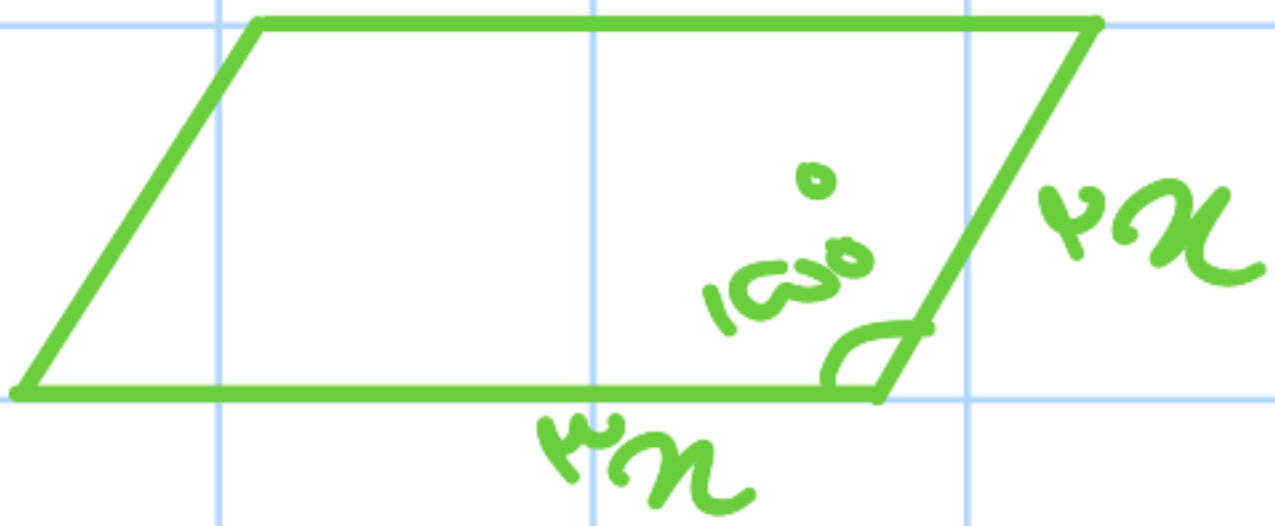


$\angle 0$

↪ $\frac{1}{\sqrt{2}}$

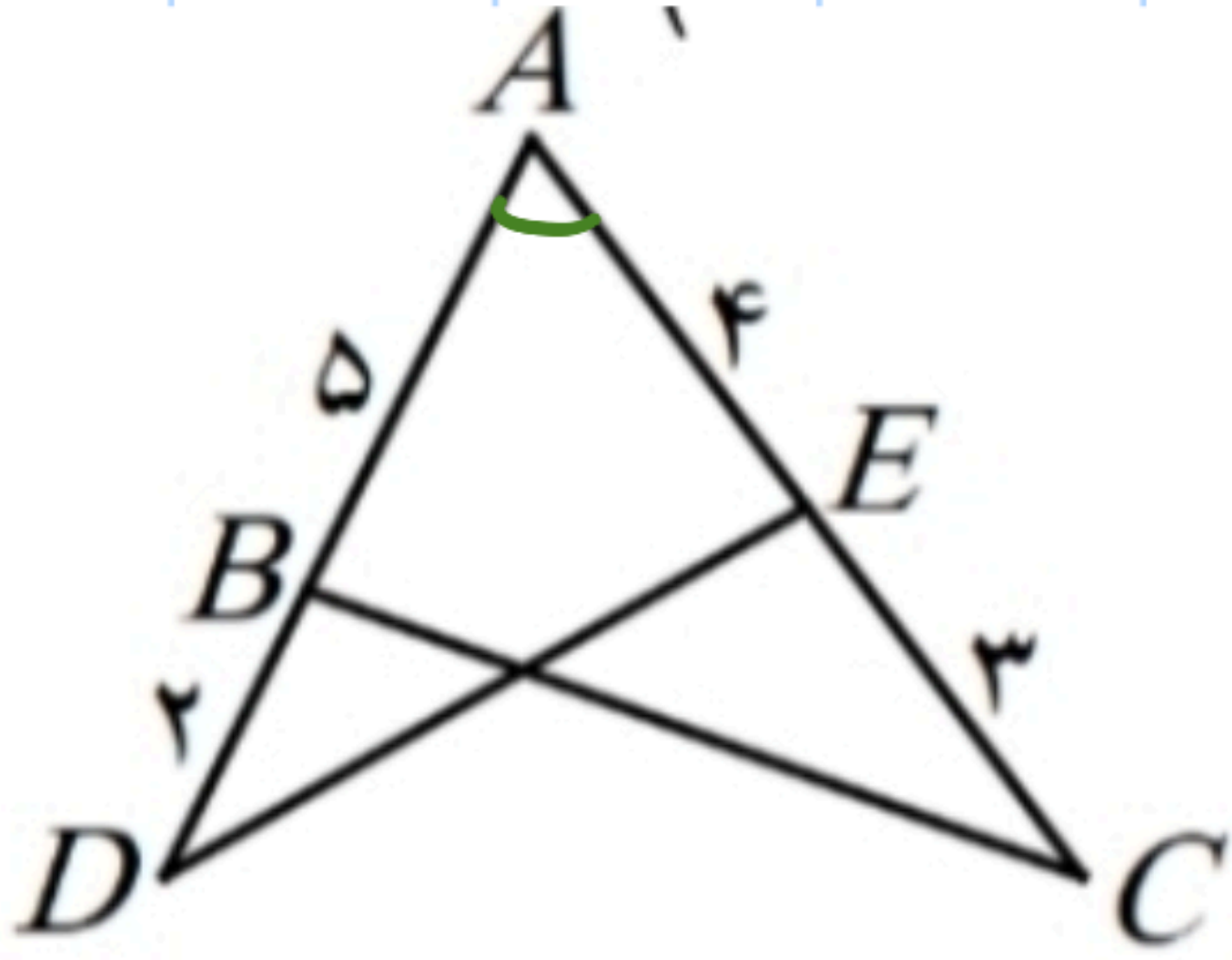
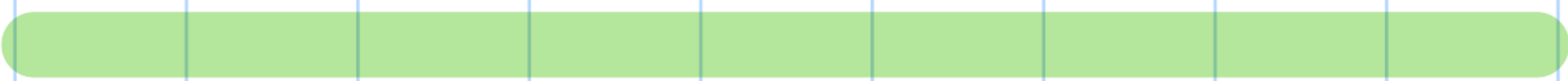
↪



5

$$\left. \begin{array}{l} \text{D, } \omega \times \\ \text{D, } \omega \sin \alpha \end{array} \right\} \rightarrow \omega \times \frac{1}{\sqrt{2}} \rightarrow 1 \text{ m} = \omega \times \frac{1}{\sqrt{2}}$$

$$r \rho = \left(\frac{4 \times 4 \sqrt{2}}{4 \sqrt{2}} + \frac{4 \times 4 \sqrt{2}}{4 \sqrt{2}} \right) \times \frac{1}{\sqrt{2}} = 4 \sqrt{2}$$



$$\frac{V \times \omega \times \sin A}{r} - \frac{V \times \kappa \times \sin A}{r} = 1, V \omega$$

$$\omega \sin A - \kappa \sin A = \frac{1}{r} \omega$$

$$V \sin A = \frac{1}{r} \omega \rightarrow \sin A = \frac{1}{r}$$

$$\cos A \rightarrow \cos^2 A + \frac{1}{r^2} = 1 \rightarrow \cos A = \frac{\sqrt{r^2 - 1}}{r}$$

$$\tan A = \frac{\sin A}{\cos A} = \frac{\frac{1}{r}}{\frac{\sqrt{r^2 - 1}}{r}} = \frac{1}{\sqrt{r^2 - 1}}$$



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

۲۴

۵

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

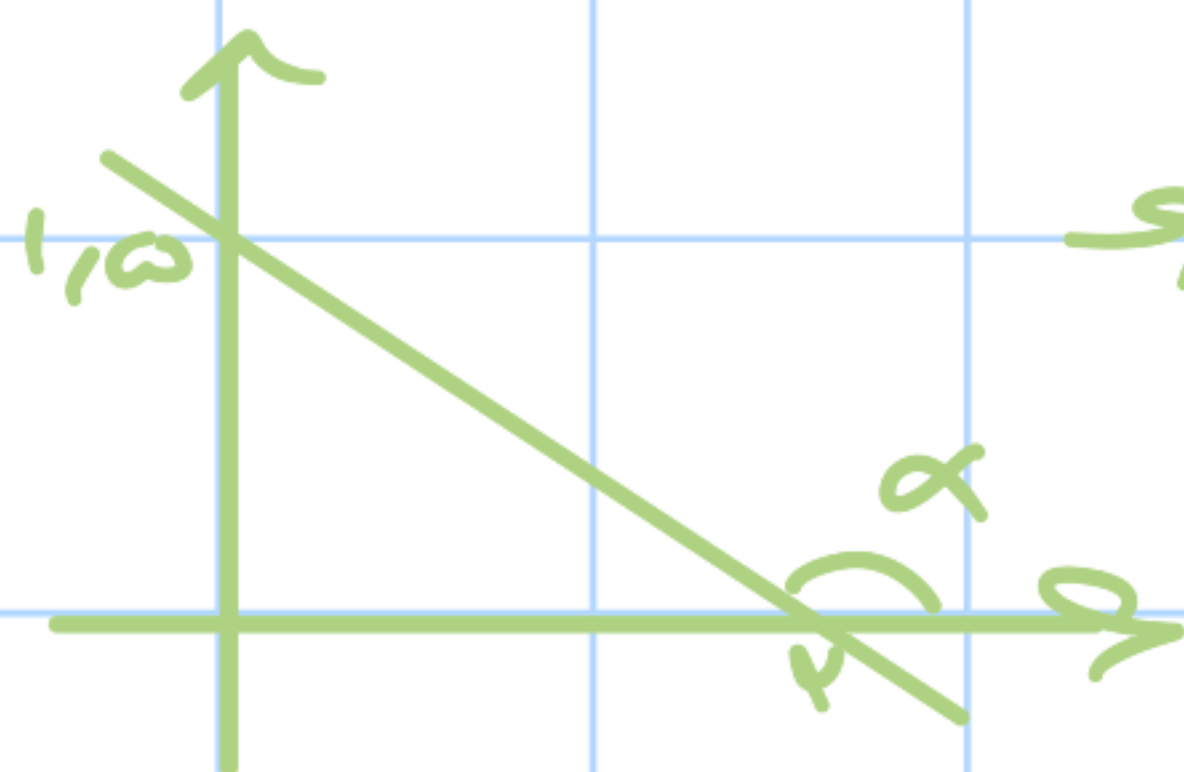
$$-\frac{\sin \alpha}{\cos \alpha} = \frac{\sin \alpha}{|\cos \alpha|} \rightarrow \cos \alpha < 0 \rightarrow \text{در ربع دوم و سوم} \textcircled{۱}$$

$$\frac{|\sin \alpha|}{\cos \alpha} = -\frac{\sin \alpha}{\cos \alpha} \rightarrow |\sin \alpha| = -\sin \alpha \rightarrow$$

$$\sin \alpha < 0 \rightarrow \text{در ربع دوم و سوم} \textcircled{۲}$$

① و ②

در ربع دوم



$$y = ax + b$$

۲۴

$$b = \frac{\pi}{4}, 0 = \pi \alpha + 1, \omega \rightarrow$$

$$\alpha = -\frac{\pi}{\omega} = \tan \alpha$$

۵

$$\tan(\pi/4 - \alpha) = \cot(\alpha) = \frac{1}{\tan \alpha}$$

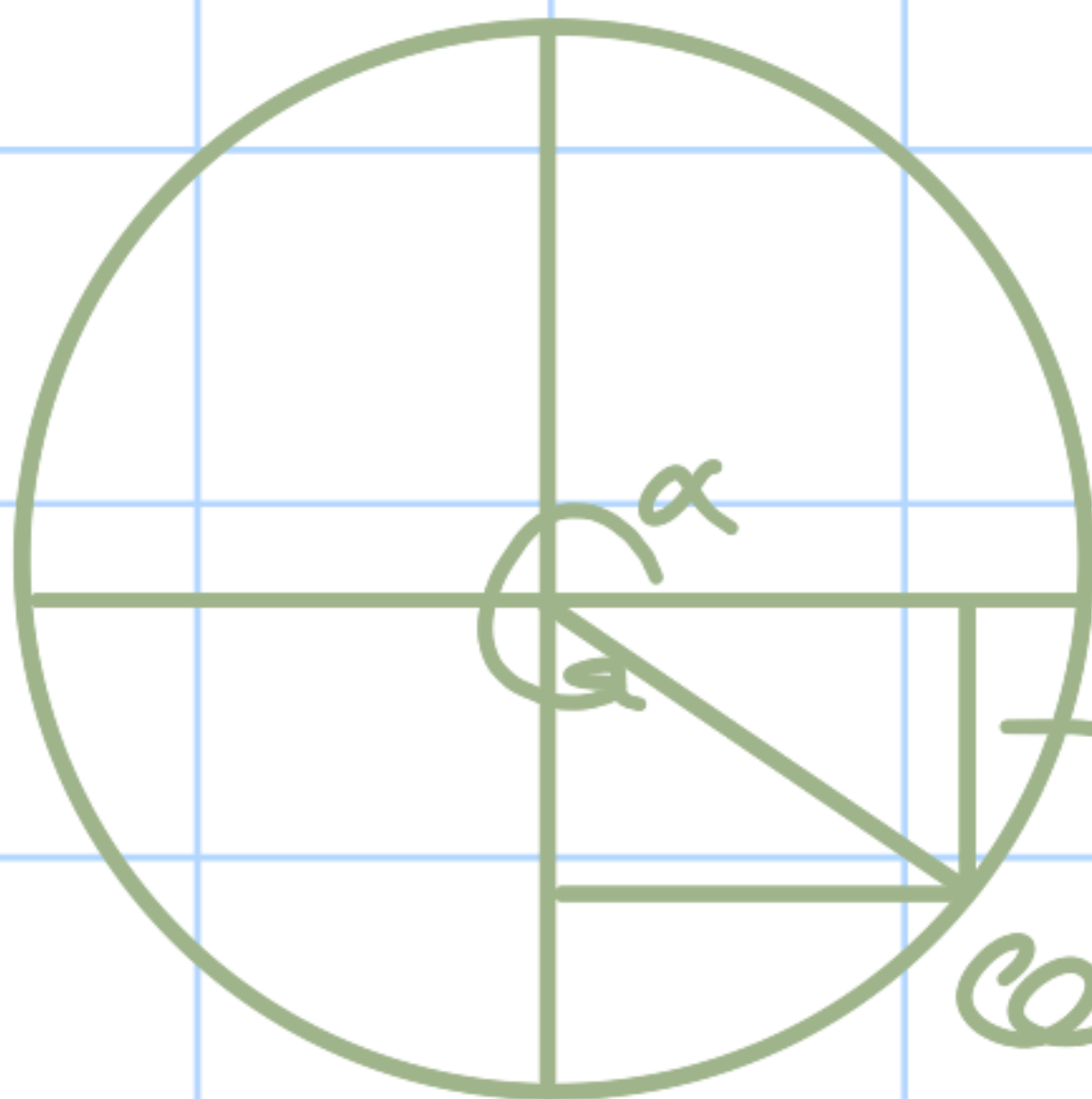
$$\frac{\frac{\pi}{2}}{\frac{\pi}{2}} = \frac{\pi}{\pi} \rightarrow \frac{\pi}{2} = \frac{\pi}{2}$$

5

rew

$$\frac{\cos(\frac{\pi}{2} - \alpha) - \sin(\pi - \alpha)}{\sin(\pi + \alpha) - \cos(\frac{\pi}{2} + \alpha)} = \frac{-\sin(\alpha) - \sin(\alpha)}{-\sin(\alpha) - \sin(\alpha)}$$

$$\frac{-\sin(\alpha)}{-\sin(\alpha)} = 1$$



$$\frac{\cos(\alpha) - \sin(\alpha)}{\sin(\pi + \alpha) - \sin(\alpha - \pi)}$$

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

$$\frac{\cos(\alpha) + \sin(\alpha)}{1 + \tan^2 \alpha}$$

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

$$\frac{\cos(\alpha) + \sin(\alpha)}{1 + \tan^2 \alpha} = \frac{\cos(\alpha) + \sin(\alpha)}{\frac{1}{\cos^2 \alpha} - 1}$$

$$z = \frac{\frac{1-\sqrt{3}}{2}}{\frac{1}{2}}$$

$$z = \frac{1-\sqrt{3}}{2}$$

$$\sin \alpha \neq \cos \alpha, \sin \alpha, \cos \alpha < 0$$

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

$$2 \cos^2 \alpha = 1 \rightarrow \cos \alpha = \pm \frac{\sqrt{2}}{2} \rightarrow \cos \alpha = -\frac{\sqrt{2}}{2}$$

$$y = \frac{-2m\sqrt{2}}{m^2-1} + \frac{\sqrt{2}}{m^2-1}$$

↖

$$\tan \alpha_0 = \sqrt{2}$$

$$\rightarrow \frac{-2m}{m^2-1} \cdot \sqrt{2} \rightarrow -2m \cdot m^2 \sqrt{2} - \sqrt{2}$$

$$\rightarrow m^2 \sqrt{2} + 2m - \sqrt{2} > 0 \Rightarrow m^2 + 2m - 2 > 0 \rightarrow$$

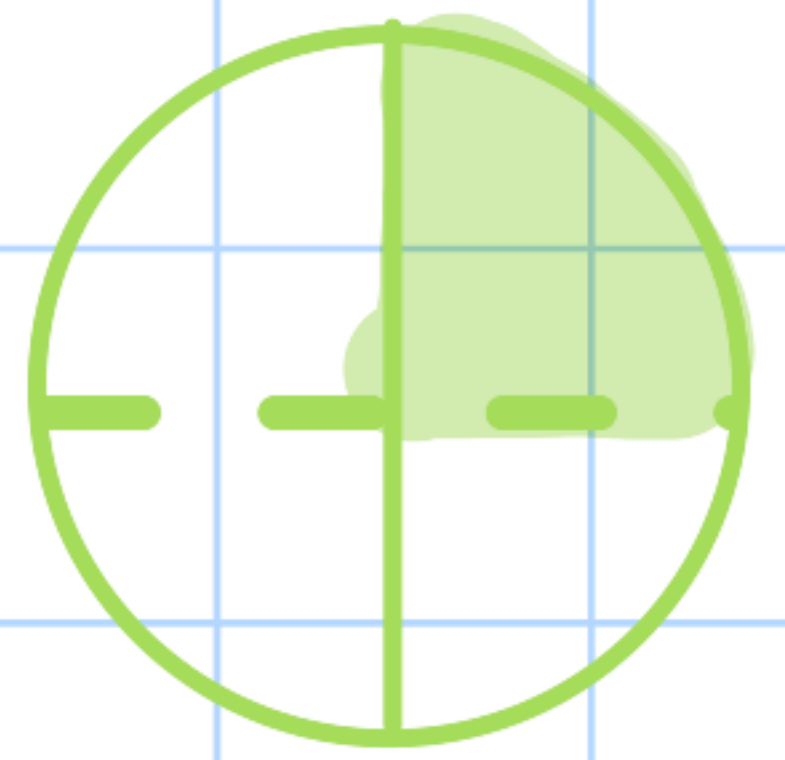
$$(m-1)(m+2) \rightarrow m = \frac{1}{\sqrt{2}}, -\frac{2}{\sqrt{2}} \rightarrow m_2 - m_1 = \frac{1}{\sqrt{2}} + \frac{2}{\sqrt{2}}$$

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

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

$\omega \rightarrow -\frac{\pi}{k} < u < \frac{\pi}{k} \xrightarrow{\pi} -\frac{\pi}{k} < -u < \frac{\pi}{k} \xrightarrow{+\frac{\pi}{k}}$

$0 < \frac{\pi}{k} - u < \frac{\pi}{k} \} \rightarrow \cos(0) < \cos(\frac{\pi}{k} - u) < \cos(\frac{\pi}{k})$
 ← قمره نشده



$0 < \frac{1-m}{2+m} \rightarrow \frac{-2}{-1} + \frac{1}{-}$

m مجموعه مقادیر ممکن. $(-2, 1)$

$\pi_{c1} = \alpha$

$\cos(\frac{3\pi}{4} + \alpha) \times \cos(\pi + \alpha) + \cos(\frac{5\pi}{4} + \alpha) \sin(\frac{4\pi}{4} + \alpha)$

$-\cos \alpha \times -\cos \alpha - \cos \alpha \times \cos \alpha \xrightarrow{\cos \alpha = \frac{\sqrt{2}}{2}} \frac{\cos \alpha^2 \sqrt{2}}{2}$

$-\sqrt{2} \times -\frac{\sqrt{2}}{2} - \sqrt{2} \times \frac{\sqrt{2}}{2} = \frac{2}{2} - \frac{2}{2} = 0$

