نام و نام خانوادگی ..... پاسخنامه تشریحی تکلیف شماره ۳ ..... کلاس ..... دهم (شنبه) .....

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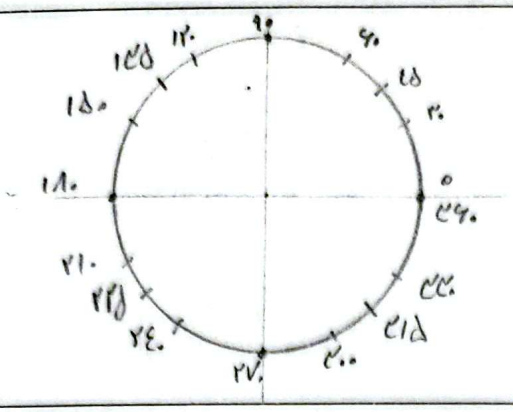
(۲)



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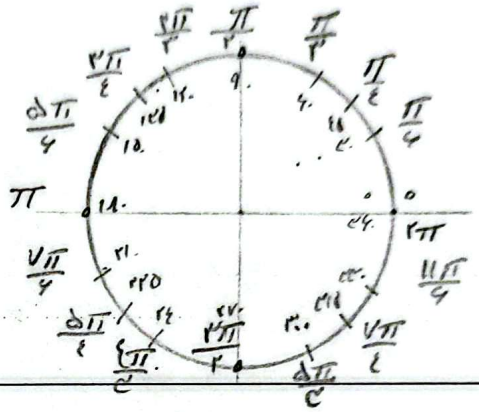
(۲)



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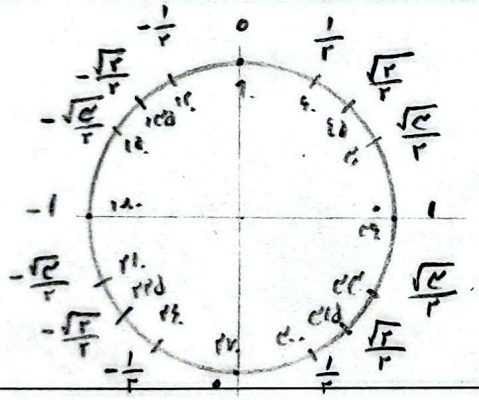

مثبت

منفی

$\frac{\sqrt{2}}{2}$ ← دارها x Cos

$\frac{1}{2}$ ← دارها y Cos

$\frac{\sqrt{2}}{2}$ ← وسطی‌ها Cos

۰ و ۱ ← اصلی‌ها Cos

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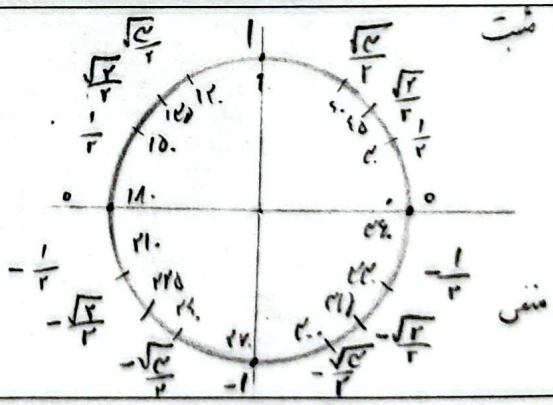
(۲)



مثبت

منفی

$\frac{1}{2}$ ← دارها x Sin

$\frac{\sqrt{2}}{2}$ ← دارها y Sin

$\frac{\sqrt{2}}{2}$ ← وسطی‌ها Sin

۰ و ۱ ← اصلی‌ها Sin

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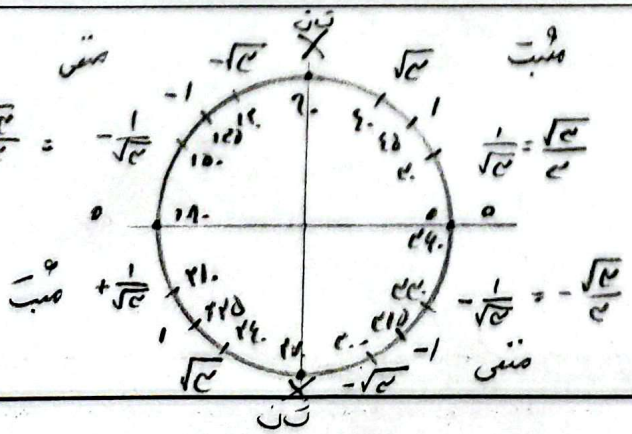
(۲)



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

$\frac{\frac{1}{2}}{\frac{\sqrt{2}}{2}} = \frac{1}{\sqrt{2}}$ ← دارها x tan

$\sqrt{2}$ ← دارها y tan

۱ ← وسطی‌ها tan

۰ و تعریف نشده (X) ← اصلی‌ها tan

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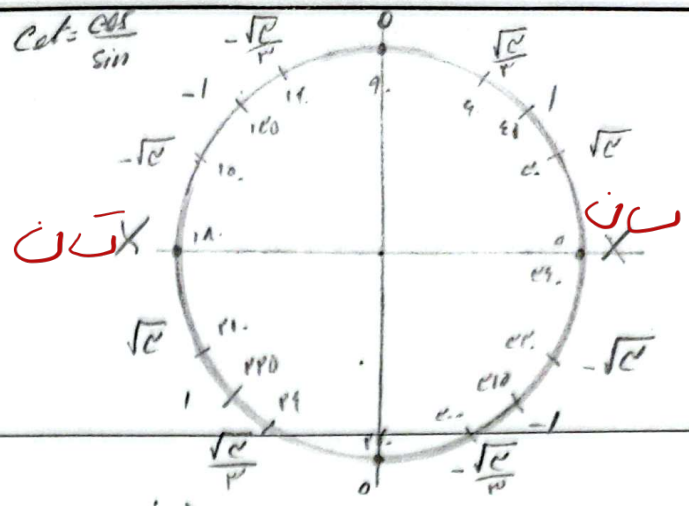
$\sqrt{2}$ ← جيب α cot

$\frac{\sqrt{2}}{2} = \frac{1}{\sqrt{2}}$ ← جيب $\frac{\pi}{4}$ cot

1 ← ظل cot

0 ، $\frac{\pi}{2}$ ← صفر لا cot

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



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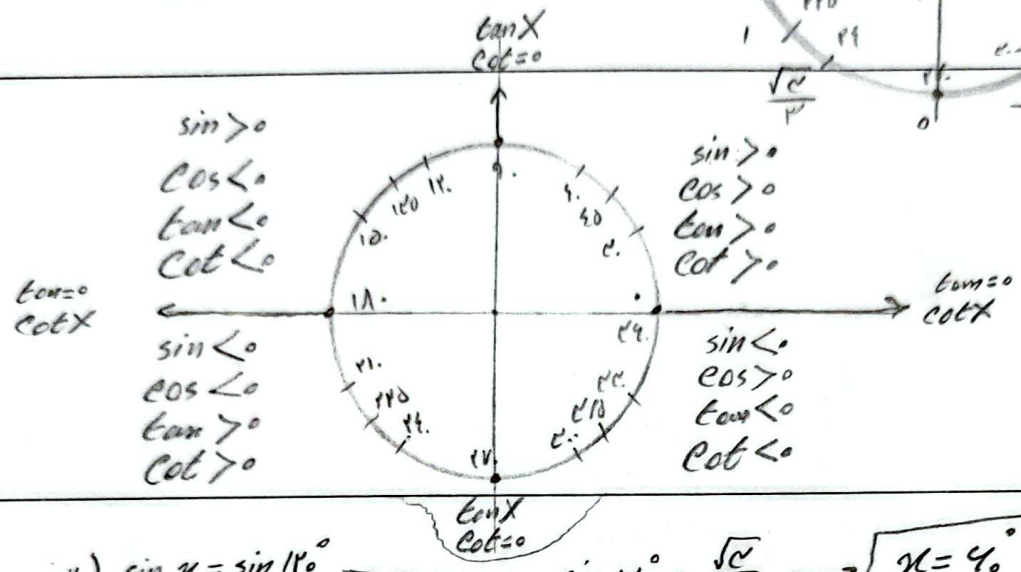

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الف) $\sin \alpha = \sin 120^\circ \longrightarrow \sin 120^\circ = \frac{\sqrt{3}}{2} \longrightarrow \boxed{\alpha = 60^\circ}$

ب) $\cos \alpha = \cos 150^\circ \longrightarrow \cos 150^\circ = -\frac{\sqrt{3}}{2} \longrightarrow \boxed{\alpha = 210^\circ}$

ج) $\tan \alpha = \tan 225^\circ \longrightarrow \tan 225^\circ = -\frac{\sqrt{3}}{3} \longrightarrow \boxed{\alpha = 135^\circ}$

د) $\cot \alpha = \cot 135^\circ \longrightarrow \cot 135^\circ = -1 \longrightarrow \boxed{\alpha = 315^\circ}$

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الف) $-\cos \frac{2\pi}{3} = \sin \alpha \longrightarrow \cos \frac{2\pi}{3} = -\frac{1}{2} \longrightarrow -\cos \frac{2\pi}{3} = \frac{1}{2} = \sin \alpha$

$\longrightarrow \boxed{\alpha = \frac{\pi}{6} ، \frac{5\pi}{6}}$

ب) $-\cos \frac{11\pi}{6} = \sin \alpha \longrightarrow \cos \frac{11\pi}{6} = \frac{\sqrt{3}}{2} \longrightarrow -\cos \frac{11\pi}{6} = -\frac{\sqrt{3}}{2} = \sin \alpha$

$\longrightarrow \boxed{\alpha = \frac{4\pi}{3} ، \frac{5\pi}{3}}$

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الف) $\cot \frac{7\pi}{4} = \cos \alpha \longrightarrow \cot \frac{7\pi}{4} = \frac{\cos \frac{7\pi}{4}}{\sin \frac{7\pi}{4}} = \frac{\frac{\sqrt{2}}{2}}{-\frac{\sqrt{2}}{2}} = -1 = \cos \alpha$

$\longrightarrow \boxed{\alpha = 180^\circ}$

ب) $-\cos 18^\circ = \sin \alpha \longrightarrow \cos 180^\circ = -\frac{\sqrt{3}}{2} \longrightarrow -\cos 180^\circ = \frac{\sqrt{3}}{2} = \sin \alpha$

$\longrightarrow \boxed{\alpha = 60^\circ ، 120^\circ}$

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