

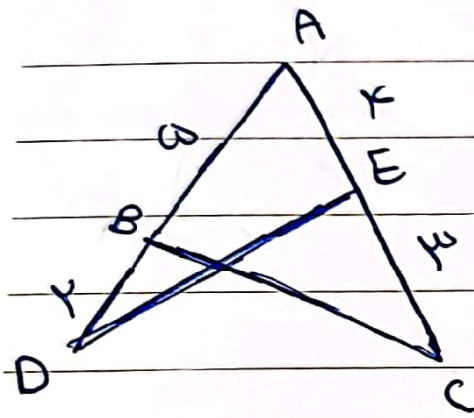
برای طالعوان - کتب ۲۲ - بازده دستری

$$S = a \times b \times \sin \theta \Rightarrow \omega K = a \times \frac{10}{p} a \times \sin \theta \quad -1$$

متوی الاضلاع

$$\Rightarrow \frac{10}{p} a^2 = \omega K \Rightarrow a^2 = \omega K = 72 \Rightarrow a = 4\sqrt{2}$$

$$\text{کلمه متوی الاضلاع} = 2 \times \underbrace{(4\sqrt{2} + 4\sqrt{2})}_{10\sqrt{2}} = \boxed{10\sqrt{2}} \quad b = \frac{10}{p} \times 4\sqrt{2} = 9\sqrt{2}$$



$$|S_{ABC} - S_{ADE}| = 1, \omega \quad -2$$

$$= \left| \frac{1}{p} \times AB \times AC \times \sin \hat{A} - \frac{1}{p} AD \times AE \times \sin \hat{A} \right|$$

$$= \left| \frac{1}{p} \sin \hat{A} (\omega \times p - p \times p) \right| = \frac{p}{p} \sin \hat{A}$$

$$\Rightarrow \sin \hat{A} = \frac{1}{p} \Rightarrow \hat{A} = 30^\circ \Rightarrow \tan \hat{A} = \boxed{\frac{\sqrt{3}}{3}}$$

مسئله

$$\frac{|\sin \alpha|}{\cos \alpha} = \frac{-\sin \alpha}{\cos \alpha} \Rightarrow \sin \alpha < 0$$

$$\frac{1}{\sqrt{\cos^2 \alpha}} - \frac{\sin \alpha}{\cos \alpha} = \frac{1}{|\cos \alpha|} + \frac{\sin \alpha}{|\cos \alpha|} \Rightarrow \frac{-\sin \alpha}{\cos \alpha} = \frac{\sin \alpha}{|\cos \alpha|}$$

$$\frac{1}{|\cos \alpha|} \Rightarrow -\cos \alpha = |\cos \alpha| \rightarrow \cos \alpha < 0$$

α در بازه سوم قرار دارد.

$$\tan \alpha = \frac{\Delta y}{\Delta x} = -\frac{1, \omega}{p} = -\frac{\mu}{\kappa}$$

$$\tan\left(\frac{\pi}{p} - \alpha\right) = \cot \alpha = \boxed{\frac{-\kappa}{\mu}}$$

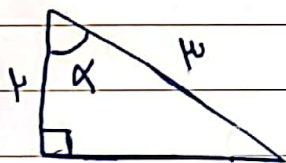
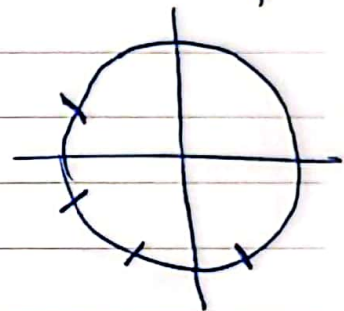
$$\frac{\mu \cos(\mu \pi) - \gamma \sin(\omega \pi)}{\sin(\gamma \pi) - \cos(\mu \pi)} = \frac{\mu \cos\left(\frac{\mu \pi}{\gamma} - \mu \pi\right) - \gamma \sin(\pi - \mu \pi)}{\sin(\pi + \mu \pi) - \cos\left(\frac{\mu \pi}{\gamma} + \mu \pi\right)}$$

$$\sin(\gamma \pi) - \cos(\mu \pi)$$

$$\sin(\pi + \mu \pi) - \cos\left(\frac{\mu \pi}{\gamma} + \mu \pi\right)$$

$$\frac{-\mu \sin \mu \pi - \gamma \sin \mu \pi}{-\sin \mu \pi - \sin \mu \pi} = \frac{-\omega \sin \mu \pi}{-2 \sin \mu \pi}$$

$$= \frac{\omega}{2} = \boxed{\gamma, \omega}$$



$$\sqrt{1-\epsilon} = \sqrt{\omega}$$

$$\tan \alpha = \frac{\sqrt{\omega}}{1} \Rightarrow \tan^2 \alpha = 1$$

$$\sin \alpha = \frac{\sqrt{\omega}}{1} = \frac{1}{\kappa} - 1 = \frac{1}{\kappa}$$

$$\sin\left(\frac{\pi}{p} + \alpha\right) - \sin(\alpha - \pi)$$

$$= \kappa \left(\cos \alpha + \sin \alpha \right)$$

$$\frac{1}{\kappa}$$

$$= \kappa \frac{1 - \sqrt{\omega}}{\mu} = \boxed{\frac{1 - \kappa \sqrt{\omega}}{\mu}}$$

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

$$\Rightarrow \omega \cos^2 \alpha = 1 \Rightarrow \cos^2 \alpha = \frac{1}{\omega} \Rightarrow \cos \alpha = \pm \frac{1}{\sqrt{\omega}}$$

$$\cos \alpha = -\frac{1}{\sqrt{\omega}} = \frac{-\sqrt{\omega}}{\omega} \left(\begin{array}{l} \text{cos} \alpha < 0 \\ \text{cos} \alpha < 0 \end{array} \right)$$

● dotnote

$$r \tan \alpha + (m^r - 1)y = w \Rightarrow (m^r - 1)y = w - r \tan \alpha \quad \Delta$$

$$\Rightarrow y = \frac{-r \tan \alpha}{m^r - 1} x + \frac{w}{m^r - 1} \Rightarrow \frac{-r \tan \alpha}{m^r - 1} = \tan 45^\circ = \sqrt{w}$$

سبب

$$\Rightarrow \sqrt{w} m^r - \sqrt{w} + r \tan \alpha = 0$$

$$\Delta = b^2 - 4ac = \quad \swarrow$$

$$m = \frac{-r \pm \sqrt{r^2 + 4w}}{2\sqrt{w}}$$

$$m_1 = \frac{-r + \sqrt{r^2 + 4w}}{2\sqrt{w}}$$

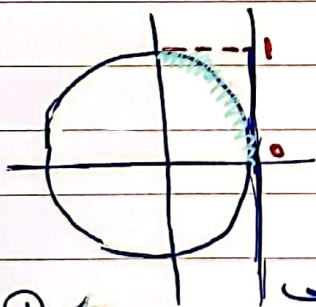
$$m_2 = \frac{-r - \sqrt{r^2 + 4w}}{2\sqrt{w}}$$

$$r + r \times \sqrt{r^2 + 4w} \times \sqrt{w}$$

$$= 14$$

انحراف = $\frac{r}{\sqrt{w}} = \frac{r\sqrt{w}}{w}$

$$\frac{-\pi}{r} < \alpha < \frac{\pi}{r} \Rightarrow \frac{-\pi}{r} < -\alpha < \frac{\pi}{r} \Rightarrow 0 < \frac{\pi}{r} - \alpha < \frac{\pi}{r}$$



$$\Rightarrow 0 < \tan\left(\frac{\pi}{r} - \alpha\right) < 1$$

$$\Rightarrow 0 < \frac{1-m}{r+m} < 1$$

گرساترانتسا

①

$$\frac{1-m}{r+m} < 0$$

②

$$\frac{r}{-r} + \frac{1}{0} < 1$$

$$\frac{1-m-r-m}{r+m} < 0$$

③

$$\frac{-1-rm}{m+r} < 0$$

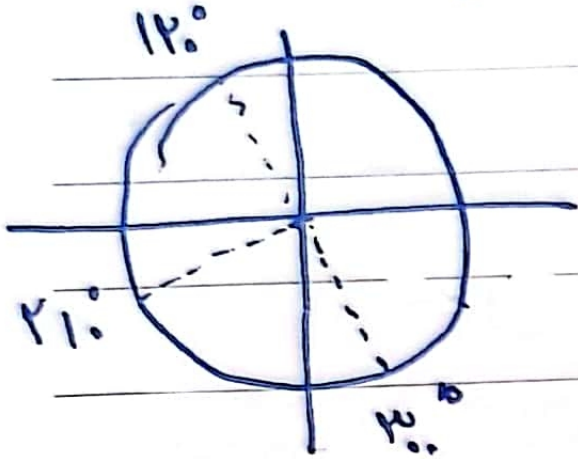
④

$$m \in \left(-\frac{1}{r}, 1\right)$$



1 1

$$\tan(\alpha) \cos(\beta) + \tan(\gamma) \sin(\delta) = -10$$



$$\begin{aligned} \gamma &= 104^\circ \rightarrow 14^\circ \\ \delta &= 17^\circ \rightarrow 14^\circ \end{aligned}$$

$$= -\sqrt{10} \times \frac{-\sqrt{10}}{4} + -\sqrt{10} \times \frac{\sqrt{10}}{4} =$$

$$\frac{10}{4} - \frac{10}{4} = \boxed{0}$$