

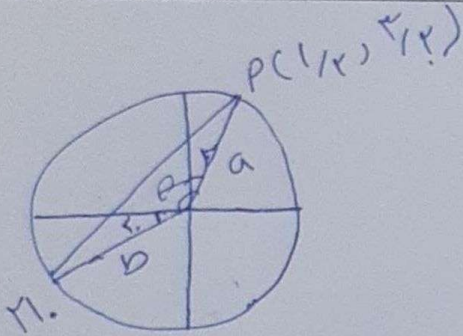
راه حل پاشی صغه نوته شد اما بهبه است پاشی نامه! نیز مطالعه کن!

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

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

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



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

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

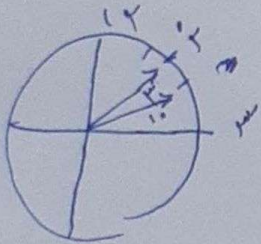
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$$\frac{12}{9} = 2$$

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

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

$$2: 2$$



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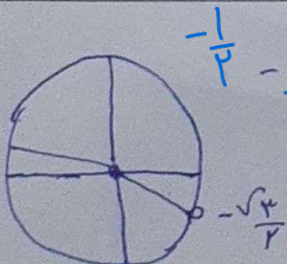
برای بدست آوردن بین دو عقربه ساعت می شود دقیقه می رسد ساعت را در ۳۰ دقیقه را در ۵۰ ضد ساعت می رسد جواب را از هم کم کنیم اگر ۱۸۰ باشد

$$1/3 \times 30 = 10$$

$$90 - 9 \times 5 = 45$$

$$90 + 2 = 92$$

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

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

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

$$-2.5 < m-3 \leq 5$$

$$-1, 0, 1, 2, 3, 4, 5, 6, 7, 8$$

$$1.5 < m \leq 8$$

$$\sin \alpha = -\frac{1}{2}$$

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

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

$$\rightarrow \frac{1 - k \tan 10}{-1 - r \tan 10} = r \rightarrow \frac{1 - \frac{k}{r}}{-1 - \frac{r}{r}} = r \rightarrow \frac{r - k}{r} = -\frac{r}{r} \quad k = r^2$$

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

$$\cos \alpha < 0$$

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

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

$$\frac{r \cos(n)}{\sin(n)} \rightarrow \frac{r \cos^2 m}{-\sin^2 m} = \frac{r/9}{-1/9} = -1/2$$

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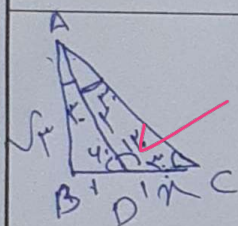
$$10\lambda = \frac{4\pi}{10} \quad \text{Jude} = \alpha R \rightarrow R_A \times \frac{4R}{10} = R_B \times \frac{4\pi}{10}$$

$$\rightarrow 4R_A = 4R_B \rightarrow \frac{R_A}{R_B} = \frac{R}{R} \left(\frac{4}{4}\right) \frac{S_A}{S_B} = \frac{R_A R_A}{17 R_B}$$

$$\frac{R_A}{R_B} = \frac{4}{4}$$

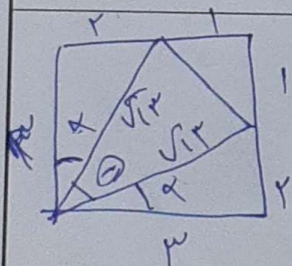
$$\rightarrow \frac{S_A}{S_B} = \frac{R_A}{R_B} = \frac{r}{9}$$

$$\frac{S_A}{S_B} = \left(\frac{r_A}{r_B}\right)^2 = \frac{4}{9}$$



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

$$\rightarrow AD \rightarrow \sin \alpha = \sin 9 = \frac{\sqrt{r}}{r}$$



$$\sin(90 - r\alpha) = \sin \theta$$

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

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

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

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

$$\frac{4}{17} - \frac{9}{17} = \frac{5}{17} = \sin \theta$$

$$\frac{\sqrt{r}(a+b)}{a-b} = -\frac{\sqrt{r}}{r} \rightarrow ra+rb = -a+b$$

$$ra = -rb \rightarrow \frac{b}{a} = -\frac{ra}{a} = -r$$

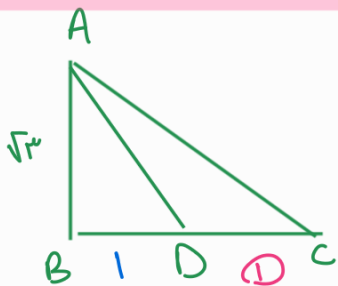
سوال ۱

$$OP = OQ = \text{مساحت دایره منتهی} = 1$$

سوال ۲

$$PP' = \sqrt{1^2 + 1^2 - (1)(1) \times \frac{1}{r} (2 \cdot \sin \theta)} = \sqrt{2 + \sqrt{r}}$$

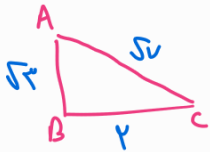
$$\frac{1}{\sin \theta} = 1 + 1 + \sqrt{2 + \sqrt{r}}$$



$$S_{ABC} = \sqrt{r}$$

سوال ۹

$$\frac{AB \times BC}{r} = \frac{\sqrt{r} \times DC}{r} = \sqrt{r} \rightarrow BC < r \rightarrow DC < 1$$



$$\rightarrow \sin \hat{rC} = r \times \frac{\sqrt{r}}{\sqrt{v}} \times \frac{r}{\sqrt{v}} = \frac{r\sqrt{r}}{v}$$