

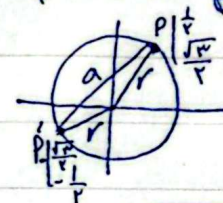
$$\textcircled{1} \frac{a \sin \frac{\pi}{3} + b \sin \frac{\pi}{3}}{a \sin \frac{\pi}{3} + b \cos \frac{\pi}{3}} \rightarrow (b \cos \frac{\pi}{3} = b \sin \frac{\pi}{3})$$

$$\downarrow$$

$$(\sin \frac{11\pi}{6} = \sin \frac{\pi}{6}) = \frac{1}{2}$$

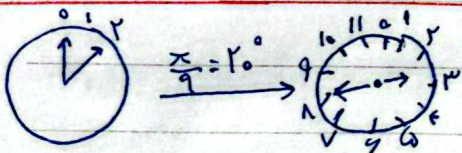
$$\textcircled{2} \frac{(a+b)(\frac{\sqrt{3}}{2})}{(-a+b)(\frac{1}{2})} = \frac{-\sqrt{3}}{2} \quad \textcircled{3} \frac{a+b}{-a+b} = \frac{1}{\sqrt{3}} \quad \begin{matrix} 2a+2b = -a+b \\ 3a = -2b \\ \frac{b}{a} = -\frac{2}{3} \end{matrix}$$

$$\textcircled{1} P(\frac{1}{2}, y) \Rightarrow \cos P = \frac{1}{2} \Rightarrow P = 60^\circ$$

$$\textcircled{2} P - 110^\circ = -150^\circ = 110^\circ$$


$$\textcircled{3} a = \sqrt{(\frac{1}{2} + \frac{\sqrt{3}}{2})^2 + (\frac{\sqrt{3}}{2} + \frac{1}{2})^2} = \sqrt{2(\frac{1}{4} + \frac{\sqrt{3}}{2} + \frac{3}{4})} = \sqrt{2 + \sqrt{3}}$$

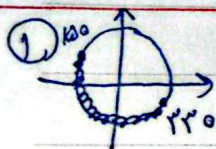
مساحت: $\sqrt{2 + \sqrt{3}} + 2$



$$2050^\circ$$

$$\textcircled{1} \alpha = \left| \frac{11M}{r} - 20H \right| \quad \textcircled{2} 20 = \left| \frac{11M}{r} - 20H \right|$$

$$\textcircled{3} \begin{cases} 20 = \frac{11M}{r} - 90 \\ 20 = 90 - \frac{11M}{r} \end{cases} \quad \begin{matrix} 110 = \frac{11M}{r} \\ M = 20 \\ M = \frac{110}{11} \end{matrix}$$



$$\Rightarrow -1 \leq \sin x \leq \frac{1}{2} \quad \textcircled{1} -\frac{1}{5} \leq \frac{m-3}{a} \leq \frac{1}{5}$$

$$\textcircled{3} -a \leq m-3 \leq \frac{a}{5} \rightarrow -2 \leq m \leq a/a$$

① $\sin(180^\circ) = \cos(180^\circ)$
 $\cos(180^\circ) = -\sin(180^\circ)$
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② $\frac{\cos(180^\circ) + K(-\sin(180^\circ))}{-\cos(180^\circ) - \sin(180^\circ)} = 1$

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180° = π

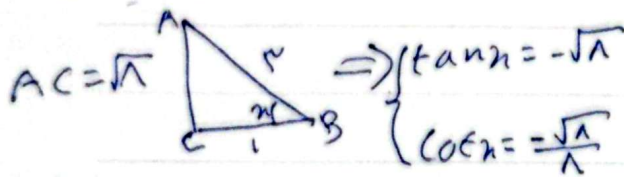
③ $-r \cos t - s \sin t = \cos t + K \sin t$ $-r \cos t = (K+s) \sin t$

④ $-r = \frac{1}{f} (K+s)$ $-1s = K+s$ $K = -2r$

① $\frac{\tan(\frac{\pi}{2} - n) - \cot(\pi - n)}{\cot(\frac{\pi}{2} - n) + \tan(\pi - n)} = \frac{\cot n + \cot n}{\tan n - \tan n}$

✓

② $1 - \cos n = r + r \cos n \rightarrow \cos n = -\frac{1}{r}$



③ $\frac{-\frac{1}{\sqrt{11}}}{\sqrt{11}} = -\frac{1}{f}$

① $\frac{1}{10} \times \pi \times \frac{\pi}{180} = \frac{\pi}{180}$ $\text{Area} = \frac{\pi}{180} \times R$, $\text{Volume} = \frac{\pi}{180} \times R^2$

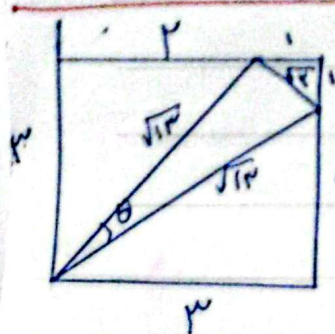
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② $\text{Area} = \frac{1}{10} \times \pi \times R$, $\text{Volume} = \frac{1}{10} \times \pi \times R^2$ $\frac{\frac{1}{10} \times \pi \times R^2}{\frac{1}{10} \times \pi \times R} = \frac{R}{1} = \frac{1}{10}$

① $AD = r \rightarrow AB = \sqrt{11}$ ② $S = \frac{AB \times BC}{2} = \sqrt{11} \rightarrow BC = r$ $AC = \sqrt{11}$

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③ $\sin C = \frac{AB}{AC} \times \frac{BC}{AC} \times r = \frac{r \sqrt{11}}{11}$



① $\sin \theta = \frac{BC}{AB} = \frac{r}{\sqrt{11}}$

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② $\frac{1}{r} \times \sin \theta \times 11 = 1$ $\sin \theta = \frac{r}{11}$