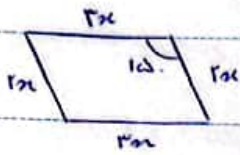


14, 5

آرشیبا یازدهم و فتر A تالیف شماره ۲۴۰۱



$$(r_1)(r_2) \sin \alpha = \Delta F \rightarrow x^2 = \frac{\Delta F}{r} = 1A \rightarrow x = \sqrt{1A}$$

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$$\frac{\Delta F}{r} : r(r_1 + r_2) = 1 \cdot x \rightarrow 1 \cdot (\sqrt{1A}) = 1 \cdot \sqrt{1A} = 2 \cdot \sqrt{F}$$

$$\left(\frac{1}{r} x \Delta x V \sin A\right) - \left(\frac{1}{r} x V x E \sin A\right) = 1/V \Delta \rightarrow \frac{r \Delta \sin A}{r} - \frac{r A \sin A}{r} = 1/V \Delta$$

$$\rightarrow \frac{V}{r} \sin A = \frac{V}{r} \rightarrow \sin A = \frac{1}{r} \rightarrow \hat{A} = 30^\circ \quad \tan \hat{A} = \frac{1}{\sqrt{3}} = \frac{\sqrt{3}}{3}$$

5

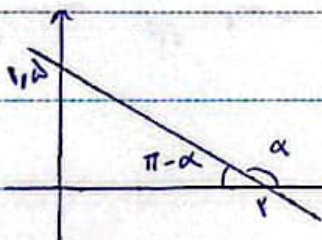
$$\frac{|\sin \alpha|}{\cos \alpha} = \frac{-1}{\cot \alpha} = \frac{-\sin \alpha}{\cos \alpha} \rightarrow \boxed{\sin \alpha < 0}$$

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$$\frac{1}{\sqrt{\cos^2 \alpha}} - \tan \alpha = \frac{1}{|\cos \alpha|} + \frac{\sin \alpha}{-\cos \alpha} = \frac{1 + \sin \alpha}{|\cos \alpha|} \Rightarrow |\cos \alpha| = -\cos \alpha \rightarrow \boxed{\cos \alpha < 0}$$

$\rightarrow \alpha : \text{سوم}$

$$\tan\left(\frac{\pi}{r} - \alpha\right) = \cot \alpha$$



$$\tan(\pi - \alpha) = \frac{1/r}{r} = \frac{1}{r} \rightarrow \tan \alpha = \frac{-r}{r}$$

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$$\rightarrow \cot \alpha = \tan\left(\frac{\pi}{r} - \alpha\right) = \frac{-r}{r}$$

$$\frac{r \cos(r\alpha) - r \sin(1\omega\alpha)}{\sin(r, r) - \cos(r\alpha r)} = \frac{r \cos(r\alpha_0 - 11r) - r \sin(r\alpha_0 - 11r)}{\sin(90 + 11r) - \cos(1A + 11r)} = \frac{r \cos(-11r) - r \cos(11r)}{\cos(-11r) - (-\cos(11r))}$$

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$$\frac{r \cos(11r) - r \cos(11r)}{\cos(11r) + \cos(11r)} = \frac{\cos(11r)}{2 \cos(11r)} = \frac{1}{2}$$

$$\frac{-r \sin 2r^\circ - r \sin 2r^\circ}{-\sin 2r^\circ - \sin 2r^\circ} = \frac{-2r \sin 2r^\circ}{-2 \sin 2r^\circ} = r$$

$$\frac{\sin\left(\frac{\pi}{r} + \alpha\right) - \sin(\alpha - \pi)}{|\tan^r \alpha - 1|} = \frac{\sin\left(\frac{\pi}{r} + \alpha\right) - (-\sin(\pi - \alpha))}{|\tan^r \alpha - 1|}$$

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

$$\cos \alpha = \frac{r}{r} \rightarrow \sin^r \alpha = 1 - \frac{r}{r} = \frac{\omega}{r} \rightarrow \sin \alpha = \frac{-\sqrt{\omega}}{r}$$

$$\tan \alpha = \frac{-\sqrt{\omega}}{r} \times \frac{r}{r} = \frac{-\sqrt{\omega}}{r}$$

$$\frac{\frac{-\sqrt{\omega}}{r} + \frac{r}{r}}{\left|\frac{\omega}{r} - 1\right|} = \frac{\frac{r - \sqrt{\omega}}{r}}{\frac{1}{r}} = \frac{r(r - \sqrt{\omega})}{r} = r - \sqrt{\omega}$$

$$\cos^2 \alpha = 1 - \sin^2 \alpha = 1 - \frac{\omega}{r^2} = \frac{r^2 - \omega}{r^2}$$

$$\sin^r \alpha + \cos^r \alpha = 1 \rightarrow \sin \alpha = r \cos \alpha \rightarrow r^r \cos^r \alpha + \cos^r \alpha = 1 \rightarrow \omega \cos^r \alpha = 1$$

$$\rightarrow \cos^r \alpha = \frac{1}{\omega} \rightarrow \cos \alpha = \frac{-1}{\sqrt{\omega}} = \frac{-\sqrt{\omega}}{\omega}$$

$$m = \tan \theta_0 = \sqrt{r}, m = \frac{-a}{b} \rightarrow \frac{r m}{m^2 - 1} = \sqrt{r}$$

$$\rightarrow \sqrt{r} m^2 + r m - \sqrt{r} = 0 \quad \Delta = 14 \quad m = \frac{-r \pm r}{r\sqrt{r}} \rightarrow m_1 = \frac{1}{\sqrt{r}}, m_2 = \frac{-r}{\sqrt{r}}$$

$$\omega m \text{ interval: } \frac{1}{\sqrt{r}} - \left(\frac{-r}{\sqrt{r}}\right) = \frac{r}{\sqrt{r}}$$

$$\tan\left(\frac{\pi}{r} - \alpha\right) = \frac{1 - m}{r + m} \rightarrow \tan(\alpha) = \frac{1 - m}{r + m} \quad -\frac{\pi}{r} < \alpha < \frac{\pi}{r}$$

$$\rightarrow -1 < \tan \alpha < 1 \rightarrow -1 < \frac{1 - m}{r + m} < 1 \rightarrow -1 < \frac{1 - m}{r + m} < 1$$

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

$$\rightarrow D = (-r, -\frac{1}{r}) \quad -\frac{\pi}{r} < \alpha < \frac{\pi}{r} \rightarrow -\frac{\pi}{r} < \alpha - \frac{\pi}{r} < \frac{\pi}{r}$$

لأن در ربع اول است ← از این است ← $\frac{1-m}{r+m} > 0 \rightarrow m \in (r, 1)$

Subject.

Day. Month. Year.

$$\tan(\pi_0) = \tan(\pi_0 - \epsilon_0) = -\tan \epsilon_0 = -\sqrt{\mu} \quad \text{سوال 1}$$

$$\cos(\pi_1) = \cos(\pi_1 + \pi_0) = -\cos \pi_0 = -\frac{\sqrt{\mu}}{r} \quad \text{سوال 1}$$

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$$\tan(\epsilon_1) = \tan(\pi_1 - \epsilon_0) = -\tan \epsilon_0 = -\sqrt{\mu} \quad \text{سوال 1}$$

$$\sin(\pi_2) = \sin(\pi_0 - \epsilon_0) = \sin \epsilon_0 = \frac{\sqrt{\mu}}{r} \quad \text{سوال 1}$$

$$(-\sqrt{\mu})\left(-\frac{\sqrt{\mu}}{r}\right) + (-\sqrt{\mu})\left(\frac{\sqrt{\mu}}{r}\right) = \frac{\mu}{r} - \frac{\mu}{r} = 0$$