

Subject :

تکلیف شماره ۲

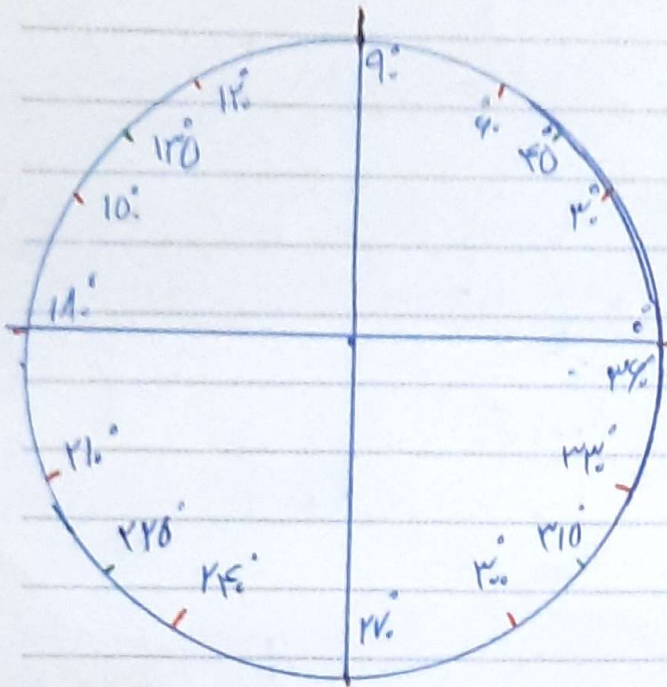
Date :

امیرعلی میرزائی

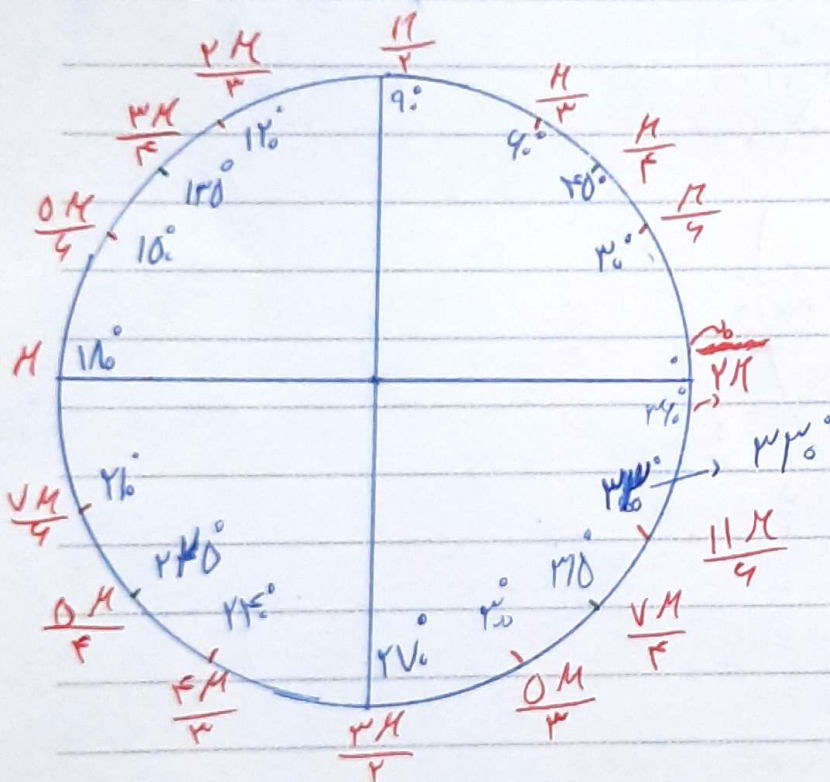
نام خدا

مقطع دهم سر A

سؤال ۱



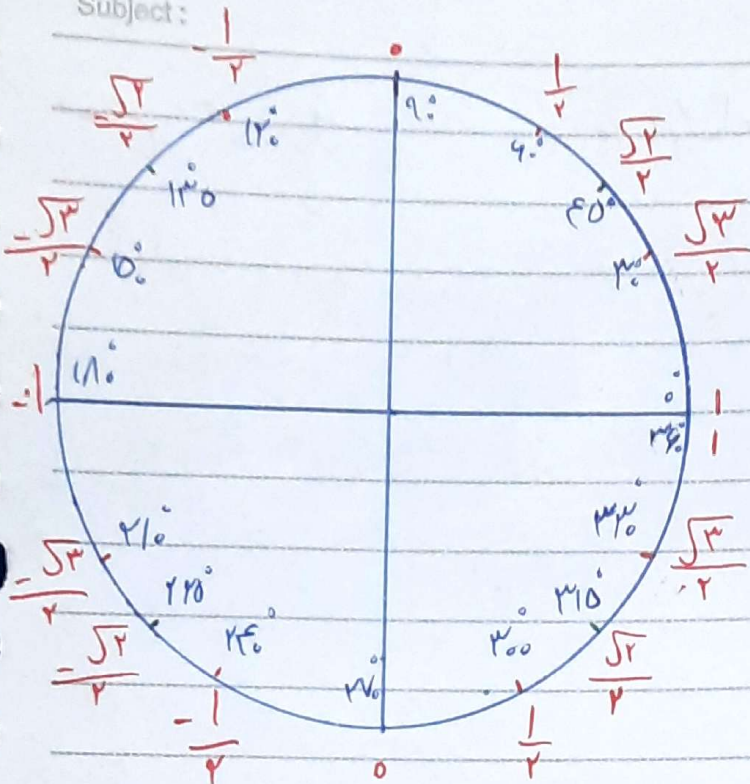
سؤال ۲



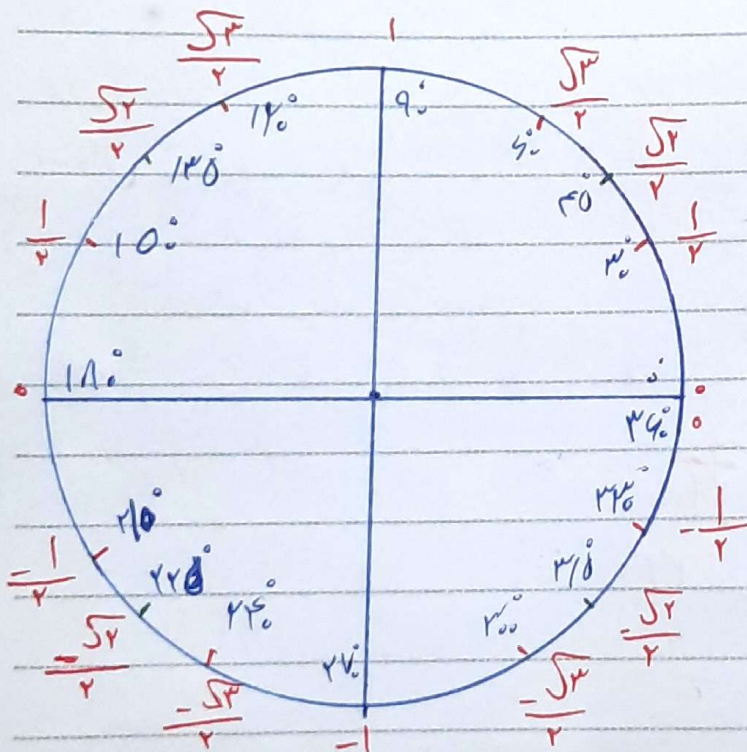
Subject :

Date :

سوال ۳ ←

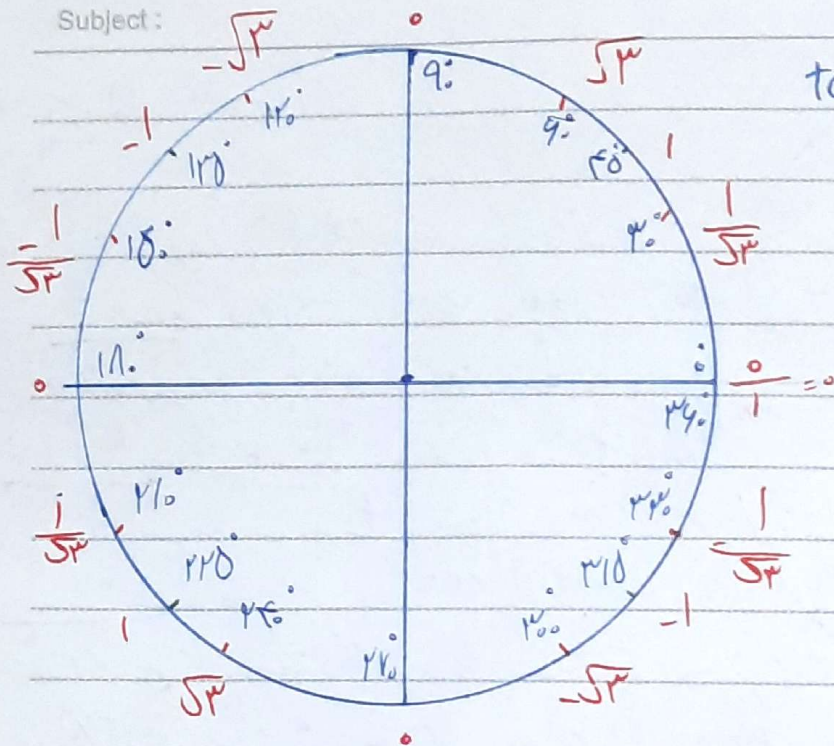


سوال ۴ ←



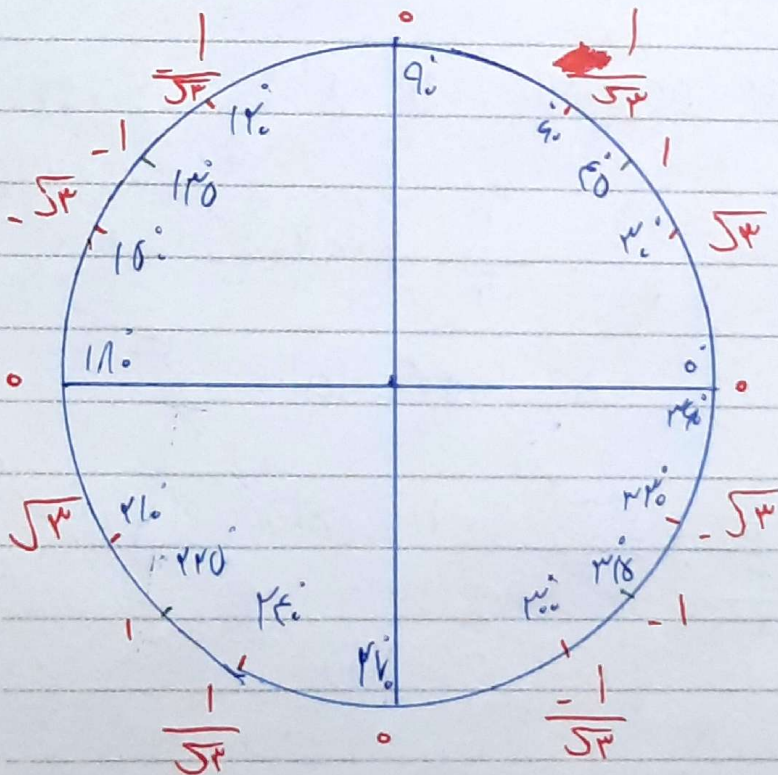
Subject :

Date :



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

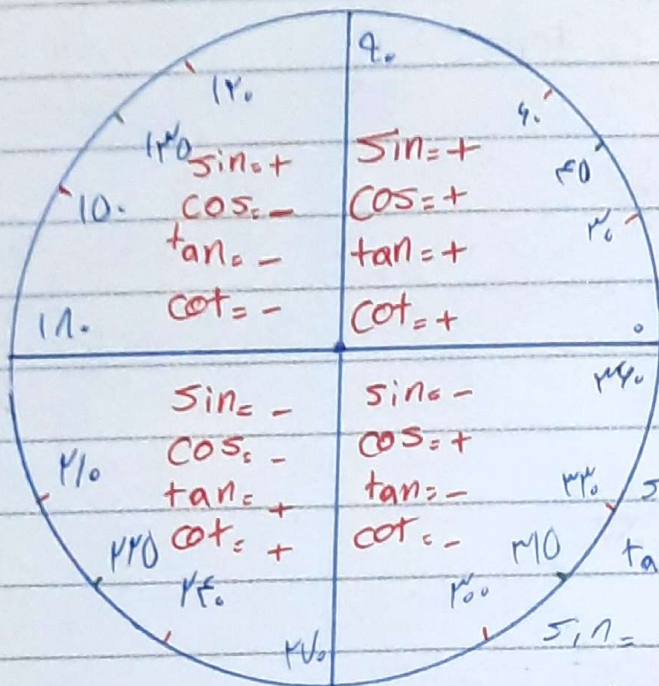
سوال 5 ←



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

سوال 6 ←

سوال ۷

در این ربع اول $\sin=+$ $\cos=+$ $\tan=+$ $\cot=+$ در این ربع دوم $\sin=+$ $\cos=-$ $\tan=-$ $\cot=+$ در این ربع سوم $\sin=-$ $\cos=-$ $\tan=+$ $\cot=+$ در این ربع چهارم $\sin=-$ $\cos=+$ $\tan=-$ $\cot=+$

سوال ۸

الف) $\sin 120^\circ = \frac{\sqrt{3}}{2}$ ، $\sin \alpha = \sin 120^\circ$ ، $\alpha = 60^\circ$

ب) $\cos 10^\circ = \frac{\sqrt{3}}{2}$ $\rightarrow \cos \alpha = \cos 10^\circ$ ، $\alpha = 210^\circ$

ج) $\tan 45^\circ = \frac{\sin 45^\circ}{\cos 45^\circ} = \frac{\frac{1}{\sqrt{2}}}{\frac{1}{\sqrt{2}}} = 1$ ، $\tan \alpha = 1$ ، $\alpha = 45^\circ$

د) $\cot 135^\circ = \frac{\cos 135^\circ}{\sin 135^\circ} = \frac{-\frac{\sqrt{2}}{2}}{\frac{\sqrt{2}}{2}} = -1$ ، $\cot \alpha = -1$ ، $\alpha = 225^\circ$

سؤال ٩ ←

$$\text{الف) } \frac{2\pi}{3} = 120^\circ \rightarrow (\cos 120^\circ) = -\left(\frac{1}{2}\right) = -\frac{1}{2}$$

$$\sin \alpha = \frac{1}{2} \rightarrow \alpha = 30^\circ, 150^\circ \rightarrow \alpha^\circ = \frac{\pi}{6} \quad 10^\circ = \frac{5\pi}{9}$$

$$\text{ب) } \frac{11\pi}{6} = 330^\circ \rightarrow (\cos 330^\circ) = \frac{\sqrt{3}}{2}$$

$$\sin \alpha = -\frac{\sqrt{3}}{2} \rightarrow \alpha = 240^\circ, 300^\circ \rightarrow \alpha^\circ = \frac{4\pi}{3} \quad 300^\circ = \frac{5\pi}{3}$$

$$\text{الف) } \frac{7\pi}{4} = 315^\circ \rightarrow \cot 315^\circ = \frac{\cos 315^\circ}{\sin 315^\circ} = \frac{\frac{\sqrt{2}}{2}}{-\frac{\sqrt{2}}{2}} = \frac{+\sqrt{2}}{-\sqrt{2}} = -1$$

$$\cos \alpha = -1 \rightarrow \alpha = 180^\circ$$

$$\text{ب) } (\cos 10^\circ) = -\left(\frac{\sqrt{3}}{2}\right) = -\frac{\sqrt{3}}{2} \rightarrow \sin \alpha = \frac{\sqrt{3}}{2} \rightarrow \alpha = 60^\circ, 120^\circ$$