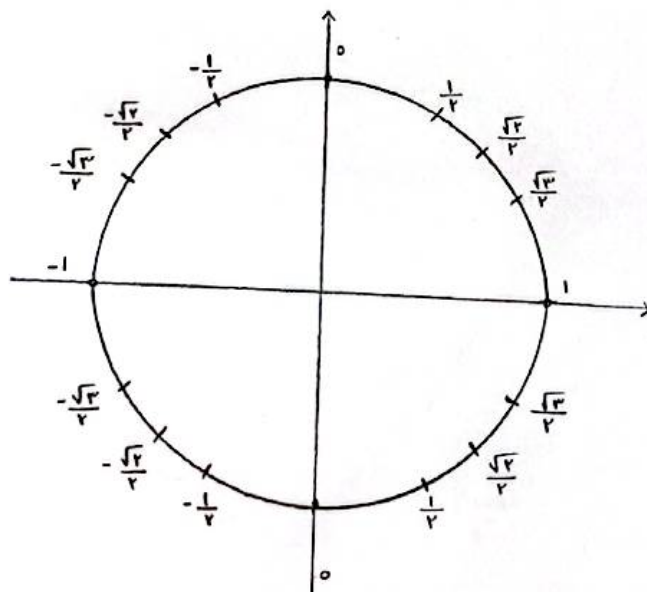
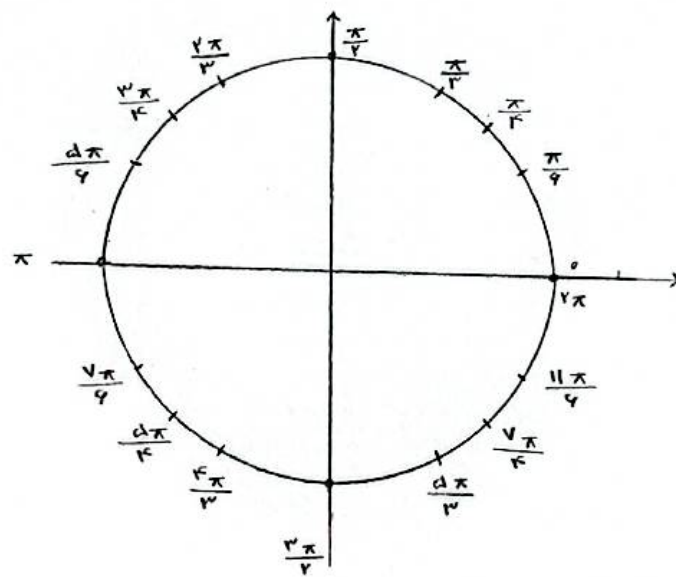
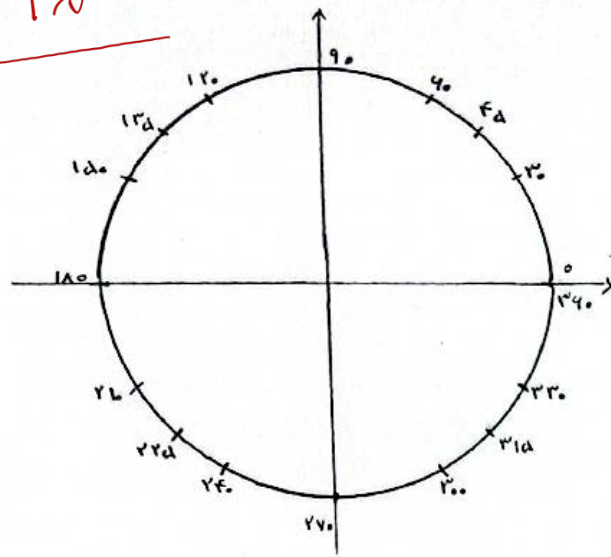
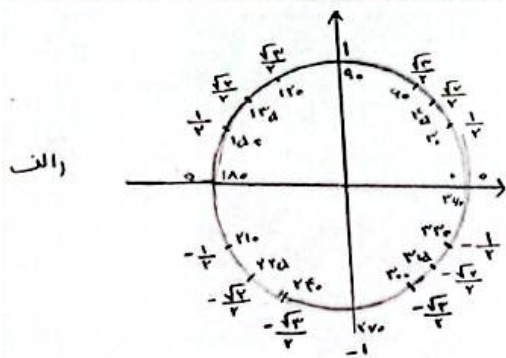
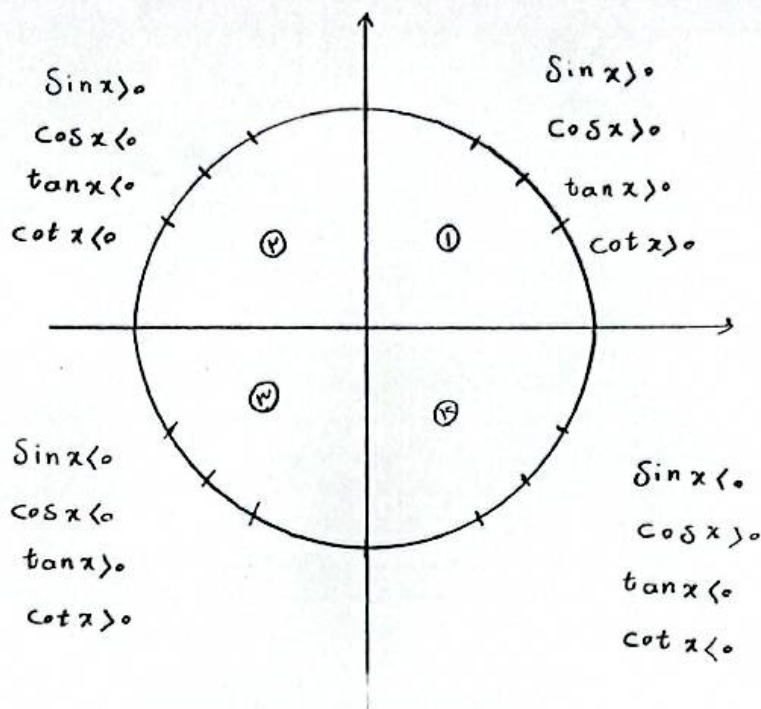


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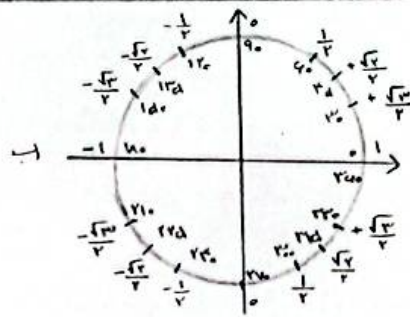
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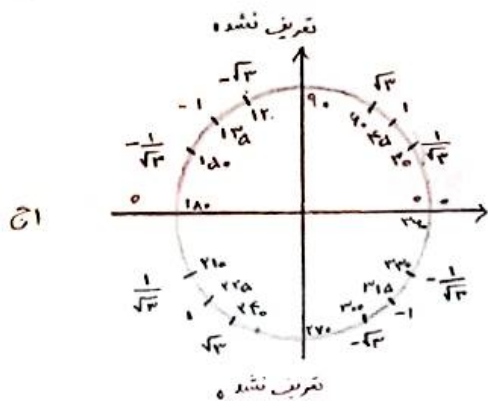




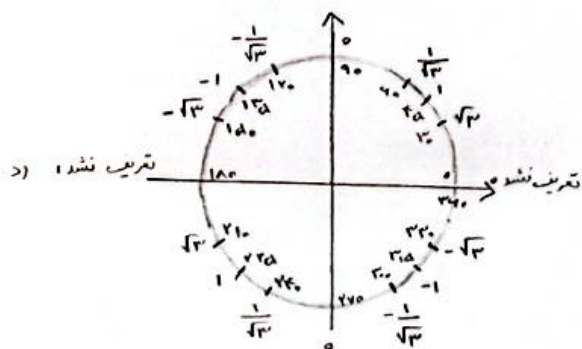
$$\sin 120^\circ = \frac{\sqrt{3}}{2} = \sin 60^\circ = \frac{\sqrt{3}}{2}$$



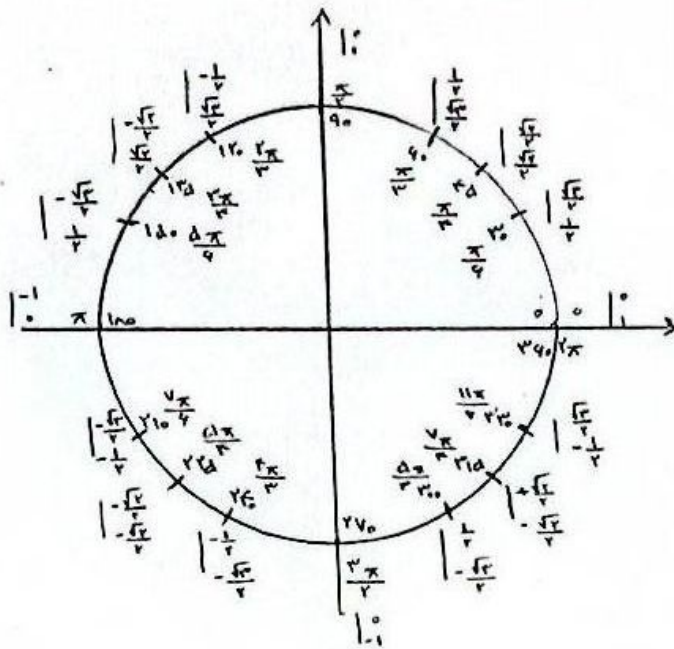
$$\cos 120^\circ = -\frac{1}{2} = \cos 240^\circ = -\frac{1}{2}$$



$$\tan 120^\circ = -\frac{1}{\sqrt{3}} = \tan 240^\circ = -\frac{1}{\sqrt{3}}$$



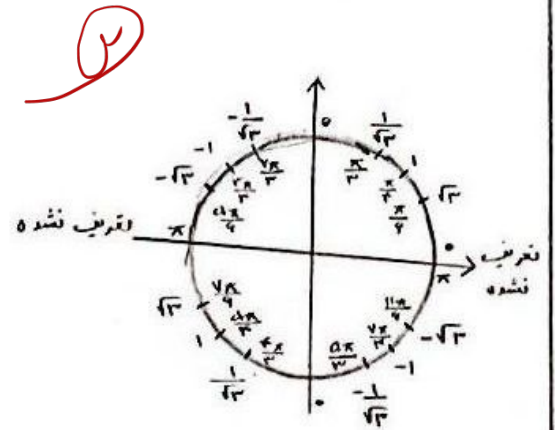
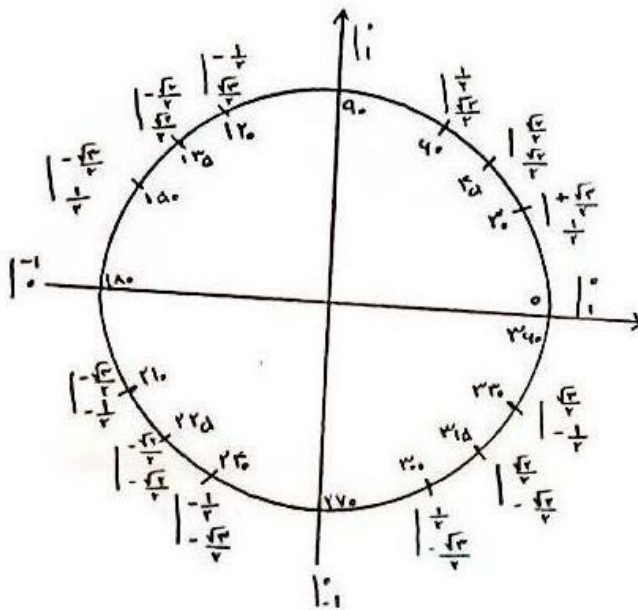
$$\cot 120^\circ = -1 = \cot 240^\circ = -1$$



5

الف) $\cos\left(\frac{7\pi}{4}\right) = -\frac{1}{\sqrt{2}} \xrightarrow{\text{قرینه}} \frac{1}{\sqrt{2}} = \sin \frac{\pi}{4} = \sin \frac{4\pi}{4}$

ب) $\cos \frac{11\pi}{4} = \frac{\sqrt{2}}{\sqrt{2}} \xrightarrow{\text{قرینه}} -\frac{\sqrt{2}}{\sqrt{2}} = \sin \frac{5\pi}{4} = \sin \frac{4\pi}{4}$



الف) $\cot \frac{7\pi}{4} = -1 = \cos 180^\circ$

ب) $\cos 120^\circ = -\frac{\sqrt{3}}{2} \xrightarrow{\text{قرینه}} \frac{\sqrt{3}}{2} = \sin 60^\circ = \sin 120^\circ$