq 1 \Rightarrow -\frac{1}{2} < \frac{m-1}{2} \leq 1 \Rightarrow m-1 \leq 2$$

$$\Rightarrow -1 < m \leq 2 \quad \checkmark$$

date:

subject:

$$\frac{\sin n}{\cos n} + \frac{\cos n}{\sin n} \Rightarrow \frac{\sin^2 n + \cos^2 n}{\sin n \cos n} = -\mu \Rightarrow \textcircled{\mu}$$

$$\sin n \cos n = -\frac{1}{\mu} \quad \textcircled{\mu}$$

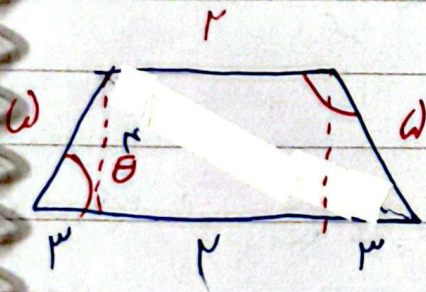
$$(\sin n + \cos n)^2 = \sin^2 n + \cos^2 n + 2 \sin n \cos n = \frac{1}{\mu}$$

$$\Rightarrow \sin n \cos n = \pm \frac{\sqrt{\mu}}{\mu}$$

$$\mu \pi < \mu n < \mu \pi \Rightarrow \frac{\mu}{\mu} \pi < n (\pi \Rightarrow) \sin n + \cos n = -\frac{\sqrt{\mu}}{\mu}$$

$$\Rightarrow \sin^2 n + \cos^2 n = -\frac{\sqrt{\mu}}{\mu} \times \frac{\mu}{\mu} = -\frac{\mu}{\mu} \sqrt{\mu}$$

$$\Rightarrow \frac{1}{\sin^2 n + \cos^2 n} = \frac{1}{-\frac{\mu}{\mu} \sqrt{\mu}} \Rightarrow -\frac{\mu \sqrt{\mu}}{\mu} \checkmark$$



$$\therefore S = \frac{\pi}{\omega} \Rightarrow \pi = \mu \quad \textcircled{\mu} \quad \textcircled{\mu}$$

$$S = \frac{(\pi + \mu)}{\mu} \times \mu = \mu \checkmark$$

date:

subject:

$$\tan(\alpha + \omega) \tan(\beta + \omega) - \sin(\alpha - \beta) \cos(\alpha + \beta) \quad \underline{0} \quad (\omega)$$

$$\frac{\tan \alpha + \tan \omega}{1 - \tan \alpha \tan \omega} \times \frac{\tan \beta + \tan \omega}{1 - \tan \beta \tan \omega}$$

۱۳۵ نه ناسه دو م است ؟

$$\Rightarrow \sqrt{r} \left(-\frac{\sqrt{r}}{r} \right) \times \sin(rv - rv) - \sqrt{r} \left(+\frac{\sqrt{r}}{r} \right) \cos(\alpha - rv) \quad \leftarrow$$

$$\Rightarrow \frac{r \cos rv}{r} + \frac{r \cos rv}{r} = \frac{r \cos rv}{r} \Rightarrow r \cos rv \quad \left(\frac{r}{r} \right)$$

وقت!

$$= \frac{\omega}{r} \cos rv$$

$$\cos rv \quad \cancel{r}$$

(r) (v)

$$1 \neq \cos^r\left(\frac{\pi}{r}\right) \cos^r\left(\frac{\pi}{r}\right) \cos^r\left(\frac{\pi}{r}\right) \cos^r\left(\frac{\pi}{r}\right)$$

$$\Rightarrow 1 \neq \left(\frac{1 + \cos \frac{\pi}{r}}{r}\right) \left(\frac{\sqrt{r}}{r}\right)^r \left(\frac{1}{r}\right) \left(-\frac{1}{r}\right)^r = \frac{1 + r\sqrt{r}}{1} \checkmark$$

$$1 - \sin m = r + r \sin m \Rightarrow \sin m = \frac{r}{\omega}$$

(r) (v)

$$\sin m = \frac{r \tan \frac{m}{r}}{1 + \tan^2 \frac{m}{r}} \xrightarrow{\tan \frac{m}{r} = t} -\frac{r}{\omega} = \frac{rt}{1+t^2}$$

$$\Rightarrow r + r + 1 \cdot t + r = \dots \Rightarrow \begin{cases} t_1 = -\frac{1}{r} \text{ (در حد و حد)} \\ t_2 = -r \checkmark \end{cases}$$

(r) (v)

$$\frac{1 + \cos \theta}{\sin \theta} \Rightarrow \frac{r \cos^r \frac{\theta}{r}}{r \sin \frac{\theta}{r} \cos \frac{\theta}{r}} = \cot \frac{\theta}{r}$$

$$\frac{\sin \theta}{1 - \cos \theta} = \frac{r \sin \frac{\theta}{r} \cos \frac{\theta}{r}}{r \sin^r \frac{\theta}{r}} = \cot \frac{\theta}{r}$$

$$\Rightarrow r \cot \frac{\theta}{r} \Rightarrow k = r \checkmark$$

date:

subject:

تعمیر سوالات!

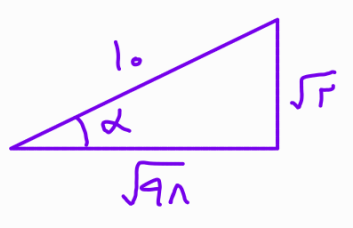
$$\cos^r \left(\frac{11\pi}{8} + \alpha \right) = \frac{1 + \cos \left(\frac{11\pi}{4} + 2\alpha \right)}{2} \quad (1)$$

$$\Rightarrow \frac{1 - \sin(2\alpha)}{2} \Rightarrow \frac{1 - \frac{\sqrt{2}}{2}}{2} \Rightarrow \frac{2 - \sqrt{2}}{4}$$

$$\begin{aligned} \tan(\pi/2 + 12) \tan(12 - \pi/2) - \sin(\pi/2 + 12) \cos(\pi/2 - 12) &= \\ -\cot 12 \times \tan 12 - \sin 12 (-\sin 12) &= -1 + \sin^2 12 = -\cos^2 12 \end{aligned}$$

K = -1

$$\begin{aligned} \cos\left(\frac{11\pi}{4} + \alpha\right) &= \cos\left(\pi - \frac{\pi}{4} + \alpha\right) = -\cos\left(\alpha - \frac{\pi}{4}\right) \quad -10 \\ &= -\left(\cos\alpha \cos\frac{\pi}{4} + \sin\alpha \sin\frac{\pi}{4}\right) = -\frac{\sqrt{2}}{2} (\cos\alpha + \sin\alpha) \end{aligned}$$



\rightarrow $\cos\alpha = \frac{-\sqrt{18}}{10}$

$$-\frac{\sqrt{2}}{2} (\cos\alpha + \sin\alpha) = -\frac{\sqrt{2}}{2} \left(-\frac{\sqrt{18}}{10} + \frac{\sqrt{2}}{10}\right) = \frac{2}{5}$$