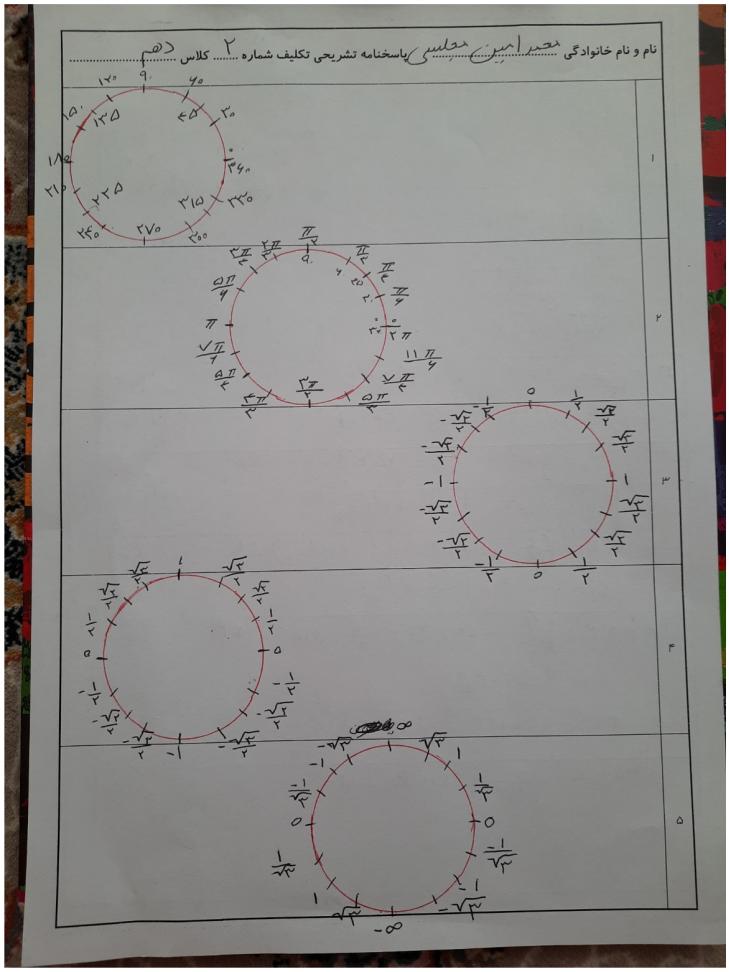
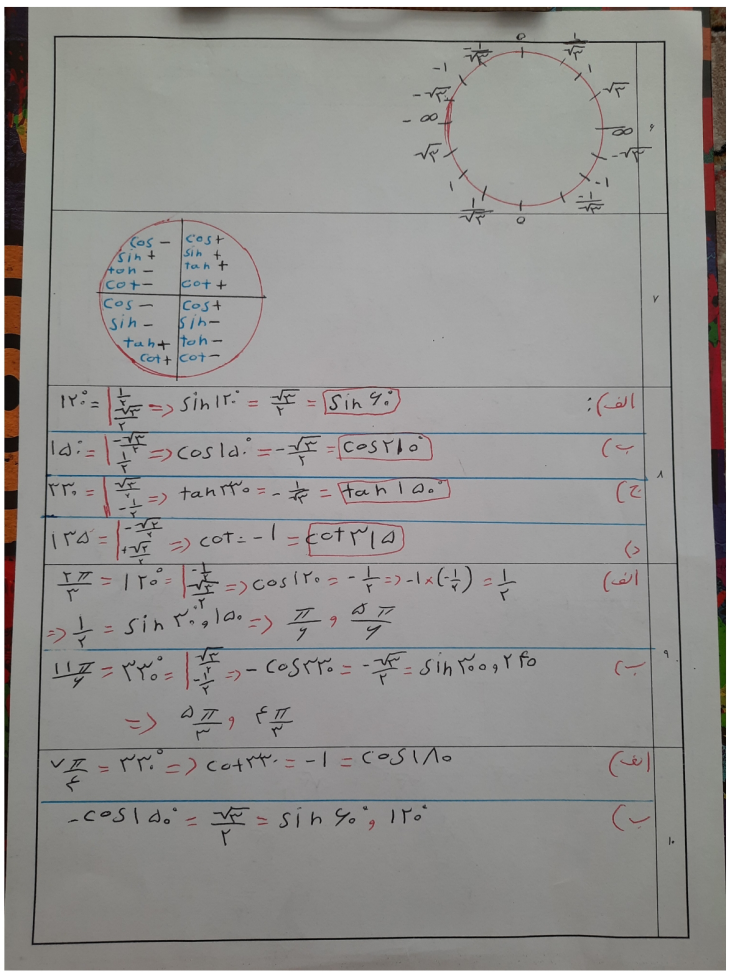
نام و نام خانوادگی محبر امیر محلیسی پاسخنامه تشریحی تکلیف شماره ۲ کلاس دهم .....





cos −	cos +	
sin +	sin +	
tan −	tan +	
cot −	cot +	
cos −	cos +	
sin −	sin −	
tan +	tan −	
cot +	cot −	

الف) $120^\circ = \left|\frac{\frac{1}{2}}{\frac{\sqrt{3}}{2}}\right| \Rightarrow \sin 120^\circ = \frac{\sqrt{3}}{2} = \sin 60^\circ$

ب) $150^\circ = \left|\frac{-\frac{\sqrt{3}}{2}}{\frac{1}{2}}\right| \Rightarrow \cos 150^\circ = -\frac{\sqrt{3}}{2} = \cos 210^\circ$

ج) $330^\circ = \left|\frac{\frac{\sqrt{3}}{2}}{-\frac{1}{2}}\right| \Rightarrow \tan 330^\circ = -\frac{1}{\sqrt{3}} = \tan 150^\circ$

د) $135^\circ = \left|\frac{-\frac{\sqrt{2}}{2}}{+\frac{\sqrt{2}}{2}}\right| \Rightarrow \cot = -1 = \cot 315^\circ$

الف) $\frac{2\pi}{3} = 120^\circ = \left|\frac{\frac{\sqrt{3}}{2}}{-\frac{1}{2}}\right| \Rightarrow \cos 120^\circ = -\frac{1}{2} \Rightarrow -1 \times \left(-\frac{1}{2}\right) = \frac{1}{2}$

$\Rightarrow \frac{1}{2} = \sin 30^\circ, 150^\circ \Rightarrow \frac{\pi}{6}, \frac{5\pi}{6}$

ب) $\frac{11\pi}{6} = 330^\circ = \left|\frac{-\frac{\sqrt{3}}{2}}{\frac{1}{2}}\right| \Rightarrow -\cos 330^\circ = -\frac{\sqrt{3}}{2} = \sin 300^\circ, 240^\circ$

$\Rightarrow \frac{5\pi}{3}, \frac{4\pi}{3}$

الف) $\frac{7\pi}{4} = 315^\circ \Rightarrow \cot 315^\circ = -1 = \cos 135^\circ$

ب) $-\cos 150^\circ = \frac{\sqrt{3}}{2} = \sin 60^\circ, 120^\circ$