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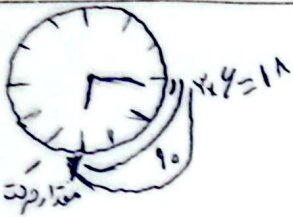


$$\begin{aligned} 1 \times 30 &= 90 \\ 90 + 6 \times (6) &= 126 \\ \frac{36}{2} &= 18 \\ 126 + 18 &= 144 \end{aligned}$$

$$\begin{aligned} | 5,5m - 30h | \\ 29V - 90 &= 20V \\ 390 - 20V &= 153 \end{aligned}$$

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$$90 - 11 \times 9 = 11 \checkmark$$

$$| 5,5m - 30h |$$

$$99 - 110 = -11 = 11 \checkmark$$

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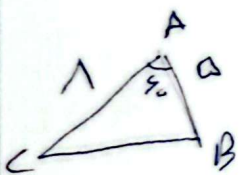
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$$\frac{9\pi}{12} = \frac{3\pi}{4} \checkmark \leftarrow \frac{\pi}{12} \times 9 = \frac{\pi}{2} \times 3 \quad (\text{الف})$$

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$$\frac{\pi}{2} \times 3 = \frac{3\pi}{2} = \frac{\pi}{2} \quad \frac{\pi}{2} + 3 + 3 = \left(\frac{\pi}{2} + 6 \right) \checkmark \quad (-)$$



$$\frac{1}{2} \times 1 \times 1 \times \sin 60^\circ = \frac{1}{2} \times \frac{\sqrt{3}}{2} = \frac{\sqrt{3}}{4} \checkmark$$

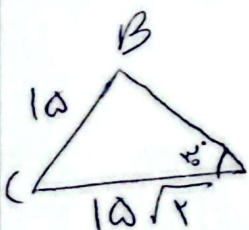
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$$BC = \sqrt{AB^2 + AC^2 - 2AB \times AC \cos A}$$

$$BC = \sqrt{25 + 49 - 10 \times \frac{1}{2}} = \sqrt{74 - 5} = \sqrt{69} = 7 \checkmark$$

$$1 + 1 + 1 = 3 \checkmark$$



$$\frac{10}{\sin 30^\circ} = \frac{10}{\frac{1}{2}} = 20 = \frac{10\sqrt{2}}{\sin B} \Rightarrow \sin B = \frac{10\sqrt{2}}{20} = \frac{\sqrt{2}}{2}$$

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$$135^\circ, 45^\circ \leftarrow \begin{aligned} &= 100^\circ \end{aligned}$$

$$\frac{45}{180} = \frac{\text{Rad}}{\pi}$$

$$\frac{45\pi}{180} = \frac{\pi}{4} \checkmark$$

$$\frac{100}{180} = \frac{\text{Rad}}{\pi} \quad \text{Rad} = \frac{21\pi}{36} = \frac{\sqrt{\pi}}{12} \checkmark$$

$$\frac{-\tan\alpha + \gamma \tan\alpha}{-\tan\alpha - \tan\alpha} = \frac{\gamma \tan\alpha}{-\gamma \tan\alpha} = -1 \quad \checkmark$$

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$$\frac{1}{14} = \frac{15}{110} \quad \frac{\pi}{14} = 15^\circ \quad \frac{\tan(\frac{\pi}{14} - a) + \tan(\frac{\pi}{14} + a)}{\tan(\pi - a) - \tan(\frac{\pi}{14} - a)} = \cot$$

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

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

$$\cos^2 = 1 - \sin^2 \quad \tan^2 = \frac{\sin^2}{\cos^2} = \frac{x}{1-x} = \omega$$

$$\frac{2}{\sin^2 - 1 + \sin^2} = \frac{2}{\sin^2 - 1} = x \Rightarrow \sin^2 - x = 1 \quad \sin^2 = \frac{x}{x-1}$$

$$\sin^2 = \omega \quad \cos^2 = \frac{1}{\omega}$$

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$$\frac{\sin^r - \gamma(1 - \sin^r) + 1}{\sin^r + \gamma(1 - \sin^r) - 1} = \frac{\sin^r - \gamma + \gamma \sin^r + 1}{\sin^r + \gamma - \gamma \sin^r - 1} = \frac{\gamma \sin^r - 1}{1 - \sin^r} = \epsilon$$

$$\epsilon - \epsilon \sin^r = \gamma \sin^r - 1$$

$$a = v \sin^r$$

$$\sin^r = \frac{a}{v} \quad \cos^r = \frac{v}{v}$$

$$\tan^r = \frac{\sin^r}{\cos^r} = \frac{a}{v} = \frac{a}{v} = \underline{\gamma, a} \quad \checkmark$$

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$\cos^2 \gamma, \alpha = \frac{1 + \cos \theta}{2} = \frac{1 + \frac{\sqrt{r}}{r}}{2} = \frac{\frac{r + \sqrt{r}}{r}}{2} = \frac{r + \sqrt{r}}{2r}$
 مثبت 6. بقبول است $\Rightarrow \cos \gamma, \alpha = \pm \frac{\sqrt{r + \sqrt{r}}}{\sqrt{r}} + \frac{\sqrt{r + \sqrt{r}}}{\sqrt{r}} \checkmark$
 $\sin^2 \gamma, \alpha = \frac{1 - \cos \theta}{2} = \frac{1 - (-\frac{\sqrt{r}}{r})}{2} = \frac{1 + \frac{\sqrt{r}}{r}}{2} = \frac{\frac{r + \sqrt{r}}{r}}{2} = \frac{r + \sqrt{r}}{2r}$
 مثبت 6. بقبول است $\Rightarrow \sin \gamma, \alpha = \pm \frac{\sqrt{r + \sqrt{r}}}{\sqrt{r}} - \frac{\sqrt{r + \sqrt{r}}}{\sqrt{r}} \checkmark$

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