

دکتر مسعود

یادداشت

①

الف) $\tan \frac{11\pi}{4} + \sin \frac{15\pi}{4} \cos \frac{13\pi}{4}$

$$\tan \left(2\pi + \frac{3\pi}{4} \right) + \sin \left(\pi + \frac{3\pi}{4} \right) \cos \left(\pi + \frac{\pi}{4} \right)$$

$$\tan 135^\circ + \sin 135^\circ \times \cos 225^\circ = -1 + \frac{1}{\sqrt{2}} \times \left(\frac{\sqrt{2}}{2} \right) = -1 + \frac{1}{2} = -\frac{1}{2}$$

ب) $\tan \frac{14\pi}{9} \sin \frac{11\pi}{3} + \cos \frac{10\pi}{3}$

$$\tan \left(2\pi + \frac{5\pi}{9} \right) \sin \left(\pi + \frac{2\pi}{3} \right) + \cos \left(\pi + \frac{2\pi}{3} \right)$$

$$-\frac{\sqrt{3}}{3} \times \frac{\sqrt{3}}{2} + \frac{1}{2} = 0$$

$$\frac{\cos}{\sin} = 4$$

$$4 \sin = \cos$$

$$\frac{4 \cos \sin - \sin \sin}{\cos \sin + \sin \sin}$$

$$\cos \sin + \sin \sin$$

$$\cot x = 4 \quad \text{یا} \quad \text{②}$$

$$\frac{4 \sin - \sin}{\sin} = \frac{4 \sin}{\sin} = 4$$

مقدار $\cos \alpha$ و $\sin \alpha$ را بیابیم

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

$$\cos^2 + 4 \cos^2 = 1$$

$$\sin^2 = (4 \cos)^2$$

$$5 \cos^2 = 1$$

$$\cos = \pm \frac{1}{\sqrt{5}}$$

چون ربع سوم است $\cos = -\frac{1}{\sqrt{5}}$

انتقالی (لحاظ ربع دوم)

$$\cos \left(\frac{11\pi}{4} + \alpha \right)$$

$$\cos \left(\frac{11\pi}{4} + \alpha \right) = \cos \frac{11\pi}{4} \cos \alpha - \sin \frac{11\pi}{4} \sin \alpha$$

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

$$\sin \alpha = \frac{\sqrt{2}}{2}$$

الف) $\sin^2 = 1 - \cos^2$

$$\cos = \frac{\sin}{1} = \pm \frac{\sqrt{2}}{2}$$

ربع دوم است

قسم B

یا رسا محوری

$$\sin\left(\frac{13\pi}{4} + \alpha\right)$$

$$\sin^2 = 1 - \frac{4}{\delta} = \frac{1}{\delta}$$

$$\tan \alpha = \frac{1}{\sqrt{3}}$$

$$\tan^2 + 1 = \frac{1}{\cos^2}$$

$$\frac{4}{49} = \frac{1}{\cos^2}$$

$$\cos^2 = \frac{49}{4} = \pm \frac{\sqrt{49}}{1}$$

(ب) انتهای کمان α در ربع اول

$$\frac{1}{49} + 1 = \frac{1}{\cos^2}$$

چون اول پس مثبت است.

$$\frac{\sqrt{2}}{1} = \sin$$

ادل است.

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

$$-\frac{4}{\delta} =$$

$$\tan^2 = ?$$

$$\cos^2 = 1 - \frac{\sin^2}{\frac{1}{4}} = \frac{3}{4}$$

$$\tan^2 = \frac{\sin^2}{\cos^2} = \frac{\frac{1}{4}}{\frac{3}{4}} = \frac{1}{3}$$

$$r \sin^2 + \cos^2 = \frac{r}{3} \quad (5)$$

$$\sin^2 + \cos^2 + \sin^2 = \frac{r}{3}$$

$$1 + \sin^2 = \frac{r}{3}$$

$$\sin^2 = \frac{1}{3}$$

max
min

$$S = r, 0$$

$$(a, 4, \sqrt{3}) \quad (6)$$

$$\sqrt{3} \times 4 \times \frac{1}{r} \times \sin \alpha = r, 0$$

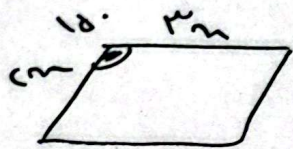
$$r \times \sqrt{3} \times \sin = r, 0$$

$$\sin \alpha = \frac{\sqrt{3}}{r}$$

$$\sin = \frac{r \times \delta^{1/2}}{r \times \sqrt{3}} = \frac{r}{r\sqrt{3}}$$

$$\frac{\max}{\min} = \frac{12}{9} = 2$$

یا رسا حمیری

$$S = \Delta K$$


محرم ۱۲۸۵

$$S = \int \psi^\dagger \gamma^\mu \partial_\mu \psi$$

$$\frac{9m^2}{r} = 2m$$

$$F_{21}^T = \Delta F$$

$$2^r = 1n$$

$$n = 3\sqrt{p}$$

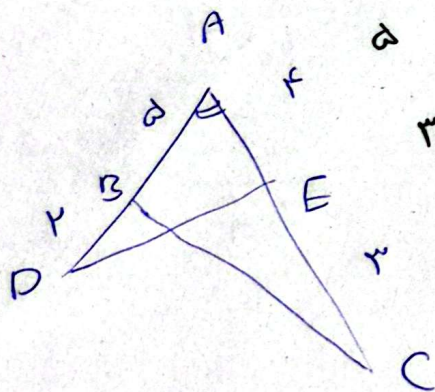
 $\sin 18^\circ$

$$\frac{9\sqrt{r} + 9\sqrt{r}}{2(15\sqrt{r}) \times r} = \frac{3\sqrt{r}}{r}$$

$$w \cdot w \cdot \tan A$$

ABC و ADE ۱۱۷۵ است

اختلاف مساحت



$$a \quad x v \times \sin A \frac{1}{r} - v \times r \times \frac{1}{r} \times \sin A$$

$$\text{Find } \sin \alpha = 1.17 \Delta$$

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

$$C.S. = \sqrt{\frac{3}{2}} / L$$

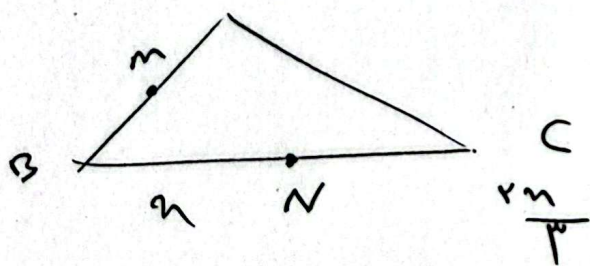
$$\frac{1}{\sqrt{r}} = \tan \hat{A}$$

$$r \overline{BN} = r \overline{NC}$$

N, m سو AB و BC درست است ABC

$$4 \frac{Bm}{Am}$$

4. $\frac{Bm}{Am}$ نسبت Bm و Am نسبت ABC و مساحت مثلث



$$F_{BM} = \omega A m$$

$$B_m = \frac{d}{r} A_m$$

$$\frac{\frac{Q}{A_m}}{A_m} = \frac{Q}{A_m^2}$$

$$r \times \frac{1}{r} \times BM \times BN \times \sin B$$

$$\frac{1}{r} \times A \bar{B} \times BC + \sin B$$

$$\mu_{Bm} = (B_m + A_m) \alpha \frac{\Delta}{\mu}$$

$$\frac{| \sin \alpha |}{C \cdot S \alpha} = \frac{-1}{C \cdot \alpha}$$

$$\frac{1}{\sqrt{C \cdot S \alpha}} - \tan \alpha = \frac{1 + \sin \alpha}{|C \cdot S \alpha|}$$

انتهای کما α در تمام ناحیه قرار دارد

~~در تمام~~

$$\frac{1}{\sqrt{C \cdot S \alpha}} = \frac{1}{|C \cdot S \alpha|} - \tan \alpha = \frac{1 + \sin \alpha}{|C \cdot S \alpha|}$$

$$-\tan \alpha = \frac{\sin \alpha}{|C \cdot S \alpha|}$$

$$C \cdot S \alpha < \frac{1}{|C \cdot S \alpha|} + \frac{\sin \alpha}{|C \cdot S \alpha|}$$

پس در ناحیه سوم $\sin \alpha < 0$

$$\frac{| \sin \alpha |}{C \cdot S \alpha} = \frac{-\sin \alpha}{C \cdot S \alpha}$$