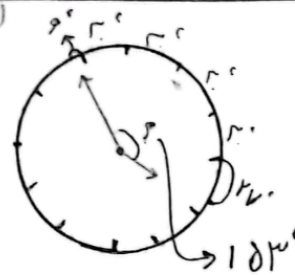
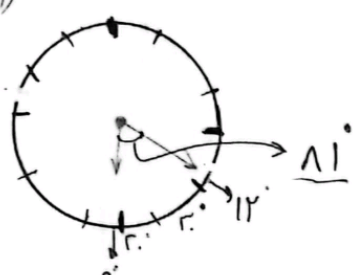


الف) 	$ 8,8m - 2h = 207^\circ$ $24 - 2 \cdot 7 = 10$	۱
---	---	---

الف) 	$ 8,8m - 2h = 11^\circ$	۲
---	--------------------------	---

الف) $s = \frac{\alpha}{r} R^2 = \frac{9\pi}{12} = \frac{3\pi}{4}$ ب) $P = \alpha R + 2R = 9 + \frac{\pi}{2}$	۳
---	---

الف) $s = \frac{bc \sin A}{r} = 10\sqrt{3}$ ب) $a = \sqrt{b^2 + c^2 - 2bc \cos A} = \sqrt{49} = 7$ $P = a + b + c = 7 + 8 + 7 = 22$	۴
---	---

$\hat{B} + \hat{C} = 108^\circ \Rightarrow \hat{A} = 72^\circ$ $\frac{a}{\sin A} = \frac{b}{\sin B} \Rightarrow \frac{10}{\sin 72^\circ} = \frac{10\sqrt{3}}{\sin B} \Rightarrow \sin B = \frac{\sqrt{3}}{2} \Rightarrow B = 60^\circ$ چون فاصله است $\hat{A} = 72^\circ, \hat{B} = 60^\circ, \hat{C} = 68^\circ$ $\hat{B} = \frac{\pi}{3}, \hat{C} = 1.05 \times \frac{\pi}{180} = \frac{7\pi}{12}$	۵
--	---

$$\frac{\tan(\pi - \alpha) + r \tan(\alpha + \alpha)}{\tan(r\alpha - \alpha) - \tan(r\alpha + \alpha)} = \frac{-\tan \alpha + r \tan \alpha}{-\tan \alpha - \tan \alpha} = \frac{r \tan \alpha}{-r \tan \alpha} = \textcircled{-1}$$

$$\frac{\sin \alpha + \cos \alpha}{\sin \alpha - \cos \alpha} + \frac{\sin \alpha - \cos \alpha}{\sin \alpha + \cos \alpha} = r$$

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

$$\frac{\sin^r \alpha + \cos^r \alpha + \sin^r \alpha - \cos^r \alpha + r \sin \alpha \cos \alpha - r \sin \alpha \cos \alpha}{\sin^r \alpha - 1 + \sin^r \alpha} = r$$

$$\dot{y} = 4 \sin^r \alpha - r \Rightarrow \sin^r \alpha = \frac{8}{4}$$

$$\cos^r \alpha = \frac{1}{4}$$

$$\tan^r \alpha = 8$$

$$\tan V_0' = c \cdot t \frac{\pi}{1r}$$

$$\tan 180' = -c \cdot t \frac{\pi}{1r}$$

$$\tan 190' = -\tan \frac{\pi}{1r}$$

$$\tan 100' = \cot \frac{\pi}{1r}$$

$$A = \frac{r \tan V_0' + \tan 180'}{r \tan 190' + \tan 100'} = \frac{c \cdot t \frac{\pi}{1r} - c \cdot t \frac{\pi}{1r}}{-r \tan \frac{\pi}{1r} - c \cdot t \frac{\pi}{1r}}$$

$$\Rightarrow A = \frac{\frac{1}{a}}{-ra - \frac{1}{a}} = \frac{1}{-ra^2 - 1} = -\frac{1}{ra^2 + 1}$$

$$\frac{1 - c \cdot s^r \alpha}{\sin^r \alpha + \cos^r \alpha} = r \Rightarrow \frac{1 - r \cos^r \alpha}{c \cdot s^r \alpha} = r \Rightarrow r c \cdot s^r \alpha = 1 - r \cos^r \alpha = \frac{r}{v} \Rightarrow \sin^r \alpha = \frac{8}{v}$$

$$\Rightarrow \tan^r \alpha = \frac{8}{v}$$

$$\text{الف) } \cos(r\alpha, \delta) = \sqrt{\frac{1 + \cos 2\delta}{2}} = \sqrt{\frac{1 + \frac{4}{5}}{2}} = \sqrt{\frac{9 + 4}{10}} = \sqrt{\frac{13}{10}}$$

$$\text{ب) } \sin(r\alpha, \delta) = \sqrt{\frac{1 - \cos 2\delta}{2}} = \sqrt{\frac{1 - \frac{4}{5}}{2}} = \sqrt{\frac{1 + 4}{10}} = \sqrt{\frac{5}{10}}$$

$$c \cdot s^r \alpha = \frac{1 + \cos 2\alpha}{2}, \sin^r \alpha = \frac{1 - \cos 2\alpha}{2} \leftarrow \text{طبقه را از این فرمولها می‌توانیم}$$