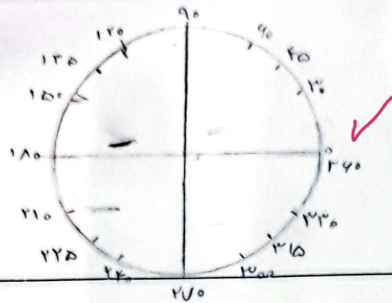
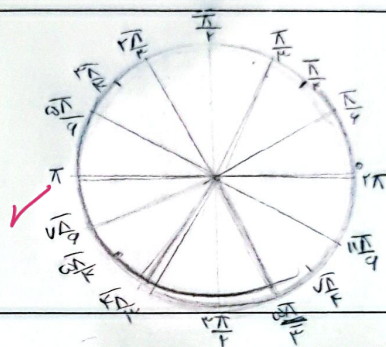


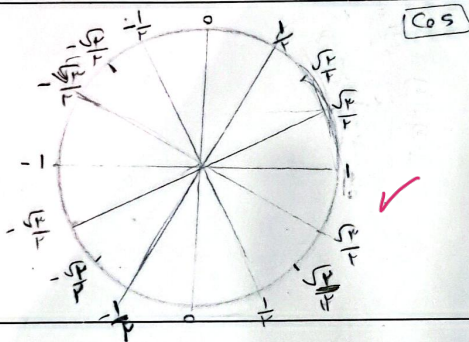
نام و نام خانوادگی پاسخنامه تشریحی تکلیف شماره کلاس
۲۰



۲

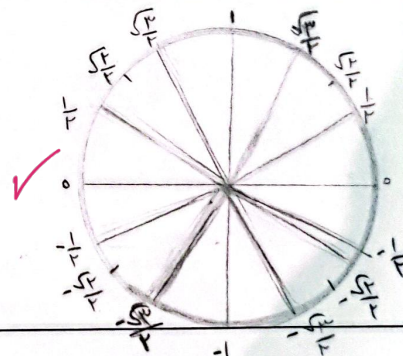


۲

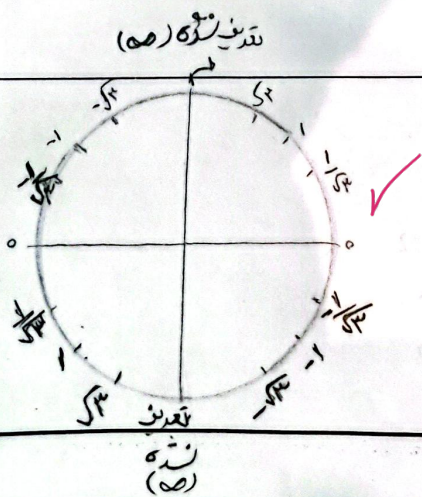


۲

sin



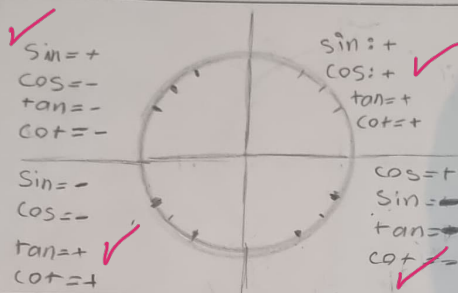
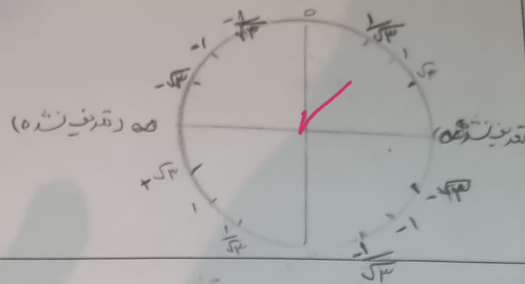
۲



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

۲

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



$\boxed{90^\circ} = ? \leftarrow \sin 135^\circ = \frac{\sqrt{2}}{2} \rightarrow \sin 45^\circ = \frac{\sqrt{2}}{2}$ (الف)
 $\boxed{110^\circ} = ? \leftarrow \cos 150^\circ = -\frac{\sqrt{3}}{2} \rightarrow \sin 9^\circ = -\frac{\sqrt{3}}{2}$ (ب)
 $\boxed{150^\circ} = ? \leftarrow \tan 135^\circ = -1 \rightarrow \tan 9^\circ = -\frac{1}{\sqrt{3}}$ (ج)
 $\boxed{150^\circ} = ? \leftarrow \cot 135^\circ = -1 \rightarrow \cot 9^\circ = -1$ (د)

$\frac{4\pi}{\pi} = 135^\circ \quad \cos \frac{4\pi}{\pi} = -\frac{1}{2} \xrightarrow{\text{مقابل}} \frac{\sqrt{3}}{2} \quad \sin 9^\circ = \frac{1}{2} \rightarrow 9^\circ = \frac{\pi}{6} \text{ و } 5\pi/9$
 $\cos \frac{11\pi}{9} = \frac{\sqrt{3}}{2} \xrightarrow{\text{مقابل}} -\frac{\sqrt{3}}{2} \rightarrow \sin 9^\circ = -\frac{\sqrt{3}}{2} \rightarrow 9^\circ = \frac{4\pi}{3} \text{ و } \frac{5\pi}{3}$

$\frac{\sqrt{2}}{2} = 45^\circ$
 $\cot \frac{\sqrt{2}}{2} = -1 \rightarrow \cos 2 = -1 \Rightarrow 2 = 180^\circ = \pi$

$\cos 150^\circ = -\frac{\sqrt{3}}{2} \xrightarrow{\text{مقابل}} \frac{\sqrt{3}}{2} \rightarrow \sin 2 = \frac{\sqrt{3}}{2} \Rightarrow 2 = 60^\circ, 2 = 120^\circ$
 $\frac{\pi}{3} \quad \frac{2\pi}{3}$