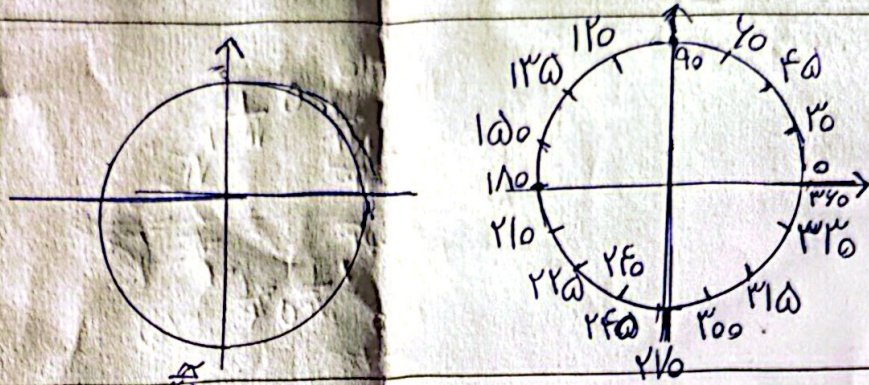
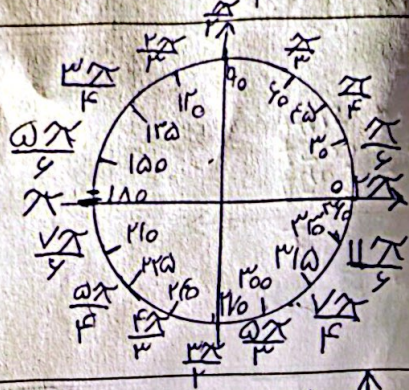
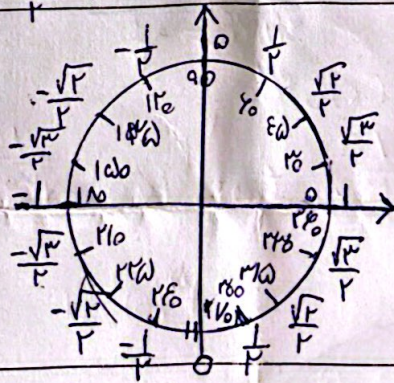




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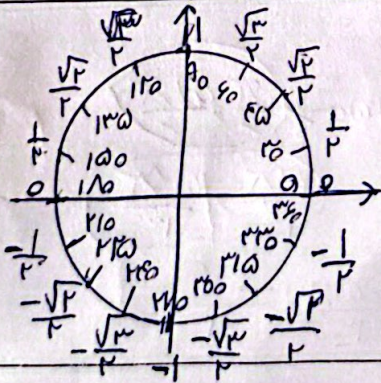


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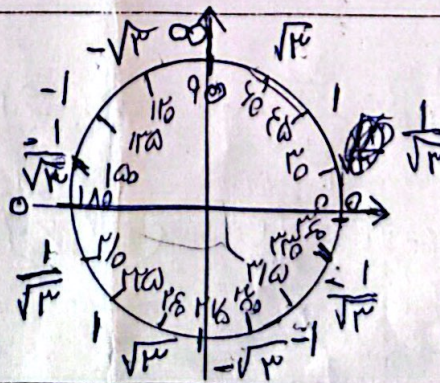
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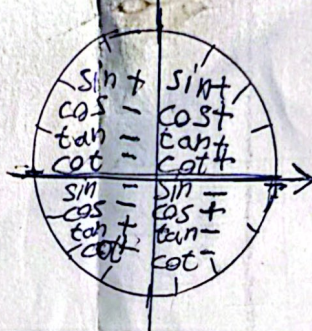
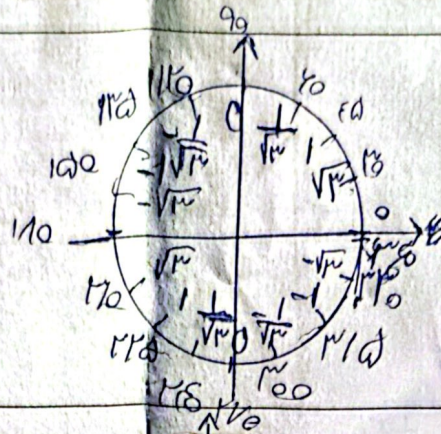


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$$\begin{aligned} \sin 110^\circ &= -\frac{1}{2} & \sin 140^\circ &= -\frac{1}{2} & \text{الف) } 140^\circ \\ \cos 140^\circ &= \frac{1}{2} & \cos 110^\circ &= \frac{1}{2} & 130^\circ \\ \tan 130^\circ &= -\frac{1}{\sqrt{3}} & \tan 140^\circ &= -\frac{1}{\sqrt{3}} & 150^\circ \\ \cot 130^\circ &= -1 & \cot 140^\circ &= -1 & 160^\circ \end{aligned}$$

$$\begin{aligned} \text{الف) } \cos \frac{11\pi}{6} &= \cos 110^\circ = \frac{1}{2} \\ -\cos \frac{11\pi}{6} &= -\cos 110^\circ = -\left(-\frac{1}{2}\right) = \frac{1}{2} & \frac{1}{2} &= \sin 30^\circ, 150^\circ \rightarrow \left(\frac{\pi}{6}, \frac{5\pi}{6}\right) \\ \text{ب) } -\cos \frac{11\pi}{6} &= -\cos 110^\circ = -\frac{\sqrt{3}}{2} \\ \sin(140^\circ, 150^\circ) &= \frac{\sqrt{3}}{2} \rightarrow \sin\left(\frac{7\pi}{6}, \frac{5\pi}{6}\right) = -\frac{\sqrt{3}}{2} \end{aligned}$$

$$\begin{aligned} \text{الف) } \cot \frac{11\pi}{6} &= \frac{\cos 110^\circ}{\sin 110^\circ} = \frac{\frac{1}{2}}{\frac{\sqrt{3}}{2}} = \frac{1}{\sqrt{3}} \rightarrow \cos 110^\circ = -1 & 110^\circ \\ \text{ب) } -\cos 140^\circ &= -\left(-\frac{\sqrt{3}}{2}\right) = \frac{\sqrt{3}}{2} & 110^\circ, 150^\circ \\ \sin 140^\circ &= \frac{\sqrt{3}}{2} \end{aligned}$$