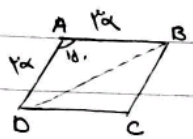


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$$S_{ABCO} = r \times \frac{1}{r} \times AD \times AB \times \sin A = r \times \frac{1}{r} \times r \times \frac{1}{r} = r^2 = \Delta E \Rightarrow a = r\sqrt{r}$$

$$r(AD+AB) = 1 \Rightarrow r = \frac{1}{r\sqrt{r}}$$

$$S_{ABC} = \frac{1}{r} \times AB \times AC \times \sin A = \frac{r\sqrt{r}}{r} \sin A \quad \left\{ \left| \frac{1}{r} \sin A \right| = \frac{1}{r\sqrt{r}} \right.$$

$$S_{ADE} = \frac{1}{r} \times AE \times AD \times \sin A = \frac{r\sqrt{r}}{r} \sin A$$

$$\sin A = \frac{1}{r} \rightarrow r \rightarrow \tan r = \frac{\sqrt{r}}{r}$$

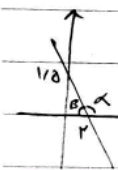
$$\sin A = \frac{-1}{r} \rightarrow 10. \text{ } \vec{O} \vec{E}$$

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

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

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



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

$$\Rightarrow \tan(\pi - \alpha) = \frac{r}{r} \Rightarrow \tan \alpha = -\frac{r}{r}$$

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

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

$$= \frac{-2 \sin r\pi}{-r \sin r\pi} = \frac{2}{r} = r/8$$

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

$$\cos \alpha = \frac{r}{r}, \cos \alpha = \frac{r}{r}, 1 - \cos \alpha = \sin^2 \alpha = \frac{r}{r} \Rightarrow \sin \alpha = \frac{\sqrt{r}}{r} \rightarrow -\frac{\sqrt{r}}{r}$$

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

$$\sin \alpha = r \cos \alpha \Rightarrow \tan \alpha = r \Rightarrow 1 + \tan^2 \alpha = \frac{1}{\cos^2 \alpha} = a \Rightarrow \cos^2 \alpha = \frac{1}{a}, \cos \alpha = \pm \frac{\sqrt{a}}{a}$$

$$r mx + (m^2 + 1)y = r \Rightarrow y = \frac{-r m}{m^2 + 1} x + \frac{r}{m^2 + 1} \quad \Delta$$

$$\tan \varphi = \frac{-r}{m} = \frac{-r m}{m^2 + 1} \Rightarrow \sqrt{r^2 m^2 + r^2} - \sqrt{r^2} = 0 \rightarrow \frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{14}}{\sqrt{r}} = \frac{\varepsilon}{\sqrt{r}} = \frac{r \sqrt{r}}{r} \quad (P)$$

$$\tan\left(\frac{\pi}{2} - x\right) = \frac{\tan \frac{\pi}{2} - \tan x}{1 + \tan \frac{\pi}{2} \tan x} = \frac{1 - \tan x}{1 + \tan x} = \frac{1 - m}{r + m} \quad \Delta$$

$$\frac{1 - \tan x + 1 + \tan x}{1 + \tan x} = \frac{1 - m + r + m}{r + m} \Rightarrow \frac{r}{1 + \tan x} = \frac{r}{r + m} \Rightarrow \frac{1 + \tan x}{r} = \frac{r + m}{r}$$

$$1 + \tan x = \frac{r + r m}{r} = \tan x = \frac{r m + 1}{r} \rightarrow -r < r m + 1 < r \Rightarrow -r < m < 1 \quad \checkmark$$

$$\frac{-\pi}{2} < x < \frac{\pi}{2} \rightarrow \tan x \rightarrow (-1, 1)$$

$$(-\sqrt{r})\left(\frac{-\sqrt{r}}{r}\right) + (-\sqrt{r})\left(\frac{\sqrt{r}}{r}\right) = 0 \quad \checkmark \quad (P)$$