

$$\epsilon \times v \times \frac{l}{r} \times \sin A = l \epsilon \sin A$$

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$$r \sin^2 = \Delta \epsilon \rightarrow m^2 = \frac{r}{\Delta} \rightarrow m = \sqrt{\frac{r}{\Delta}}$$

5

09:00

$$\epsilon \times v \times \frac{l}{r} \times \sin A = l \epsilon \sin A$$

10:00

$$\Delta \times v \times \frac{l}{r} \times \sin A = \frac{r \Delta \sin A}{r}$$

5

11:00

$$\frac{r \Delta \sin A}{r} - \frac{r \Delta \sin A}{r} = l, v \Delta$$

12:00

$$\frac{v}{r} \sin A = \frac{v}{\epsilon} \rightarrow A = \cos^{-1} \frac{r}{\epsilon} = \frac{\sqrt{\epsilon}}{r}$$

13:00

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

14:00

$$\cos + \frac{\sin}{\cos} \rightarrow \cos \sec \rightarrow \text{ربع سوم}$$

5

15:00

$$\sin \rightarrow - \rightarrow \sin \sec$$

16:00

$$\tan(180 - \alpha) = \frac{l \Delta}{r} = \frac{r}{\epsilon} \rightarrow -\tan \alpha = \frac{r}{\epsilon} \rightarrow \tan \alpha = \frac{r}{\epsilon}$$

17:00

$$\cos \alpha = \frac{\epsilon}{r}$$

5

18:00

$$\frac{r \cos(180 - \alpha) - r \sin(180 - \alpha)}{\sin(180 + \alpha) - \cos(180 - \alpha)} = \frac{-r \sin \alpha - r \sin \alpha}{-\sin \alpha - \cos \alpha} = \frac{r}{\epsilon}$$

19:00

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

20:00

5

$$\frac{\frac{r + \sqrt{\epsilon - r}}{\epsilon}}{\frac{1}{\epsilon}} = \frac{r + \sqrt{\epsilon - r}}{1}$$

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

$$\frac{-r \pm \sqrt{r^2 - 4m^2}}{2m^2 - 1} \rightarrow -r \pm \sqrt{r^2 - 4m^2} = 0 \rightarrow \sqrt{r^2 - 4m^2} = r \rightarrow r^2 - 4m^2 = r^2 \rightarrow -4m^2 = 0 \rightarrow m = 0$$

$$\left| \frac{1}{r} + \frac{r}{\sqrt{r^2}} \right| = \frac{r + \sqrt{r^2}}{r}$$

$$\frac{-r + \epsilon}{2\sqrt{r}} = \frac{1}{\sqrt{r}} \quad \text{G}$$

$$\frac{-r - \epsilon}{2\sqrt{r}} = -\frac{r}{\sqrt{r}}$$

$$\tan\left(\frac{\pi}{2} - n\right) = \cot n = \frac{1 - m}{r + m} \rightarrow \dots \rightarrow \left(\frac{r}{r}, 1\right)$$

$$\tan(\alpha_0 - \epsilon_0) \sin(\alpha_0 + \epsilon_0) + \tan(\alpha_0 + \epsilon_0) \sin(\alpha_0 - \epsilon_0)$$

$$\left(\frac{-\sqrt{r}}{r} \times \frac{-\sqrt{r}}{r} + \frac{-\sqrt{r}}{r} \times \frac{-\sqrt{r}}{r} \right) + \left(\frac{\sqrt{r}}{r} \times \frac{\sqrt{r}}{r} + \frac{\sqrt{r}}{r} \times \frac{\sqrt{r}}{r} \right) = \frac{r}{r} + \frac{r}{r} = 2$$

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