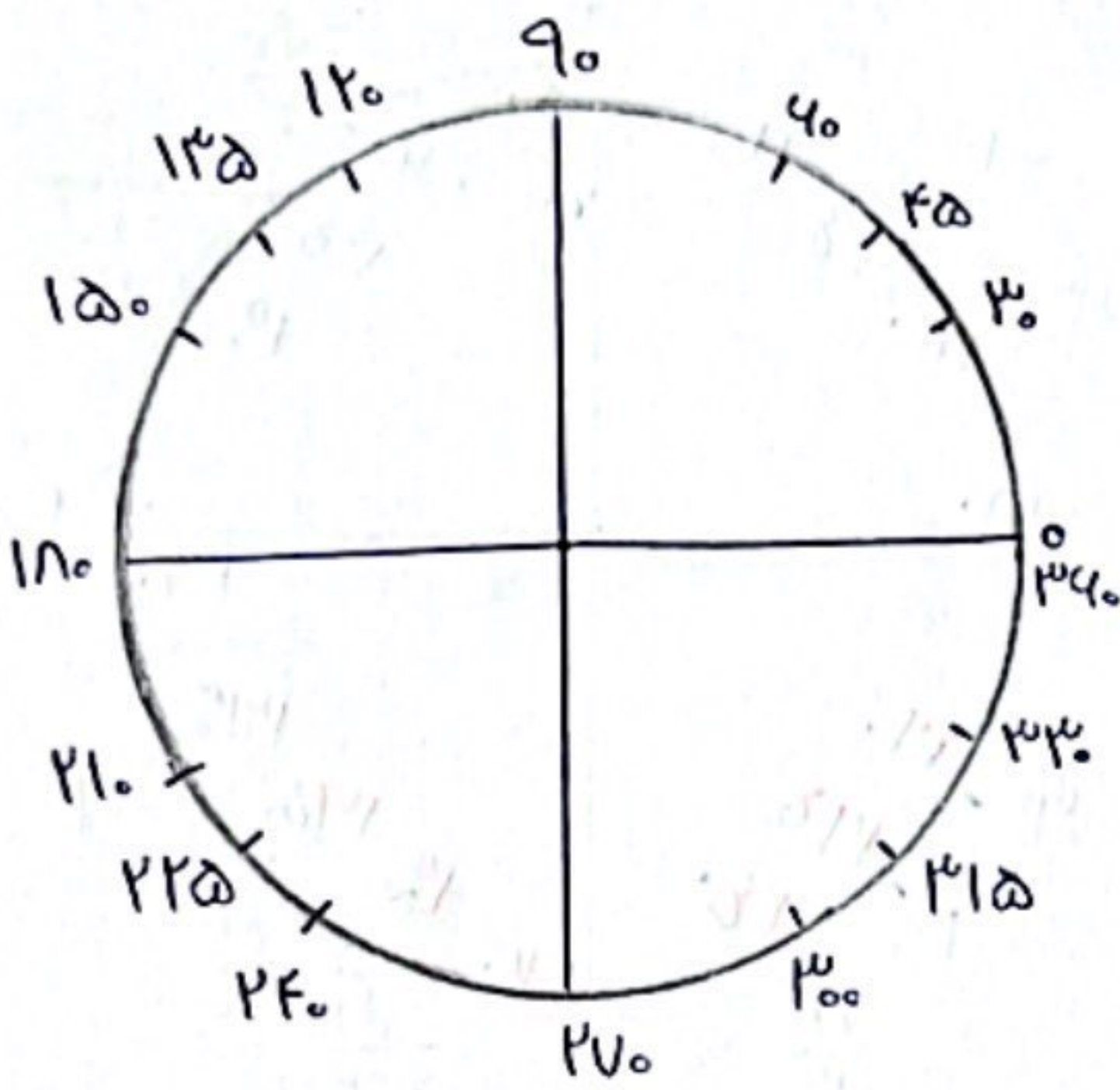
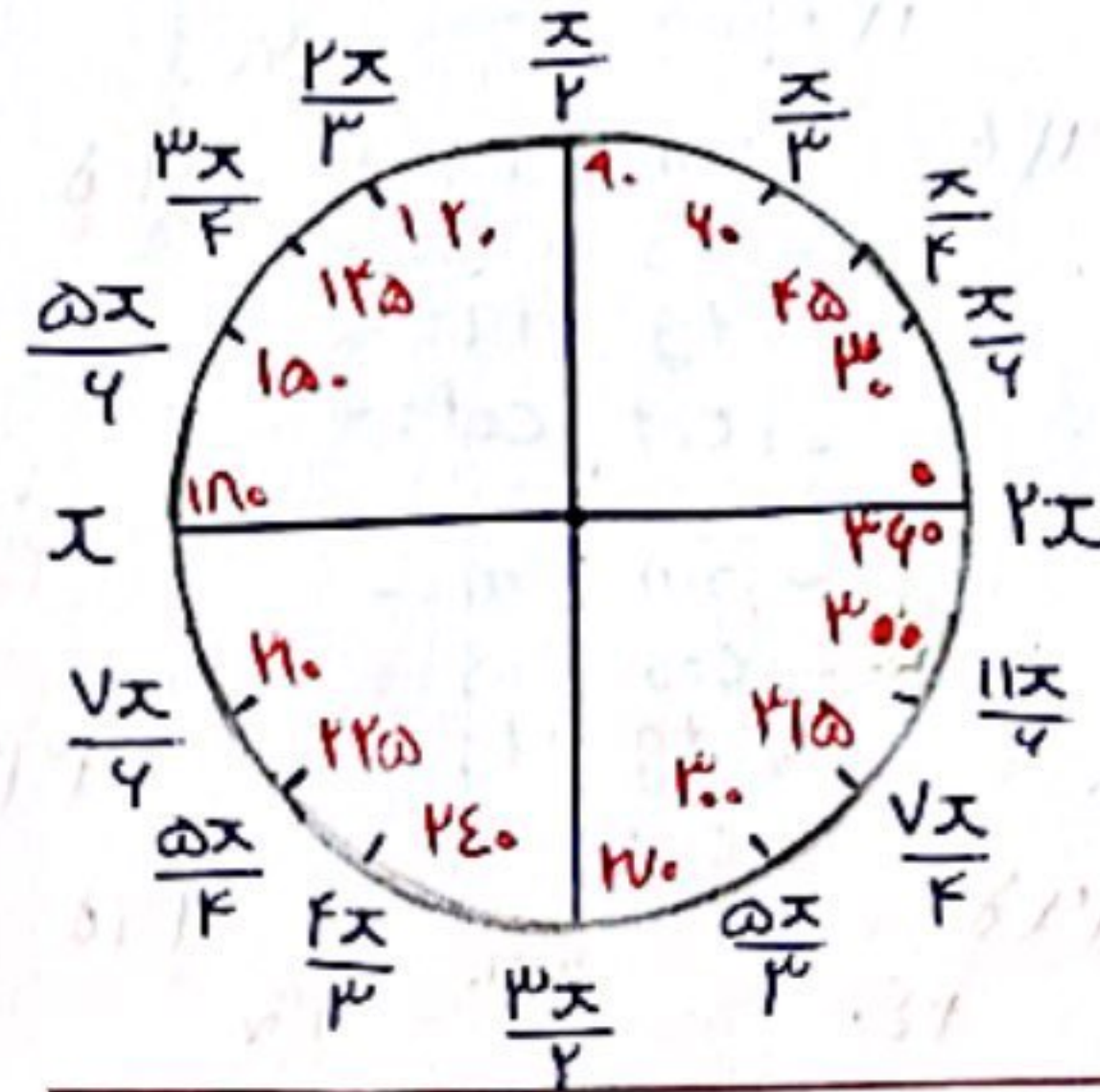


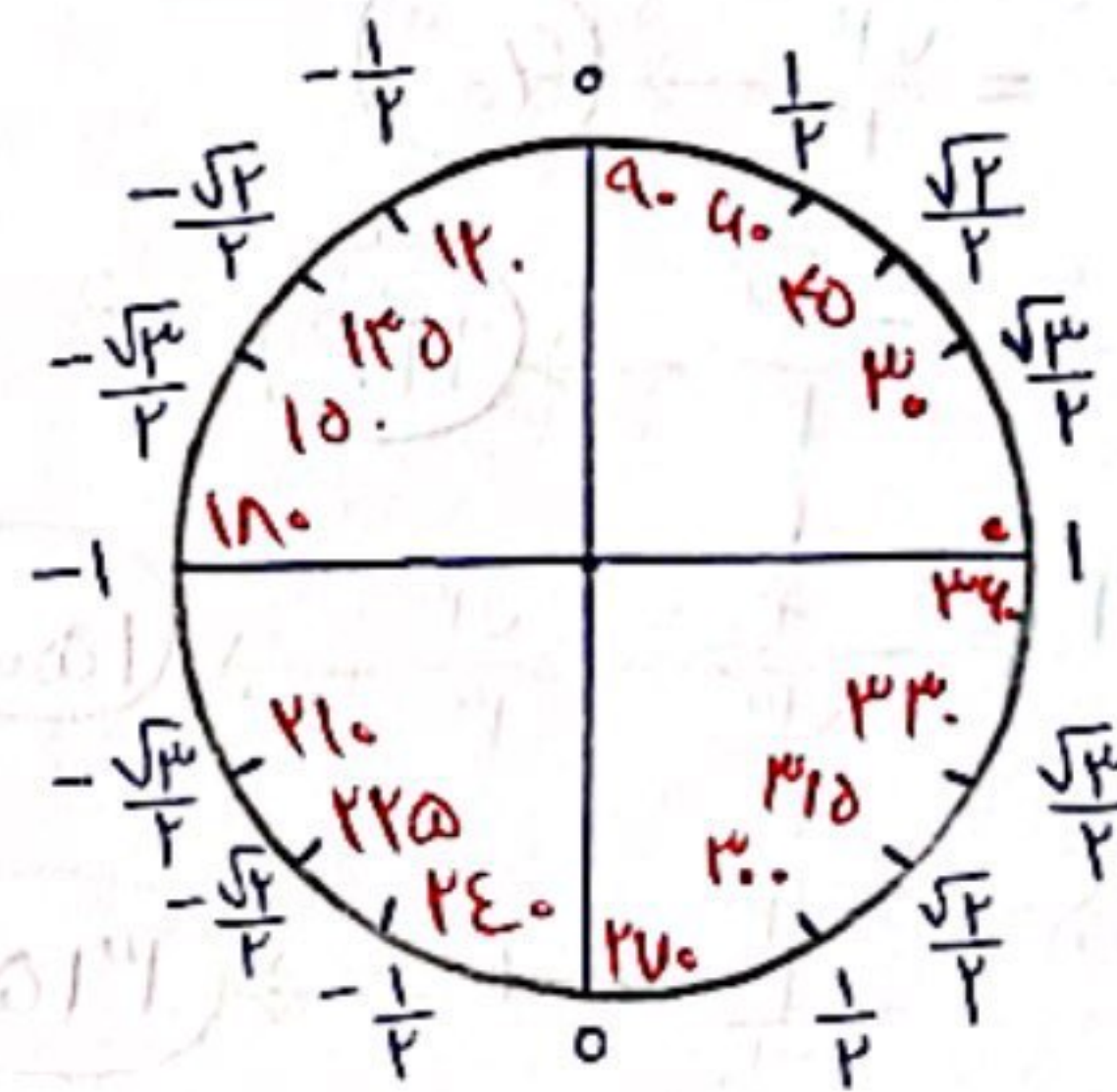
سؤال ۱



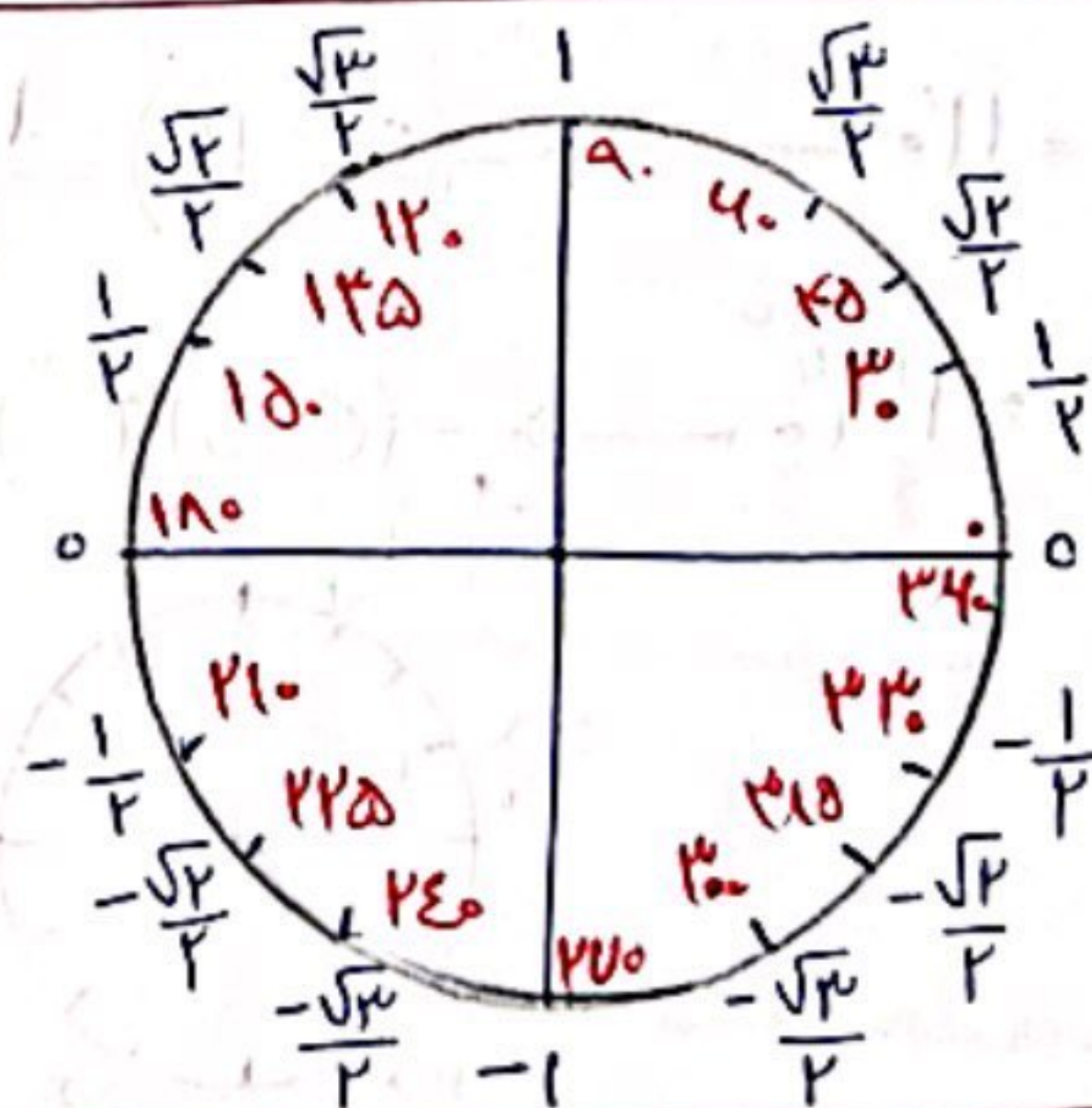
سؤال ۲



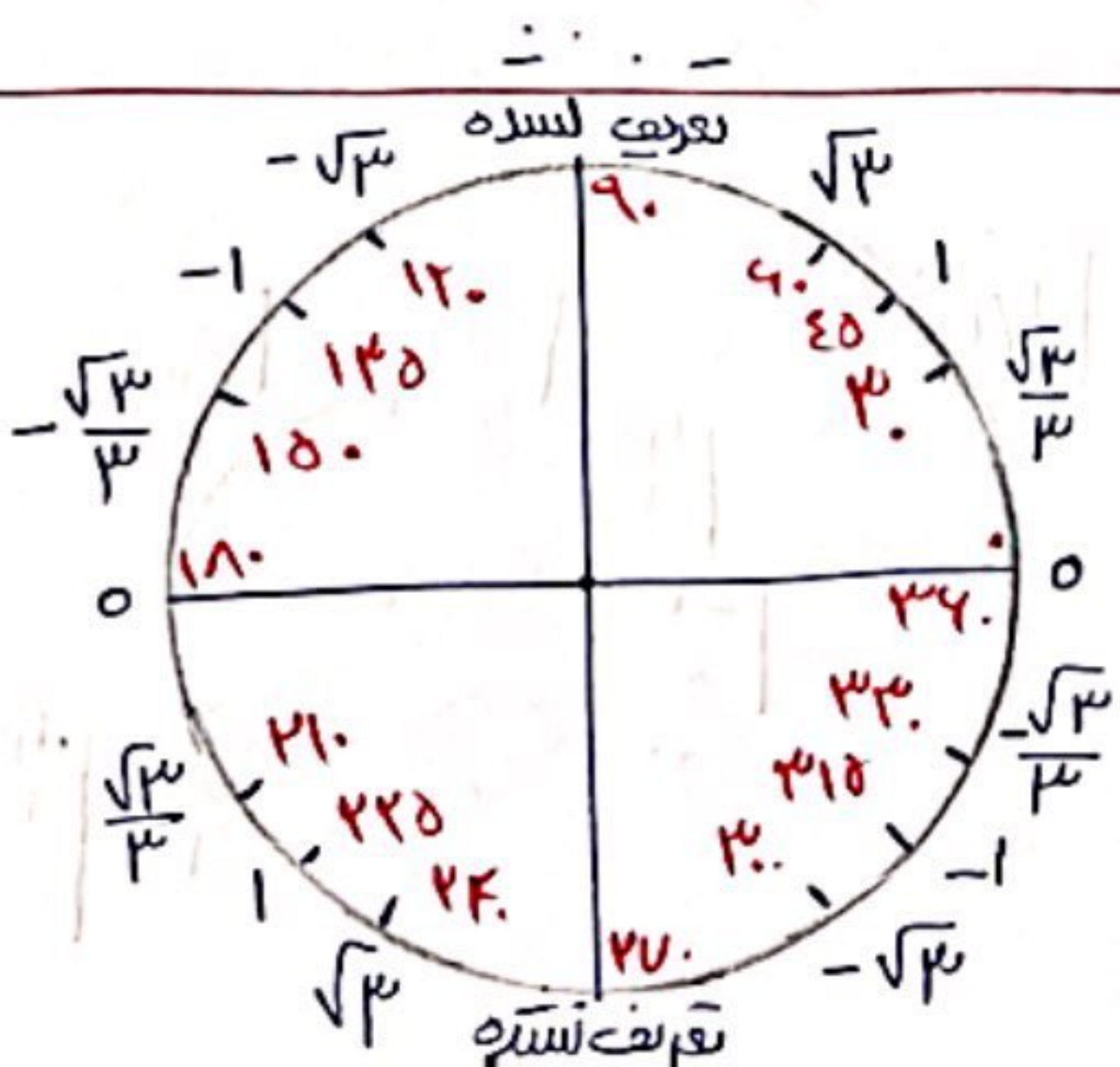
سؤال ۳



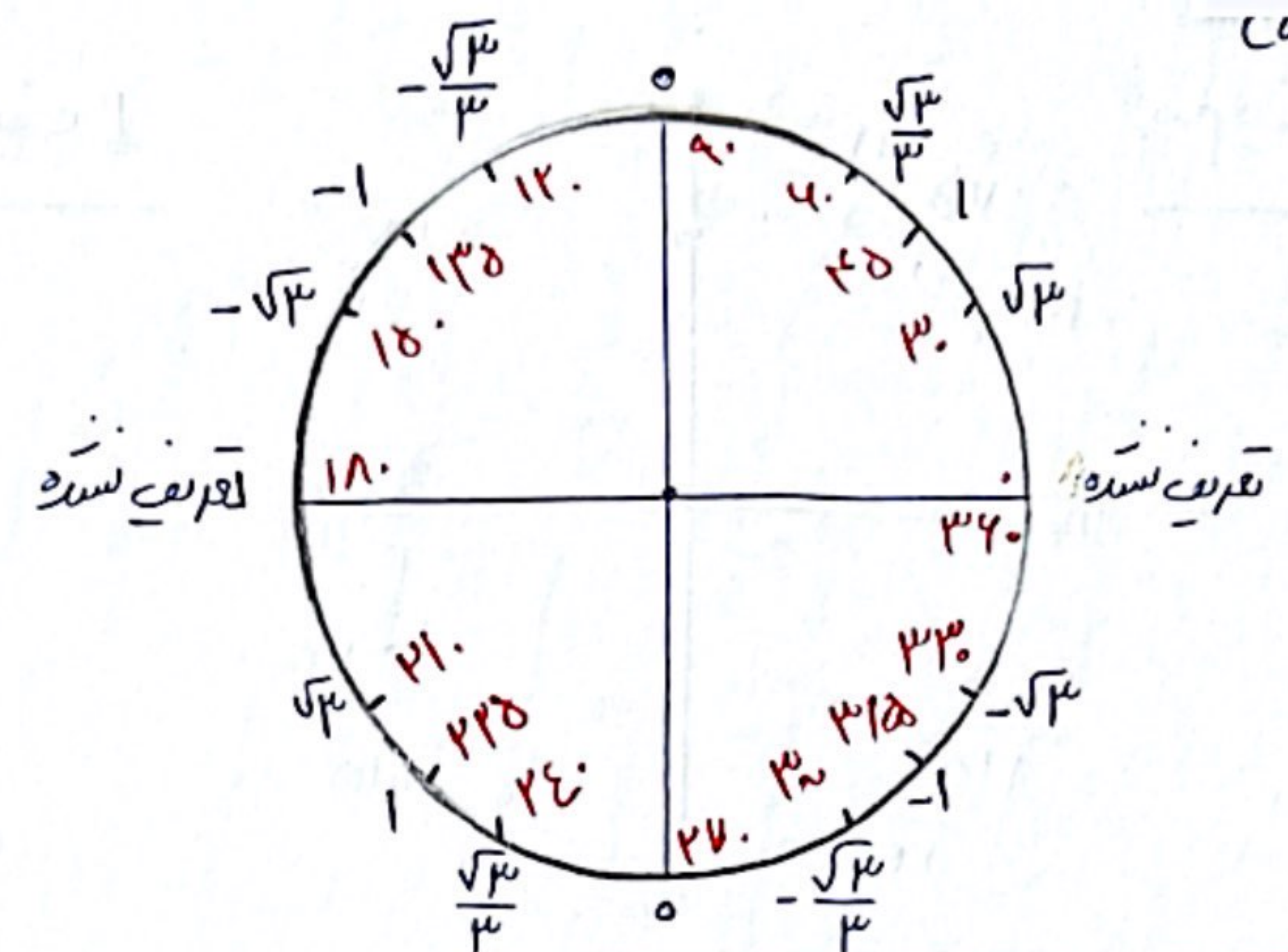
سؤال ۴



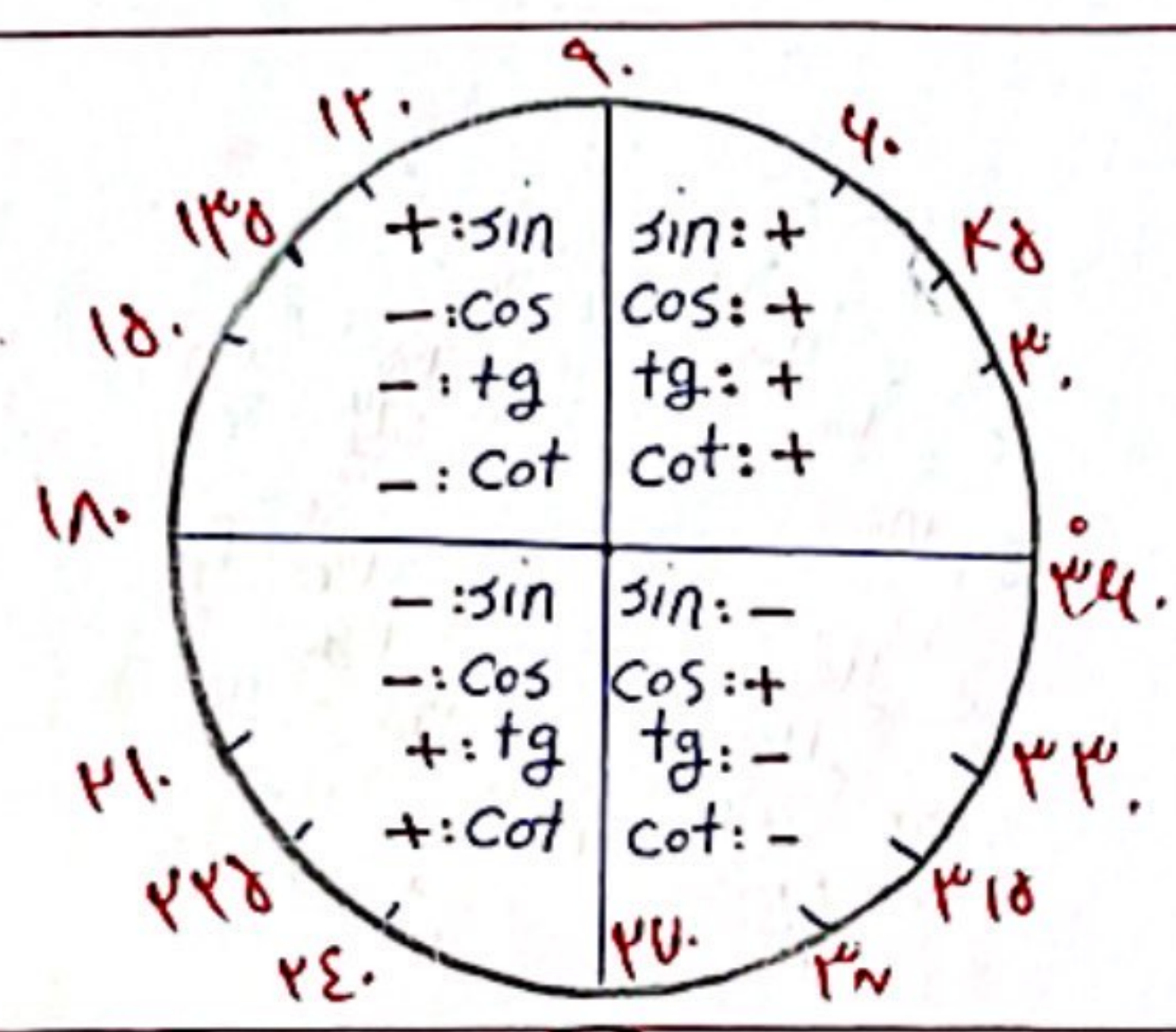
سؤال ۵



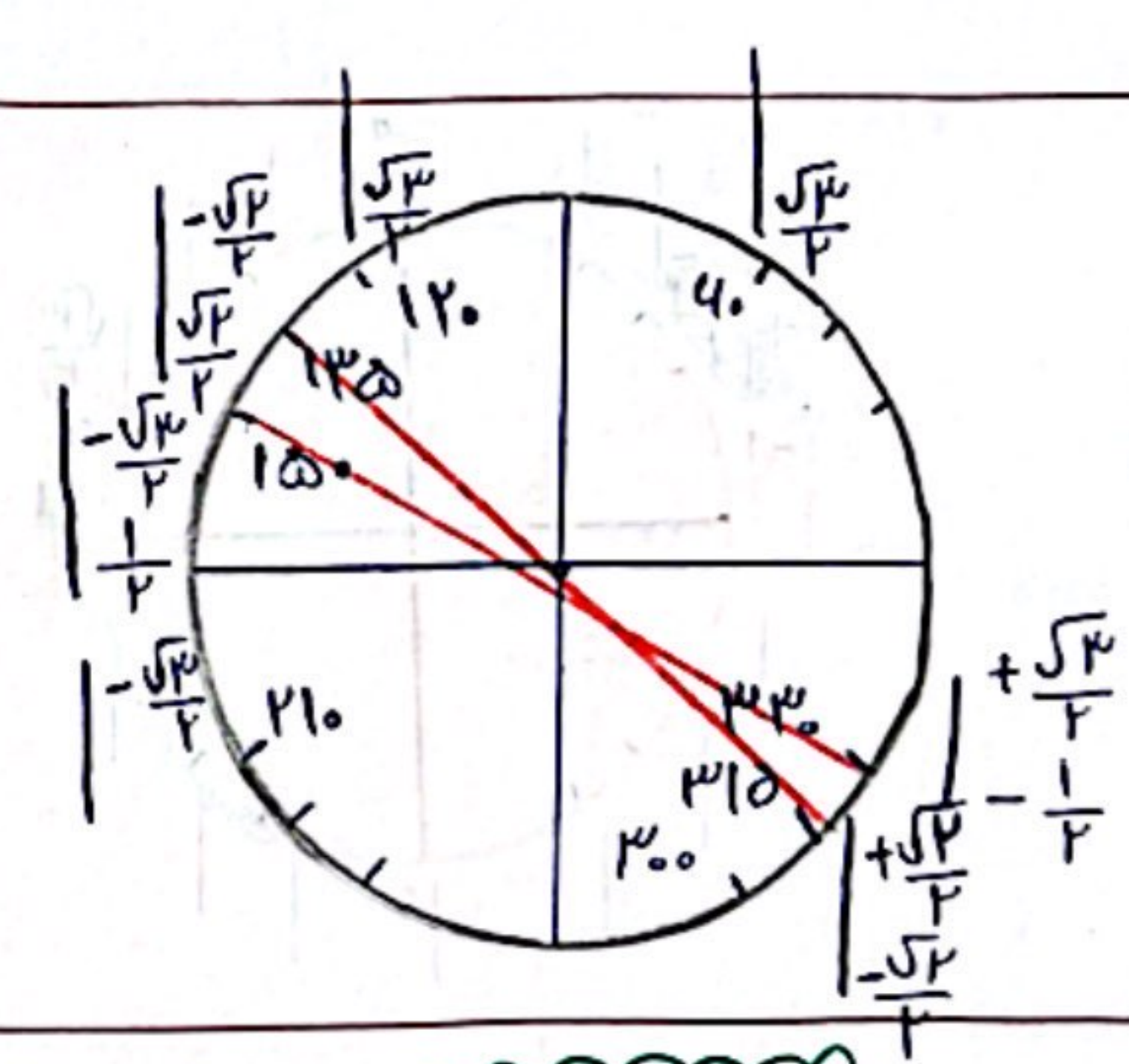
سؤال ٦



سؤال ٧

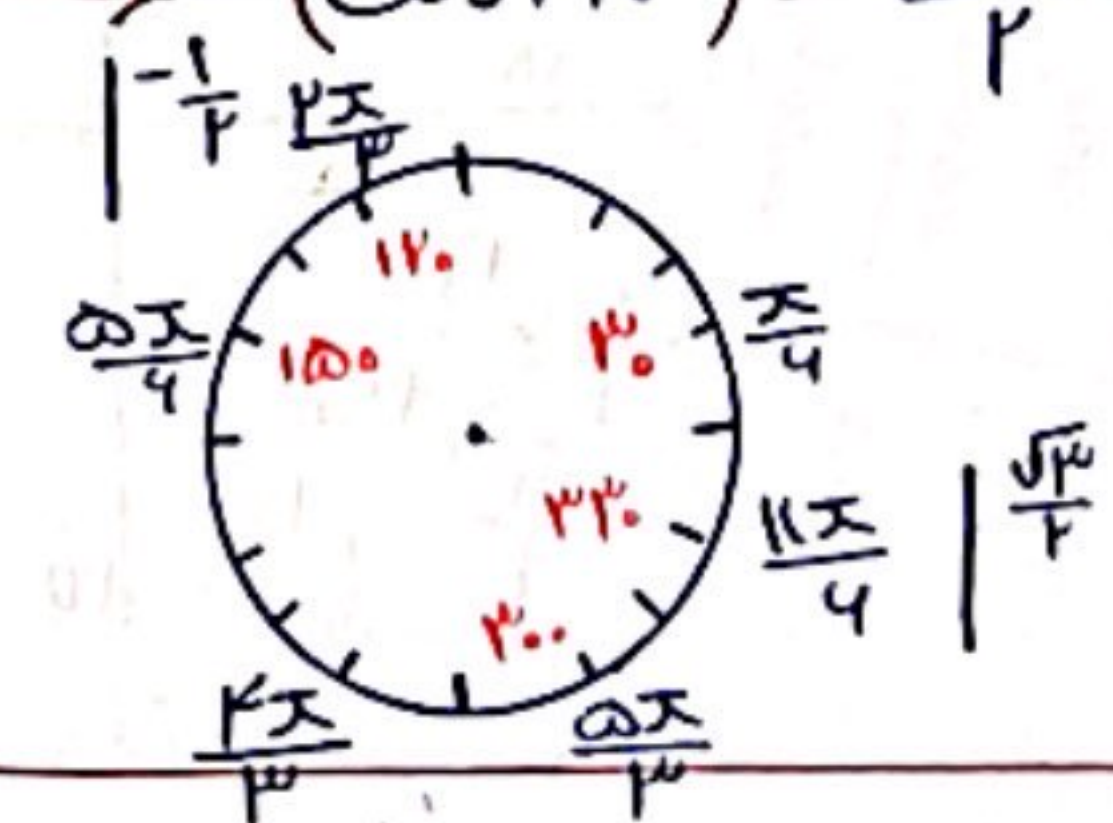


الف) $\sin 12^\circ = \frac{\sqrt{3}}{2} \rightarrow 40^\circ$
 ب) $\cos 15^\circ = -\frac{\sqrt{3}}{2} \rightarrow 210^\circ$
 ج) $\tan 33^\circ = \frac{-1}{\sqrt{3}} = -\frac{\sqrt{3}}{3} \rightarrow 150^\circ$
 د) $\cot 135^\circ = \frac{-\sqrt{2}}{\sqrt{2}} = -1 \rightarrow 315^\circ$



سؤال ٨

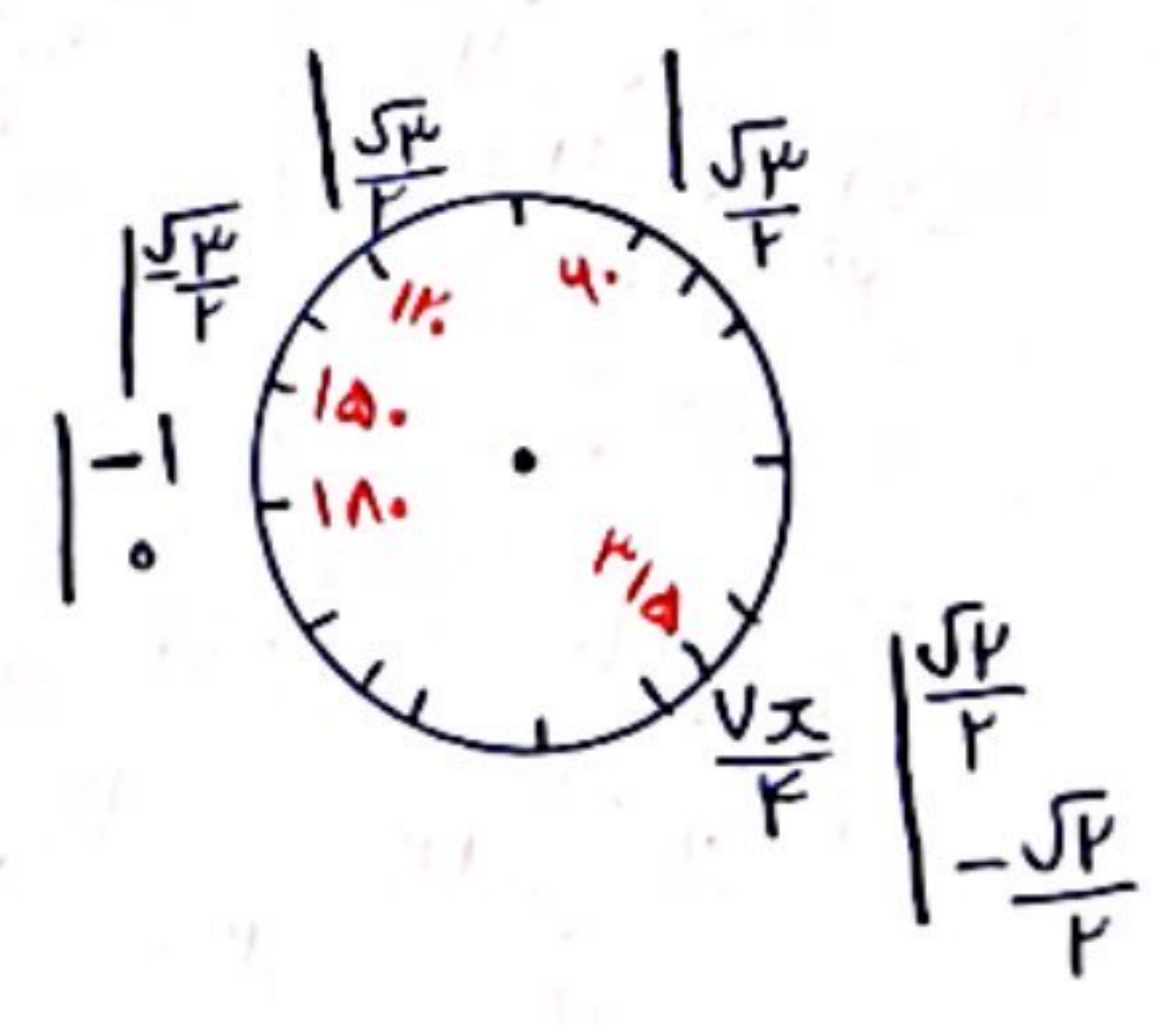
الف) $\frac{\pi}{3} = 120^\circ \rightarrow -(\cos 120^\circ) = -\frac{1}{2} \rightarrow 30^\circ, 150^\circ \Rightarrow \frac{\pi}{6}, \frac{5\pi}{6}$
 ب) $\frac{11\pi}{4} = 330^\circ \rightarrow -(\cos 330^\circ) = -\frac{\sqrt{3}}{2} \rightarrow 30^\circ, 210^\circ \Rightarrow \frac{\pi}{6}, \frac{7\pi}{6}$



سؤال ٩

الف) $\frac{\sqrt{2}}{2} = 315^\circ \rightarrow \cot 315^\circ = -1 = \cos 180^\circ$

ب) $-(\cos 150^\circ) = \frac{\sqrt{3}}{2} \rightarrow \sin 40^\circ, 120^\circ$



سؤال ١٠