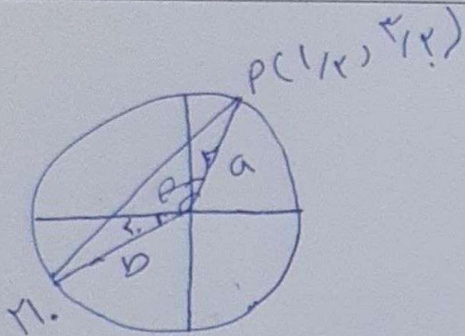


$$\frac{-\frac{\sqrt{3}}{2}a - \frac{\sqrt{3}}{2}b}{-1/2a + 1/2b} = -\frac{\sqrt{3}}{2} \Rightarrow \frac{-\frac{\sqrt{3}}{2}(a+b)}{\frac{1}{2}(b-a)} = -\frac{\sqrt{3}}{2} \Rightarrow$$

$$\frac{a+b}{b-a} \cdot 1 - \sqrt{3} = -\frac{\sqrt{3}}{2} \quad \frac{a+b}{b-a} = 1/2 \rightarrow 2a + 2b = b - a$$

$$\rightarrow b = -3a \rightarrow \frac{b}{a} = -3$$

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$$S = 1/2 ab \sin \theta$$

$$S = 1/2 \times 1 \times 1 \times 1/2 = 1/4$$

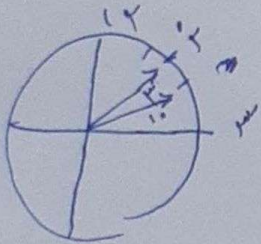
۲

$$\frac{12}{9} = 2$$

$$\frac{34}{12} = 3$$

$$\frac{2}{3} = \frac{2}{3} = 2 \text{ دقیقه}$$

$$2: 2$$



۳

برای بدست آوردن بین دو عقربه ساعت می شود دقیقه می رسد ساعت را در ۳۰ دقیقه را در ۵۰ ضد ساعت می رسد جواب را از هم می کشیم اگر ۱۸۰ باشد سه آن را از ۳۴ می کشیم

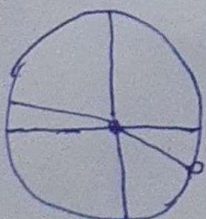
۴

$$13 \times 30 - 55 \times 5 = 20$$

$$90 - 9 \times 55 = \pm 40$$

$$90 + 20 = 110 \rightarrow x = 110$$

$$90 + 20 = 110 \rightarrow x = 110$$



$$-\frac{\sqrt{3}}{2} < \sin \alpha < 1$$

$$-\frac{\sqrt{3}}{2} \frac{m-3}{5} \leq 1$$

$$\rightarrow \frac{-5\sqrt{3}}{2} (m-3) \leq 5$$

$$-\frac{5\sqrt{3}+4}{2} < m < 1$$

→

$$-10, 1, 2, 3, 4, 5, 6, 7, 8, 9$$

فصل ۱۰ عدد صحیح است

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$$\sin\left(\frac{\pi}{r} + 10\right) + k \cos\left(\frac{r\pi}{r} - 10\right)$$

$$\frac{\cos(10) - k \sin(10)}{\cos(10) + r \sin(10)} = r \rightarrow \frac{\cos(10) - k \sin(10)}{-\cos(10) - r \sin(10)}$$

$$\rightarrow \frac{1 - k \tan(10)}{-1 - r \tan(10)} = r \rightarrow \frac{1 - \frac{k}{r}}{-1 - \frac{1}{r}} = r \rightarrow \frac{r - k}{r} = -\frac{q}{r}$$

$$k = r^2$$

$$\sin \alpha > 0 \quad 1 - \cos \alpha = r + r \cos \alpha$$

$$\cos \alpha < 0$$

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

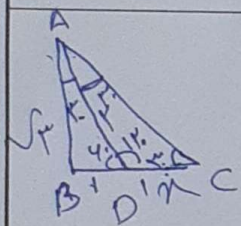
$$\frac{\cot(\pi) + \cot(\pi)}{\tan(\pi) - r \tan(\pi)}$$

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

$$10\lambda = \frac{4\pi}{10} \quad \text{Jude} = \alpha R \rightarrow R_A \times \frac{4R}{10} = R_B \times \frac{4\pi}{10}$$

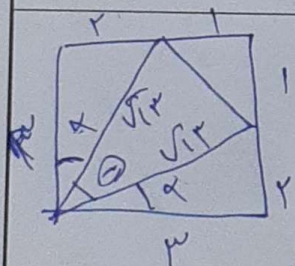
$$\rightarrow 4R_A = 4R_B \rightarrow \frac{R_A}{R_B} = \frac{r}{r} \quad \frac{S_A}{S_B} = \frac{R_A^2}{R_B^2}$$

$$\rightarrow \frac{S_A}{S_B} = \frac{R_A^2}{R_B^2} = \frac{r}{q}$$



$$S = \frac{AB \times BC}{r} = \frac{\sqrt{r} \times r}{r} \rightarrow n = 1$$

$$\rightarrow AD \sin \alpha \rightarrow \sin \alpha = \sin \theta = \frac{\sqrt{r}}{r}$$



$$\sin(\theta - r\alpha) = \sin \theta$$

$$\cos r\alpha = \sin \theta$$

$$\cos^2 \alpha - \sin^2 \alpha$$

$$\frac{4}{r} - \frac{4}{r} = \frac{4}{r} = \sin \theta$$

$$\sin \alpha = \frac{r}{\sqrt{r}}$$

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