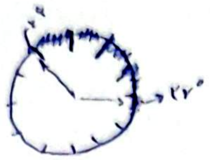
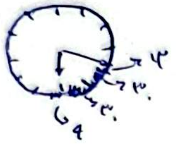


$۴ \times ۳۰ + ۶ + ۲۷ = \boxed{۱۵۳}$

$|۱۵.۵\,min - ۳۰h| = D$

$۲۹۷ - ۹۰ = ۲۰۷$

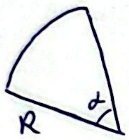
$۳۶۰ - ۲۰۷ = \boxed{۱۵۳}$



$۳۰ + ۳۰ + ۱۲ + ۹ = ۸۱$

$|۵.۵\,min - ۳۰h| = D$

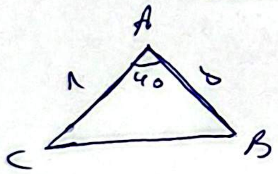
$|۱۸ \times ۵.۵ - ۱۸۰| = ۱۸۰ - ۹۹ = \boxed{۸۱}$



$\alpha = \frac{\pi}{۶} = ۳۰°$

$S = \frac{\alpha}{۲} R^۲ = \frac{\frac{\pi}{۶}}{۲} \times ۳^۲ = \frac{\pi}{۱۲} \times ۹ = \frac{۳\pi}{۴}$

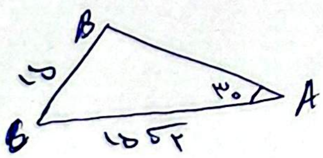
$P = \alpha R + ۲R = \frac{\pi}{۶} \times ۳ + ۲ \times ۳ = \frac{\pi}{۲} + ۶$



$S = \frac{۱}{۲} \times ab \times \sin\alpha \to ۵ \times ۸ \times \frac{۱}{۲} \times \frac{\sqrt{۳}}{۲} = \boxed{۱۰\sqrt{۳}}$

$CB = \sqrt{۶۴ + ۲۵ - ۲ \times \frac{۱}{۲} \times ۴۰} = \sqrt{۴۹} = ۷$

$P = ۵ + ۸ + ۷ = ۱۵$



$\hat{B} + \hat{C} = ۱۵۰$

$\frac{a}{\sin A} = \frac{b}{\sin B} \Rightarrow \frac{\frac{۱۵}{۱}}{\frac{۱}{۲}} = \frac{۱۵\sqrt{۲}}{\sin B} \to \sin B = \frac{\sqrt{۲}}{۲} \begin{cases} B = ۴۵ \checkmark \\ B = ۱۳۵ \end{cases}$

$۴۵ + \hat{C} = ۱۵۰ \to C = ۱۰۵$

$۴۵ = \frac{\pi}{۴}$

$۱۰۵ = \frac{۷\pi}{۱۲}$

$\frac{\pi}{۱۲} = ۱۵° \to \frac{۲\tan۷۵ + \tan۱۶۵}{۳\tan۱۶۵ + \tan۲۵۵} = \frac{۲\tan(\frac{\pi}{۲} - \alpha) + \tan(\frac{\pi}{۲} + \alpha)}{۳\tan(\pi - \alpha) - \tan(\frac{۳\pi}{۲} - \alpha)} = \frac{۲\cot(\alpha) - \cot(\alpha)}{-۳\tan\alpha - \cot\alpha}$

$$\frac{\tan(\pi-\alpha)+3\tan(\pi+\alpha)}{\tan(2\pi-\alpha)-\tan(2\pi+\alpha)} = \frac{-\tan\alpha+3\tan\alpha}{-\tan\alpha-\tan\alpha} = \frac{2\tan\alpha}{-2\tan\alpha} = -1$$

$\frac{\pi}{12} = 15$

$$A = \frac{2\tan 75 + \tan 15}{3\tan 105 \cdot \tan 75} = \frac{2\tan\left(\frac{\pi}{2}-\alpha\right)+\tan\left(\frac{\pi}{2}+\alpha\right)}{3\tan(\pi-\alpha)-\tan\left(\frac{3\pi}{2}-\alpha\right)}$$

$$= \frac{2\cot\alpha - \cot\alpha}{-3\tan\alpha - \cot\alpha} = \frac{\cot\alpha}{-3\tan\alpha-\cot\alpha} = \frac{\frac{1}{a}}{-3a-\frac{1}{a}} = \frac{1}{-3a^2-1}$$

$$\frac{\sin+\cos}{\sin-\cos} + \frac{\sin-\cos}{\sin+\cos} = 3 \rightarrow \frac{\sin^2+\cos^2+2\sin\cos+\sin^2+\cos^2-2\sin\cos}{\sin^2-\cos^2}$$

$$\frac{2}{\sin^2-\cos^2} = 3 \rightarrow 2 = 3(\sin^2-\cos^2) \rightarrow 2 = 3\sin^2-3\cos^2 \rightarrow \frac{2+3\cos^2}{3} = \sin^2$$

$$\frac{2+3\cos^2}{3} = 1-\cos^2 \rightarrow 2+3\cos^2 = 3-3\cos^2 \rightarrow 6\cos^2 = 1 \rightarrow \cos^2 = \frac{1}{6}$$

$$\cos = \frac{1}{\sqrt{6}} \quad \sin = \frac{\sqrt{5}}{\sqrt{6}} \quad \frac{\sin}{\cos} = \sqrt{5} \quad \tan^2 = 5$$

$$\frac{\sin^2-2\cos^2+1}{\sin^2+2\cos^2-1} = 4 \rightarrow \frac{1-\cos^2-2\cos^2+1}{1-\cos^2+2\cos^2-1} = 4 \rightarrow 2\cos^2 = 2 \rightarrow \cos^2 = \frac{2}{3}$$

$$\sin^2 = 1-\frac{2}{3} = \frac{5}{3}$$

$$\tan^2 = \frac{\frac{5}{3}}{\frac{2}{3}} = \frac{5}{2}$$

$\cos 22.5 \rightarrow \cos^2\alpha = \frac{1+\cos 2\alpha}{2} \rightarrow \cos^2 22.5 = \frac{1+\cos 45}{2} = \frac{2+\sqrt{2}}{4}$

$$\frac{2+\sqrt{2}}{2} = \frac{4+2\sqrt{2}}{4} \rightarrow \cos 22.5 = \sqrt{\frac{2+\sqrt{2}}{4}}$$

$\sin 67.5 \Rightarrow \sin^2\alpha = \frac{1-\cos 2\alpha}{2} \rightarrow \sin^2 67.5 = \frac{1-\cos 135}{2} = \frac{1+\frac{\sqrt{2}}{2}}{2}$

$$\frac{4+2\sqrt{2}}{4} \rightarrow \sin 67.5 = \sqrt{\frac{2+\sqrt{2}}{4}}$$