

$$\sin \frac{\pi}{\mu} = -\frac{\sqrt{r}}{r} \quad \cos \frac{\pi}{\mu} = -\frac{\sqrt{r}}{r} \quad (1)$$

$$ax - \frac{\sqrt{r}}{r} + bx - \frac{\sqrt{r}}{r} = \frac{-1}{\sqrt{r}} \rightarrow -\frac{\sqrt{r}}{r}(a+b) = \frac{-1}{\sqrt{r}} \Rightarrow \frac{r}{r}(a+b) = \frac{1}{r}(-a+b)$$

$$\rightarrow r_b = -r_b \rightarrow b = -r_b \quad \frac{b}{a} = \frac{-r_b}{a} = -r$$

$$g = \sqrt{1 - \frac{1}{r}} = \sqrt{\frac{r}{r}} \quad \frac{r + \sqrt{r} + \sqrt{r}}{r} = r \quad (2)$$

$$\frac{g + \sqrt{r} + \sqrt{r}}{r} \rightarrow PP = \sqrt{(ap - xp)^2 + (yp - y_p)^2} = \sqrt{\left(\frac{1}{r} + \frac{\sqrt{r}}{r}\right)^2 + \left(\frac{\sqrt{r}}{r} + \frac{1}{r}\right)^2} = \frac{\sqrt{r} + \sqrt{r}}{r}$$

$$\frac{1}{q} = r_0 \quad r_1 \neq 0 \quad (3)$$

$$140 \text{ km} - 20 \text{ km} \rightarrow |20 \text{ km} - 20| = r_0 \rightarrow m = 10 \text{ km} \quad m = 140 \text{ km} \quad (4)$$

$$-\frac{1}{r} \leq \sin x \leq 1 \rightarrow -\frac{1}{r} \leq \frac{m - \mu}{\omega} \leq 1 \rightarrow -\frac{\omega}{r} \leq m - \mu \leq \omega$$

$$\rightarrow \frac{1}{r} \leq m \leq 1 \rightarrow m \in [1, \frac{1}{r}]$$

$$\sin(90 + 10) = \cos 10 \quad \cos(90 - 10) = -\sin 10 \quad (5)$$

$$\cos(10) \cos(10) = -\cos 10 \quad \sin(10) = -\sin 10$$

$$\frac{\cos 10 - r \sin 10}{-\cos 10 - r \sin 10} \Rightarrow \frac{1 - r \tan 10}{1 - r \tan 10} = \frac{1 - 0.1 \tan 10}{1 - 0.1 \tan 10} \Rightarrow 0.1 \tan 10 = 0.1 \tan 10$$

$$K = 10$$

$$\frac{1 - \cos x}{1 + \cos x} = r \Rightarrow 1 - \cos x = r + r \cos x \Rightarrow r \cos x = -1 \quad (6)$$

$$\rightarrow \cos x = -\frac{1}{r}$$

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

$$\tan x = -r \sqrt{r} \rightarrow \cot x = \frac{1}{-r \sqrt{r}} = -\frac{1}{r \sqrt{r}}$$

$$\frac{r_C}{\omega} = r_B \rightarrow r_A = \frac{r}{r} r_B \quad \frac{S_A}{S_B} = \frac{\frac{1}{2} r_B^2}{\frac{1}{2} r_B^2} = \frac{1}{1}$$

(1)

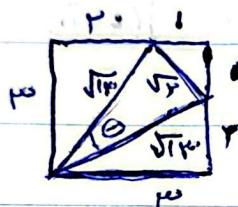
$$\sin 90^\circ = \frac{1}{\sqrt{2}} \quad AD = r$$

(9)

$$B = 90^\circ \Rightarrow AB^2 = BD^2 + AD^2 \rightarrow AB^2 = r^2 \Rightarrow AB = \sqrt{r^2}$$

$$S_{ABC} = \frac{1}{2} AB \times BC \times \sin 90^\circ = \sqrt{r^2} \Rightarrow 2 = r \quad \frac{\sqrt{r^2}}{r} 2 = r \Rightarrow AC = \sqrt{r^2}$$

$$\sin 90^\circ \cos 90^\circ \times 2 \rightarrow 2 \times \frac{r}{\sqrt{2}} \times \frac{\sqrt{r^2}}{\sqrt{2}} = \frac{2\sqrt{r^2}}{\sqrt{2}}$$



$$S = \frac{1}{2} r \times r = \frac{1}{2} \sin \theta (\sqrt{r^2})^2$$

(10)

$$\frac{1}{1} = \sin \theta$$

