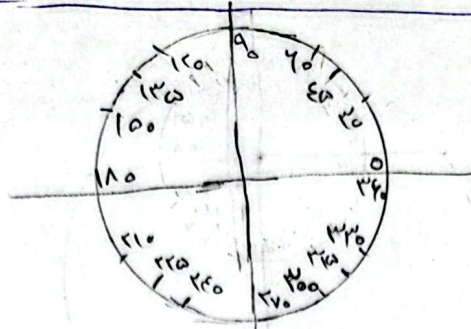


پہا سرسخت درں تکلف سمارہ ۲ کلاس اہم دختر ۷

۲۵

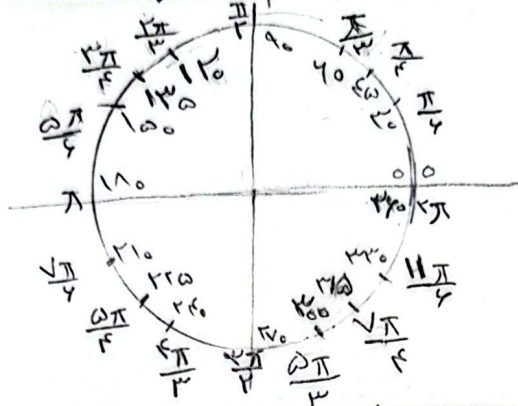


(۱) زاویہ معروف بر حسب درجہ

۲

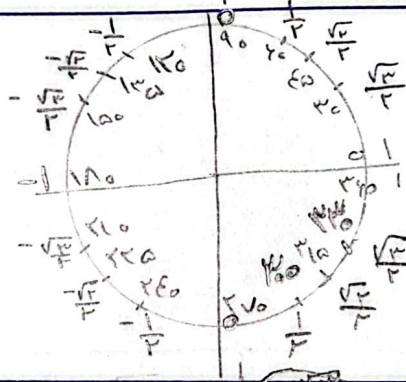
(۲) زاویہ معروف بر حسب رادیان

۳



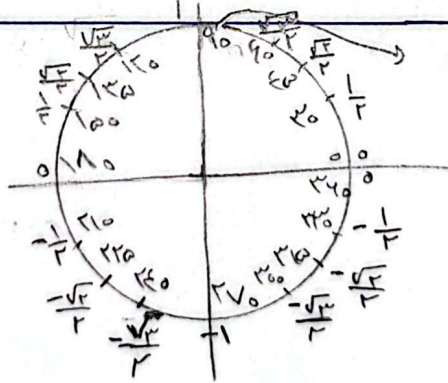
(۳) cos

۲



(۴) sin

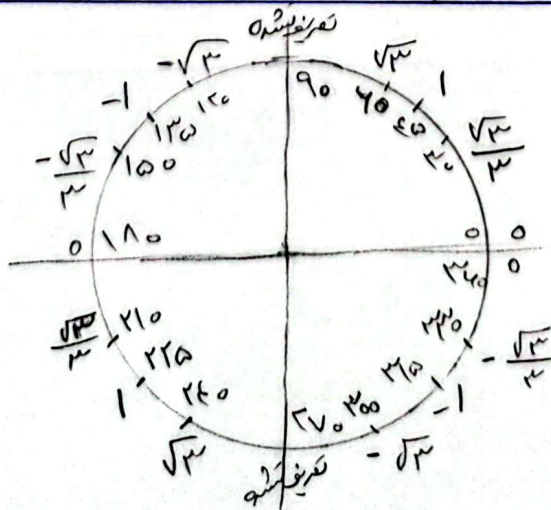
۲



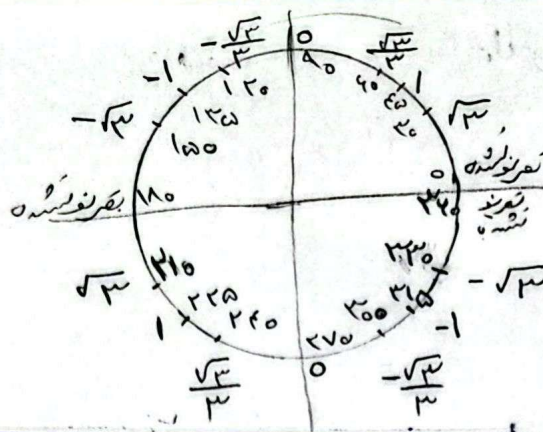
(۵) tan

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

۵

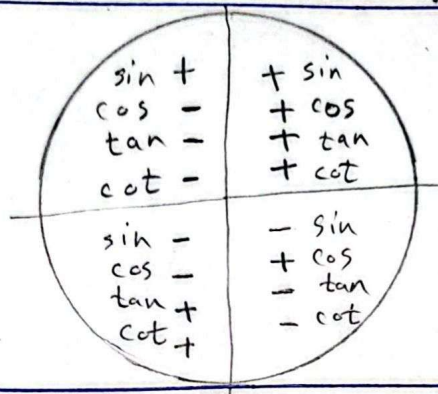


تعریف شده
 $\frac{1}{0}$ و $\frac{0}{0}$



(5)

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



(6)

صورت های
sin
cos
tan
cot

$$\cos 150^\circ = -\frac{\sqrt{3}}{2} = \cos 210^\circ$$

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

$$\cot 135^\circ = -1 = \cot 315^\circ$$

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

$$\tan 225^\circ = -\frac{\sqrt{2}}{2} = \tan 135^\circ$$

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

(7)

$$\sin 30^\circ = \sin 150^\circ = \frac{1}{2}$$

الف) قرینہ یں $\sin$ و $\cos$ $\frac{2\pi}{3}$

$$\frac{5\pi}{4} \leftarrow 150^\circ \text{ و } 30^\circ$$

$$2 \times 60 = 120 \quad \times (-1) \Rightarrow \frac{1}{2}$$

$$\cos 120^\circ = -\frac{1}{2}$$

$$\sin 210^\circ = \sin 30^\circ = -\frac{1}{2}$$

ب) قرینہ یں $\sin$ و $\cos$ $\frac{11\pi}{4}$

$$11 \times 30 = 330$$

$$\cos 330^\circ = \frac{\sqrt{3}}{2} \quad \times (-1) \Rightarrow -\frac{\sqrt{3}}{2}$$

$$\cos 180^\circ = -1$$

الف) $\cos$ و $\cot$ $\frac{7\pi}{4}$

(8)

$$7 \times 45 = 315$$

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

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

ب) قرینہ یں $\sin$ و $\cos$ 150°

$$\cos 150^\circ = -\frac{\sqrt{3}}{2}$$

$$\times (-1) \Rightarrow \frac{\sqrt{3}}{2}$$

$$\frac{7\pi}{4} \leftarrow 135^\circ \text{ و } 45^\circ$$