

$$T = \frac{r}{1-r} = \frac{r}{r} = ACU \quad B \mid y = \tan(\frac{r}{\epsilon}) = 1 \rightarrow S = \frac{1 \times \frac{r}{\epsilon}}{r} = \frac{r}{\epsilon} \quad (1)$$

$$A \mid \frac{r}{\epsilon} \rightarrow \frac{\epsilon}{9} - (\sin \alpha) \frac{r}{r} - \frac{1}{\epsilon} \cos^2 \alpha = 0 \rightarrow \frac{\epsilon}{9} - \sin \alpha (\frac{r}{r}) - \frac{1}{\epsilon} (1 - \sin^2 \alpha) \rightarrow \sin \alpha = \frac{r}{\epsilon} \times \sqrt{\epsilon} \rightarrow \sin \alpha = \frac{1}{r} \sqrt{\epsilon}$$

$$\rightarrow \cos^2 \alpha = 1 - \sin^2 \alpha = 1 - \frac{1}{9} = \frac{8}{9} \rightarrow (1 + \tan^2 \alpha = \frac{1}{\cos^2 \alpha} = \frac{9}{8})$$

$$\log \sin \alpha - \log \cos \alpha = \log r - \log (\frac{-\sin \alpha}{\cos \alpha}) = \log r \rightarrow \frac{-\sin \alpha}{\cos \alpha} = r \rightarrow \tan \alpha = -r$$

$$1 + \tan^2 \alpha = \frac{1}{\cos^2 \alpha} \rightarrow \cos^2 \alpha = \frac{1}{1+r^2} \rightarrow \cos \alpha = \frac{\sqrt{1}}{1+r^2}, \sin \alpha = \frac{r}{\sqrt{1+r^2}} \rightarrow \sin \alpha - \cos \alpha = \frac{\epsilon}{\sqrt{1+r^2}} = \frac{\sqrt{1+r^2}}{\delta}$$

$$\sin^2 \alpha + (1 - \sin^2 \alpha) = \frac{\epsilon}{\delta} \rightarrow \sin^2 \alpha - \sin^2 \alpha + 1 = \frac{\epsilon}{\delta}$$

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

$$\frac{\sin(r + \cos \alpha)}{r(1 - \cos^2 \alpha)} \rightarrow \frac{\sin(r + \cos \alpha)}{r \sin \alpha} \rightarrow \sin \alpha r$$

$$\frac{\sin^2 \alpha - 1}{\cos \alpha} = \frac{-(1 - \sin^2 \alpha)}{\cos \alpha} = \frac{-\cos^2 \alpha}{\cos \alpha} = -\cos \alpha \rightarrow \cos \alpha r$$

$$\frac{r}{\sin \alpha} = \frac{-r}{\cos \alpha} \rightarrow \frac{\sin \alpha}{\cos \alpha} = \frac{r}{-r} \rightarrow \tan \alpha + \cot \alpha = \frac{r}{r} + (\frac{-r}{r}) = \frac{-1+r}{r}$$

$$\frac{\sqrt{1 + \sin \alpha}}{\sin \alpha + \sin \alpha} = \frac{\sqrt{\sin \alpha + \sin \alpha}}{\sin \alpha + \sin \alpha} \rightarrow \left\{ \begin{array}{l} r \sin(\frac{r+\alpha}{r}) \cos(\frac{r-\alpha}{r}) = r \sin \alpha \cos r + r \cos r \\ r \sin(\frac{\alpha+1}{r}) \cos(\frac{\alpha-1}{r}) = r \times \frac{1}{r} \times \cos r + \cos r \end{array} \right. \rightarrow \frac{\sqrt{r \cos r}}{\cos r} = \sqrt{r}$$

$$\cos r(0) \times \cos r(1) \times \cos r(r) = \cos 1 \cdot \cos r \cdot \cos \epsilon \times \frac{\sin r}{\sin r} = \frac{1}{r} \sin r \cos r \cos \epsilon = \frac{1}{\epsilon} \sin \epsilon \cos \epsilon$$

$$= \frac{1}{\epsilon} \sin \epsilon = \frac{1}{\epsilon} \cot \epsilon$$

$$\cos \alpha = t \rightarrow \sin \alpha = r - t \rightarrow \sin^2 \alpha + \cos^2 \alpha = 1 \rightarrow (r - t)^2 + t^2 = 1 \rightarrow 1 \cdot t^2 - 1 \cdot t + r^2 = 0 \rightarrow 1 \cdot t^2 - 1 \cdot t = -r^2$$

$$y = \delta \cos r - 1 \cos \alpha = \delta(r t - 1) - 1 \cdot t = 1 \cdot t - 1 \cdot t - 0 = -r - \delta = -1$$

$$\cos \frac{\hat{A}}{r} = \frac{1 + \cos A}{r} \quad (1) \quad \sin B \sin C = \frac{\cos(B-C) + \cos(B+C)}{r} \quad (2) \rightarrow (1) = (2) \rightarrow 1 = \cos(B-C)$$

$$B-C=0 \rightarrow B=C=Vr \rightarrow \hat{A} = 180^\circ - r(Vr) = 144^\circ$$