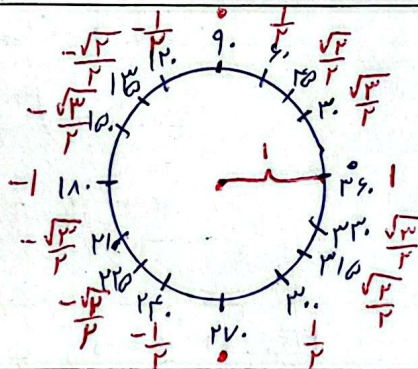
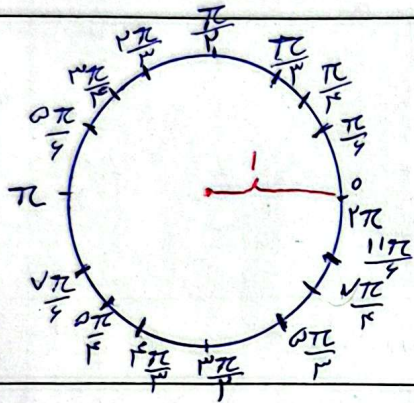
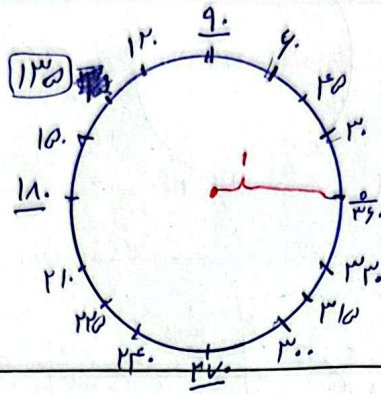
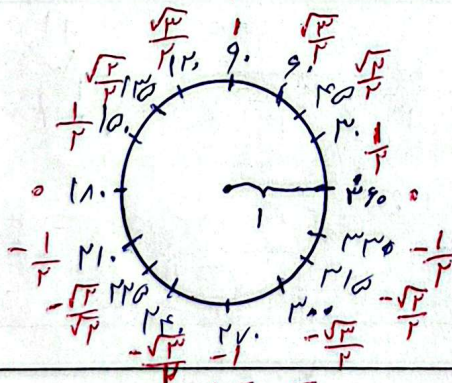
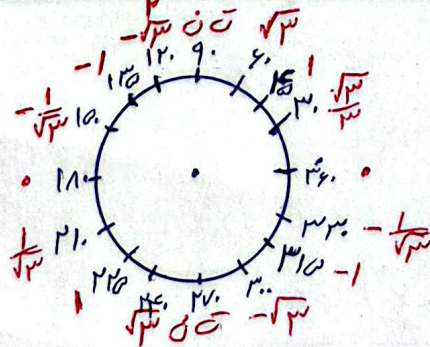




cos

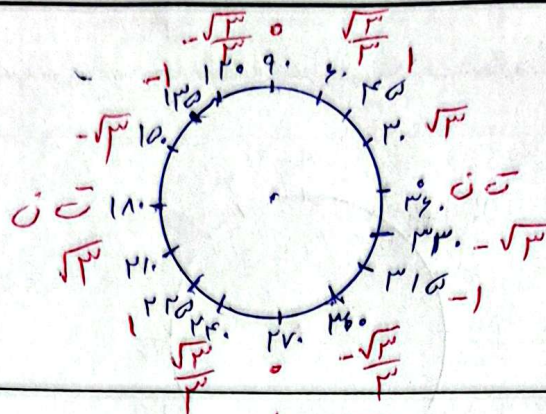


sin



$$\tan = \frac{\sin}{\cos}$$

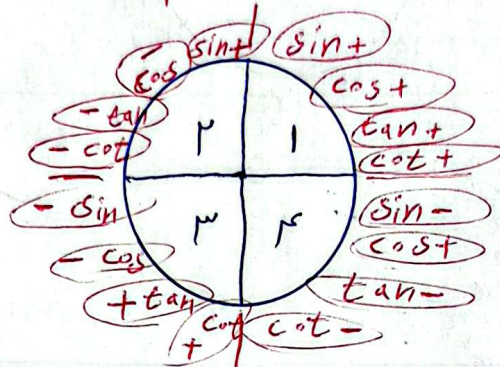
$$\frac{1/\sqrt{3}}{1} = \frac{1}{\sqrt{3}}$$



$$\cot = \frac{\cos}{\sin}$$

$$-\frac{\sqrt{3}}{3} = -\frac{1}{\sqrt{3}}$$

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$$\tan = \frac{\sin}{\cos}$$

$$\cot = \frac{\cos}{\sin}$$

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$$\sin \frac{\pi}{4} = \sin 45^\circ = \frac{\sqrt{2}}{2} \quad (\text{الف})$$

$$\cos \frac{\pi}{4} = \cos 45^\circ = \frac{\sqrt{2}}{2} \quad (\text{ب})$$

$$\tan \frac{\pi}{4} = \tan 45^\circ = 1 \quad (\text{ج})$$

$$\cot \frac{\pi}{4} = \cot 45^\circ = 1 \quad (\text{د})$$

٨

$$\frac{\pi}{3} = 60^\circ \rightarrow \cos 60^\circ = \frac{1}{2} \quad (\text{الف})$$

$$\frac{\pi}{6} = 30^\circ \rightarrow \sin 30^\circ = \frac{1}{2} \quad (\text{ب})$$

$$\frac{2\pi}{3} = 120^\circ \rightarrow \cos 120^\circ = -\frac{1}{2} \quad (\text{ج})$$

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$$\frac{\pi}{2} = 90^\circ \quad (\text{الف})$$

$$\cot 90^\circ = 0 \Rightarrow \cos 90^\circ = 0$$

$$\sin 90^\circ = 1$$

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$$\cos 150^\circ = -\frac{\sqrt{3}}{2}$$

$$\sin 150^\circ = \frac{1}{2}$$