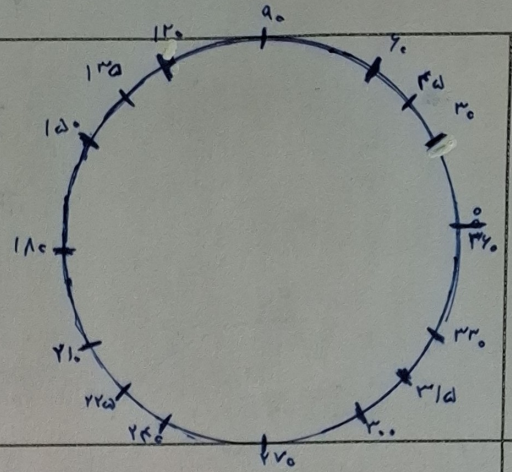
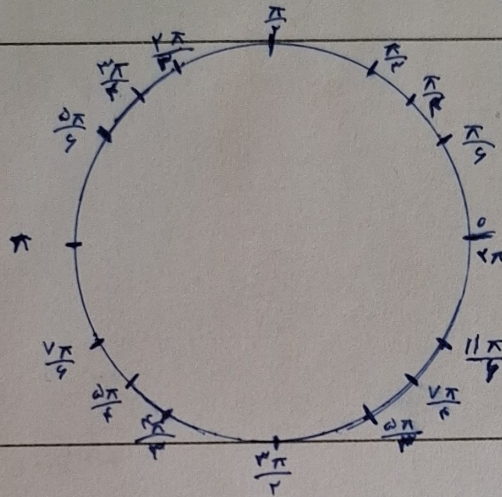
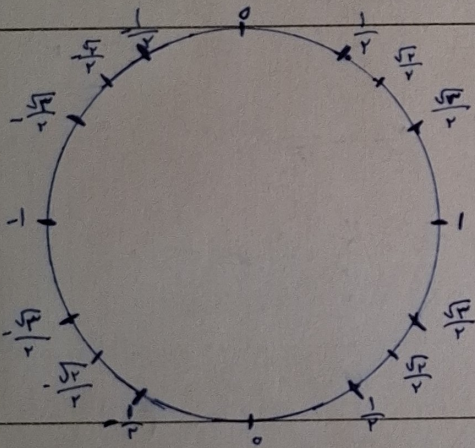




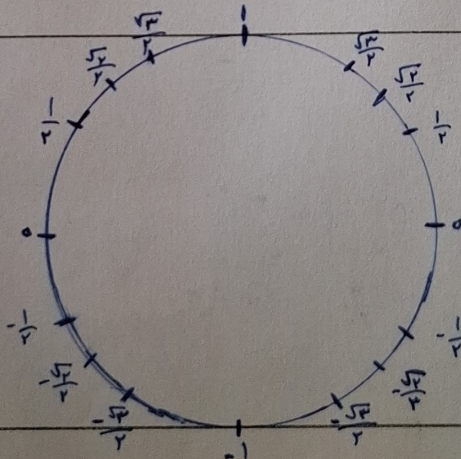
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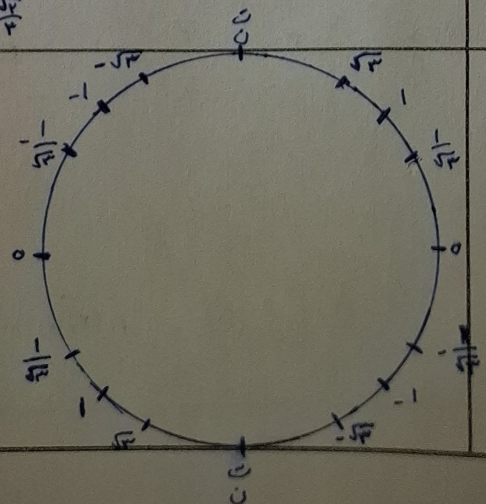
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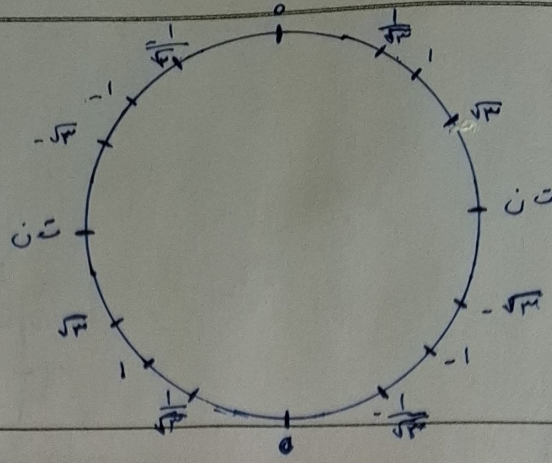
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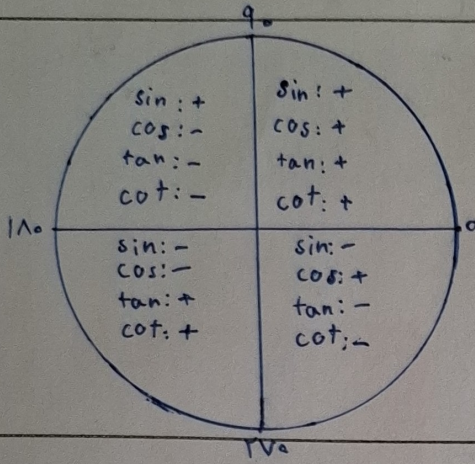
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$$\sin 135^\circ = \frac{\sqrt{2}}{2} = \sin 45^\circ \leftarrow 45^\circ \text{ (الف)}$$

$$\cos 135^\circ = -\frac{\sqrt{2}}{2} = \cos 225^\circ \leftarrow 225^\circ \text{ (ب)}$$

$$\tan 135^\circ = -\frac{1}{1} = \tan 315^\circ = -\frac{1}{1} \leftarrow 315^\circ \text{ (ج)}$$

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$$\cot 135^\circ = \frac{-\sqrt{2}}{\frac{\sqrt{2}}{2}} = \cot 225^\circ = \frac{\frac{\sqrt{2}}{2}}{-\sqrt{2}} = -1 \leftarrow 225^\circ \text{ (د)}$$

$$\cos \frac{2\pi}{4} = \cos 180^\circ = -\frac{1}{1} \xrightarrow{\text{مربع}} \frac{1}{1} = \sin 36^\circ, \sin 144^\circ$$

$$\downarrow \quad \downarrow$$

$$\sin \frac{\pi}{4} \quad \sin \frac{3\pi}{4}$$

الف

$$\cos \frac{4\pi}{4} = \cos 360^\circ = \frac{\sqrt{2}}{2} \xrightarrow{\text{مربع}} -\frac{\sqrt{2}}{2} = \sin 225^\circ, \sin 315^\circ$$

$$\downarrow \quad \downarrow$$

$$\sin \frac{5\pi}{4} \quad \sin \frac{7\pi}{4}$$

ب

$$\cot \frac{5\pi}{4} = \cot 225^\circ = \frac{\frac{\sqrt{2}}{2}}{-\frac{\sqrt{2}}{2}} = -1 = \cot 135^\circ$$

الف

$$\cos 135^\circ = -\frac{\sqrt{2}}{2} \xrightarrow{\text{مربع}} \frac{\sqrt{2}}{2} = \sin 45^\circ, \sin 135^\circ$$

ب

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