نام و نام خانوادگی ..... پاسخنامه تشریحی تکلیف شماره ۲ ..... کلاس دهم ریاضی C .....

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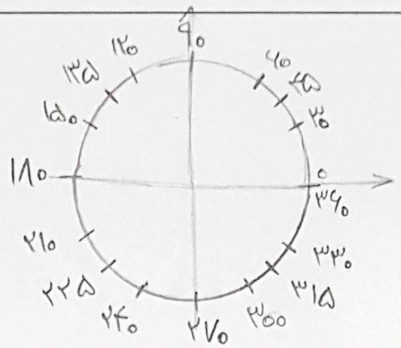

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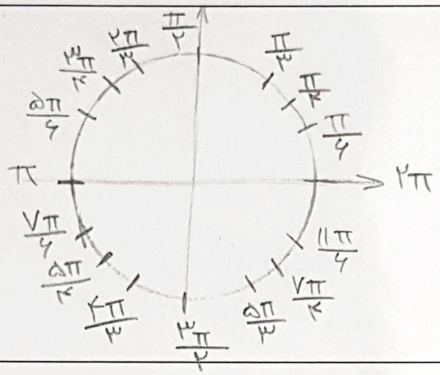

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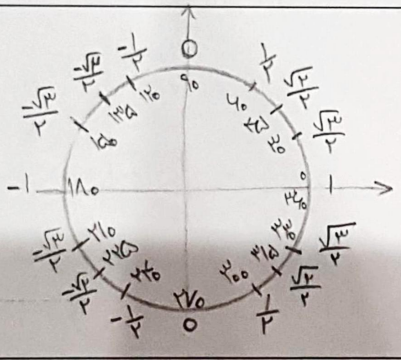

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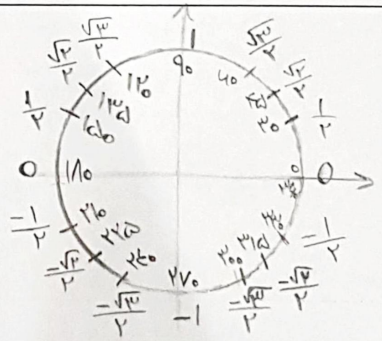

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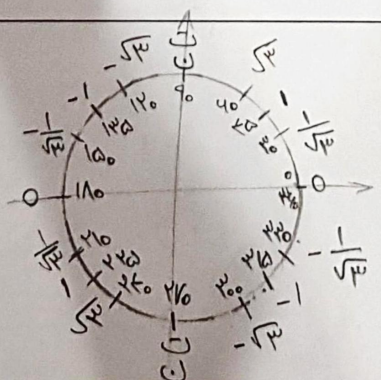

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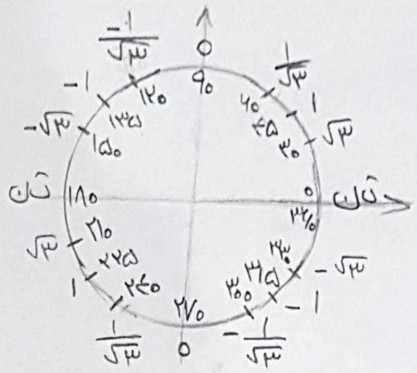

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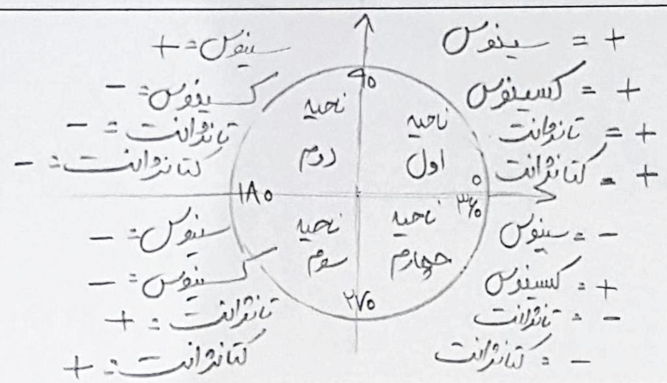

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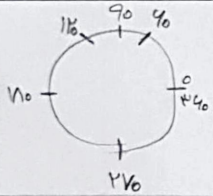
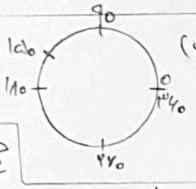
الف) 60°

$\sin 60^\circ = \frac{\sqrt{3}}{2} \Rightarrow 60^\circ \Rightarrow \sin 120^\circ = \frac{\sqrt{3}}{2}$



ب)

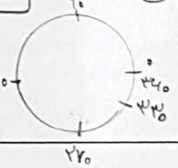
$\cos 135^\circ = \frac{-\sqrt{3}}{2} \Rightarrow 210^\circ \Rightarrow \cos 210^\circ = -\frac{\sqrt{3}}{2}$



ج)

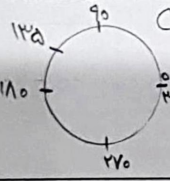
$\tan = -\frac{1}{\sqrt{3}} \Rightarrow 135^\circ$

$\tan 135^\circ = \frac{\frac{1}{2}}{\frac{-\sqrt{3}}{2}} = \frac{-1}{\sqrt{3}}$



$\tan \frac{\sin}{\cos} = \frac{\frac{1}{2}}{\frac{\sqrt{3}}{2}} \Rightarrow \frac{-1}{\sqrt{3}}$

د) 315°



$\cot 135^\circ = \frac{\cos}{\sin} = -1$

$\frac{-\sqrt{2}}{2} \div \frac{\sqrt{2}}{2} = -1$

$\cot 315^\circ = \frac{\cos}{\sin} = \frac{\frac{\sqrt{2}}{2}}{\frac{-\sqrt{2}}{2}} = -1$

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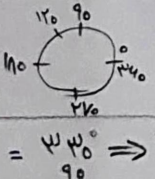
الف)

$\frac{2}{3} \times 180^\circ = 120^\circ \Rightarrow$ کسینوس 120° ← قدرمطلق $= -(-\frac{1}{2}) = \frac{1}{2}$



سینوس کدام زاویه‌ها $= \frac{1}{2}$ ؟

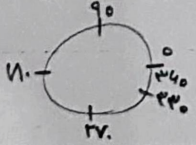
$150^\circ / 30^\circ$

$30^\circ \Rightarrow \frac{\pi}{6}$

$150^\circ \Rightarrow \frac{5\pi}{6}$

ب)

$\frac{11}{6} \times 180^\circ = 330^\circ \Rightarrow$ کسینوس 330° ← قدرمطلق $= -(\frac{\sqrt{3}}{2}) = -\frac{\sqrt{3}}{2}$



سینوس کدام زاویه‌ها $= \frac{-\sqrt{3}}{2}$ ؟

$240^\circ / 300^\circ$

$300^\circ \Rightarrow \frac{5\pi}{3}$

$240^\circ \Rightarrow \frac{4\pi}{3}$

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الف)

$\frac{7}{4} \times 180^\circ = 315^\circ \Rightarrow$ کتانژانت $315^\circ = \frac{\cos}{\sin} = \frac{\frac{\sqrt{2}}{2}}{\frac{-\sqrt{2}}{2}} = -1$

کسینوس چه زاویه‌ای $= -1$ ؟ 180°

ب)

کسینوس $150^\circ \Rightarrow \frac{-\sqrt{3}}{2} \Rightarrow$ قدرمطلق $\frac{\sqrt{3}}{2}$

سینوس کدام زاویه‌ها $= \frac{\sqrt{3}}{2}$ ؟

$60^\circ / 120^\circ$