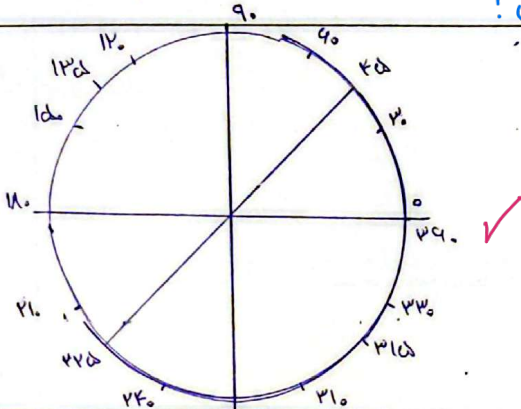
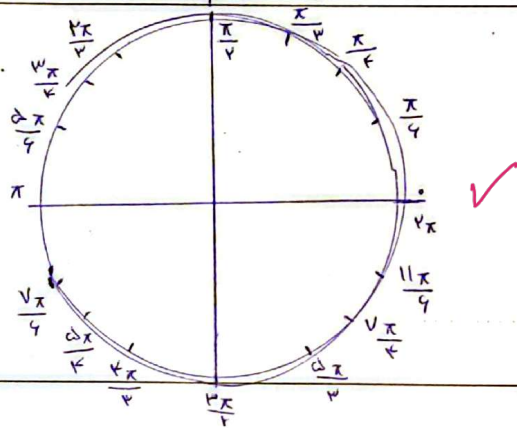


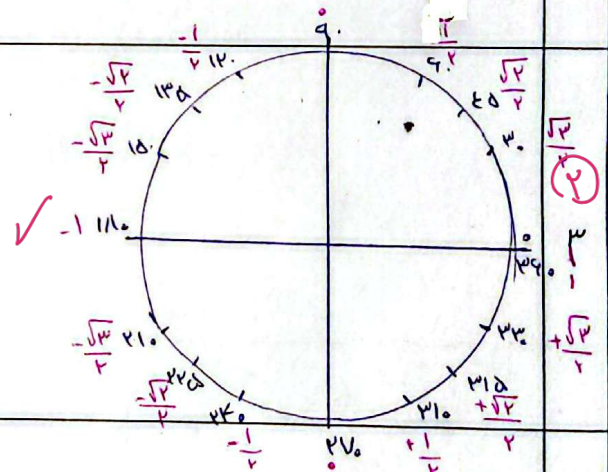
۲۰ آفرین مرتب نویسی!



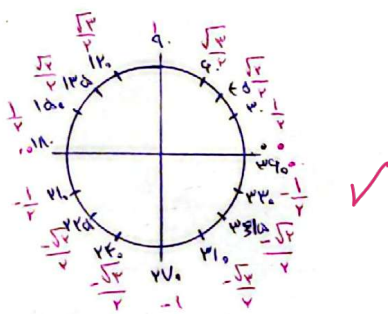
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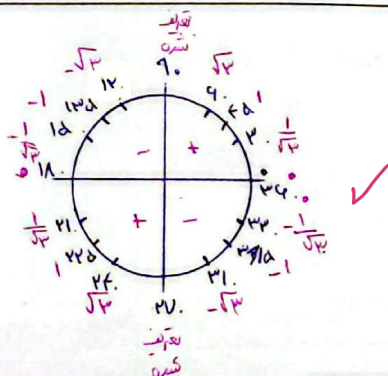
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$$\tan = \frac{\sin}{\cos}$$

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

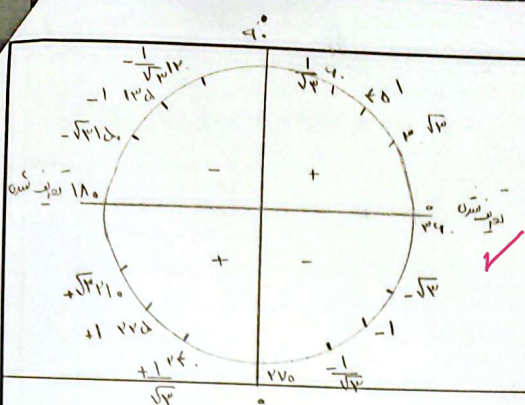
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$$\tan = \frac{\sin}{\cos}$$

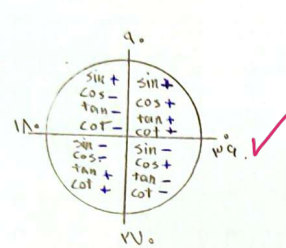
$$\cot = \frac{\cos}{\sin}$$

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

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2



2
Y

$$\tan 135^\circ = -\frac{1}{\sqrt{2}} \Rightarrow \tan 225^\circ = -\frac{1}{\sqrt{2}} \quad \text{ج}$$

$$\cot 135^\circ = -1 \Rightarrow \cot 225^\circ = -1 \quad \text{د}$$

$$\sin 45^\circ = \frac{\sqrt{2}}{2} \Rightarrow \sin 135^\circ = \frac{\sqrt{2}}{2}$$

$$\cos 45^\circ = \frac{\sqrt{2}}{2} \Rightarrow \cos 135^\circ = -\frac{\sqrt{2}}{2}$$

2
1

ا) $\cos \frac{5\pi}{4} = \cos 225^\circ = -\frac{1}{\sqrt{2}} \xrightarrow{\text{نقطة}} -\frac{1}{\sqrt{2}} \quad \sin \alpha = \frac{1}{\sqrt{2}} \quad \sin 45^\circ = \frac{1}{\sqrt{2}} \quad \sin \frac{\pi}{4} = \frac{1}{\sqrt{2}} \quad \sin 135^\circ = \frac{1}{\sqrt{2}} \quad \sin \frac{3\pi}{4} = \frac{1}{\sqrt{2}}$

ب) $\cos \frac{11\pi}{4} = \cos 315^\circ = \frac{\sqrt{2}}{2} \xrightarrow{\text{نقطة}} \frac{\sqrt{2}}{2} \quad \sin \alpha = -\frac{\sqrt{2}}{2} \quad \sin 45^\circ = -\frac{\sqrt{2}}{2} \quad \sin \frac{7\pi}{4} = -\frac{\sqrt{2}}{2} \quad \sin 315^\circ = -\frac{\sqrt{2}}{2} \quad \sin \frac{5\pi}{4} = -\frac{\sqrt{2}}{2}$

2
9

ا) $\cot \frac{5\pi}{4} = \cot 225^\circ = -1 \quad \cos \alpha = -1 \quad \cos 180^\circ = -1$

ب) $\cos 135^\circ = -\frac{\sqrt{2}}{2} \xrightarrow{\text{نقطة}} -\frac{\sqrt{2}}{2} \quad \sin \alpha = \frac{\sqrt{2}}{2} \quad \sin 45^\circ = \frac{\sqrt{2}}{2} \quad \sin 135^\circ = \frac{\sqrt{2}}{2}$

2
10