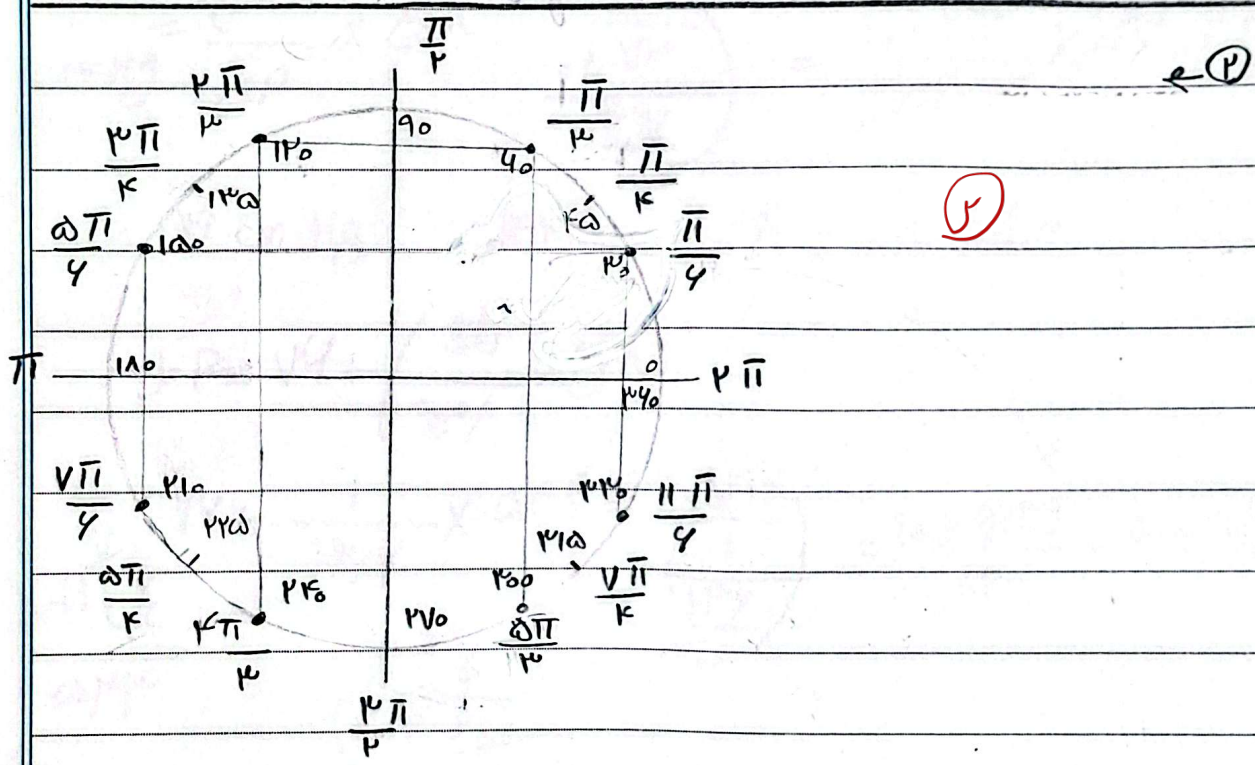
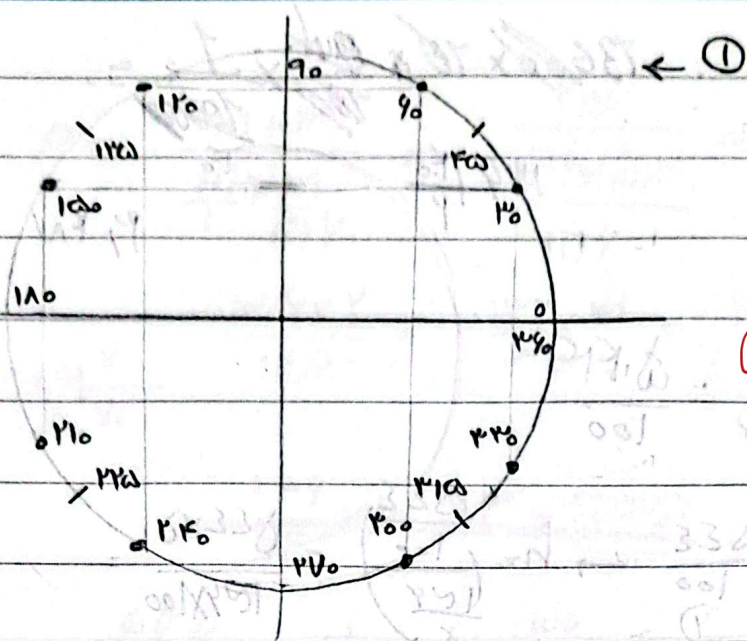
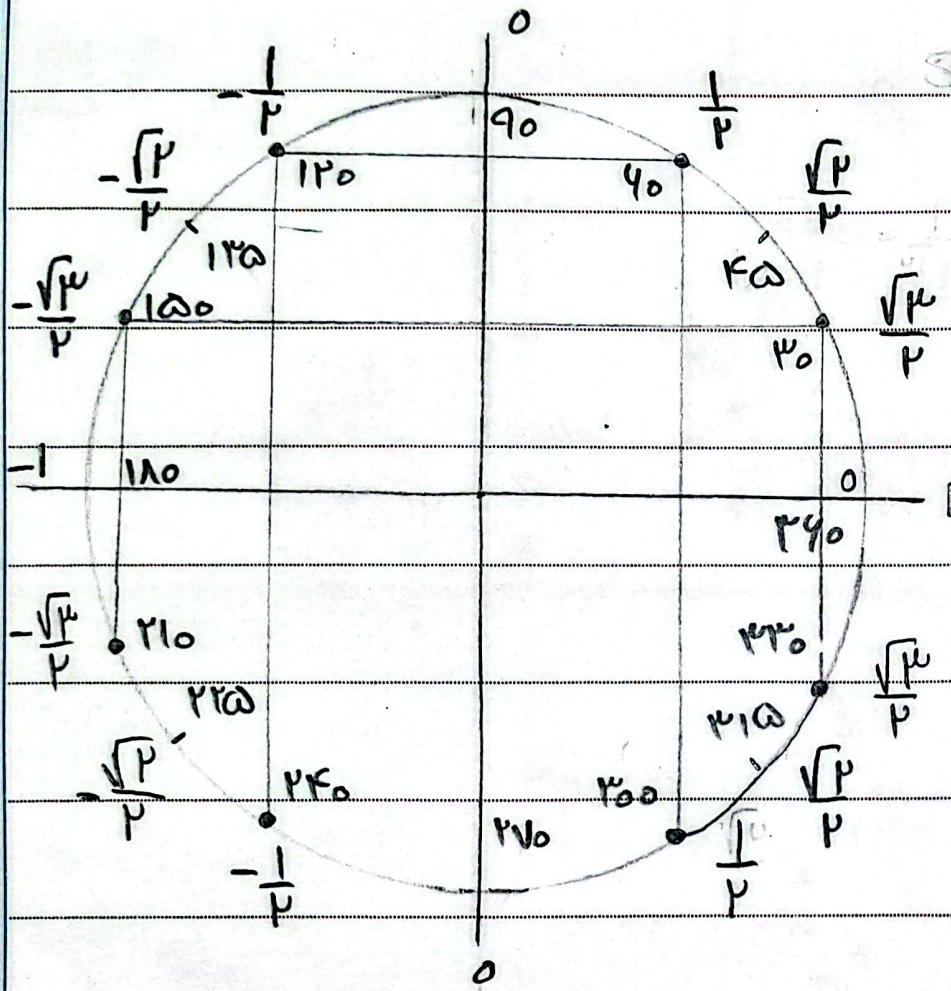


نرخ اسلانی نژاد

تدوین شده

دهم، پنجشنبه در خمر ۹۵۷



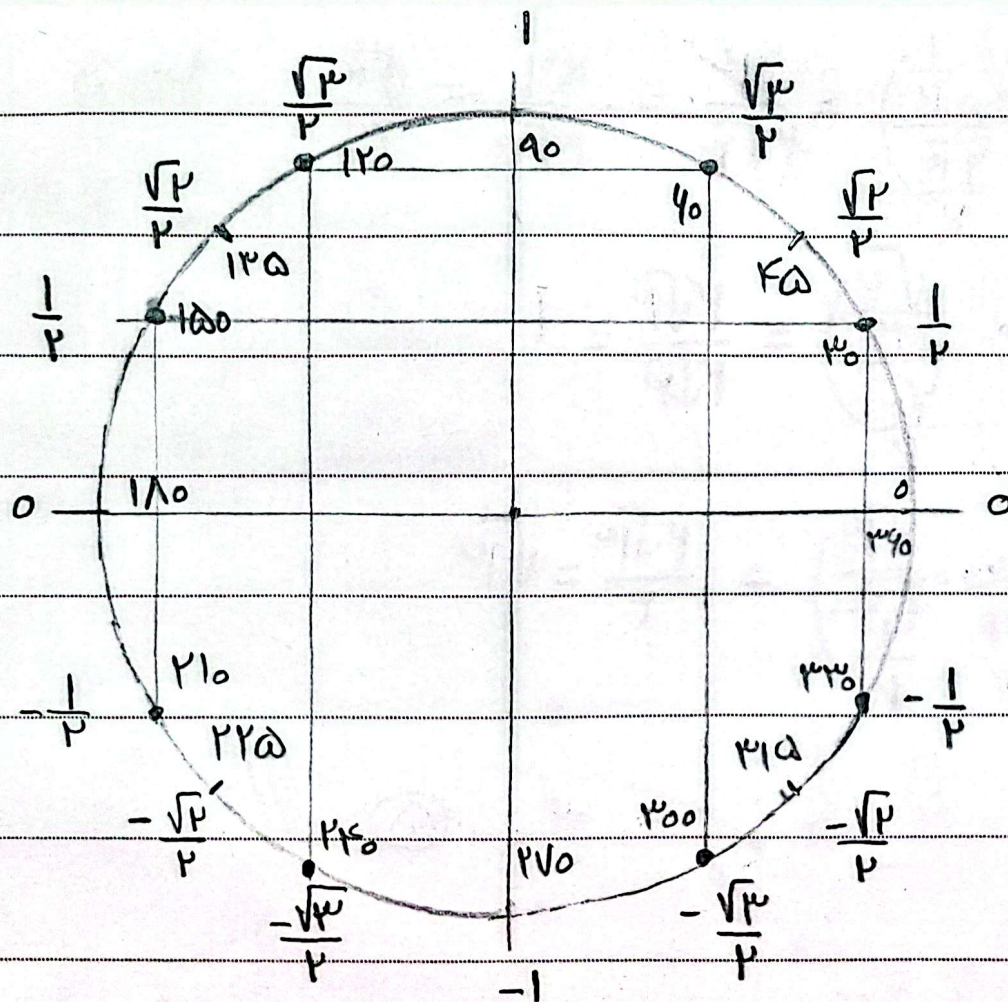


$\cos \rightarrow x$

$\leftarrow \textcircled{y}$

نردیس اصلاحی نرد

$\textcircled{y}$



$\sin \rightarrow y$

← (K)

نویس اسلای نرادر

(P)

$$\tan \rightarrow \frac{\sin}{\cos} = \frac{y}{x} \quad \text{و} \quad \frac{1}{\sqrt{r}} \rightarrow \left(\frac{\frac{1}{\sqrt{r}}}{\frac{1}{\sqrt{r}}} \right) = \frac{1}{\sqrt{r}} - \frac{1}{\sqrt{r}} = \frac{\sqrt{r}}{r}$$

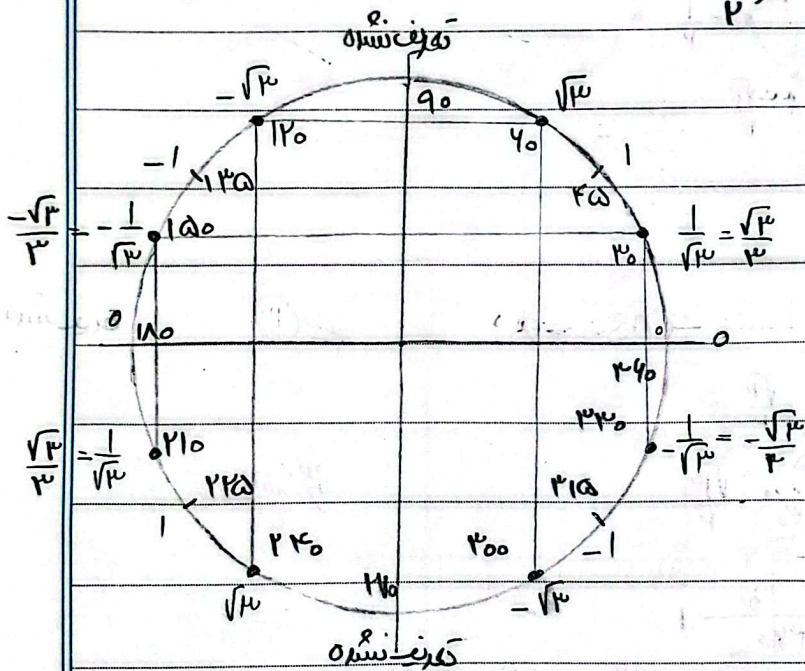
$$90 \rightarrow \frac{1}{0} = \text{تعریف نشده}$$

$$0, 180 \rightarrow \frac{0}{1} = 0$$

$$180 \rightarrow \frac{0}{-1} = 0 \quad 170 \rightarrow \frac{-1}{0} = \text{تعریف نشده}$$

$$45 \rightarrow \left(\frac{\frac{\sqrt{r}}{r}}{\frac{1}{\sqrt{r}}} \right) = \frac{r\sqrt{r}}{r\sqrt{r}} = 1$$

$$90 \rightarrow \left(\frac{\frac{\sqrt{r}}{r}}{\left(\frac{1}{\sqrt{r}} \right)} \right) = \frac{r\sqrt{r}}{r} = \sqrt{r}$$



⑤

نکته: اسلاید ۱۲

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

$$30^\circ \rightarrow \left(\frac{\sqrt{3}}{2} \right) = \frac{\sqrt{3}}{2} = \sqrt{3}$$

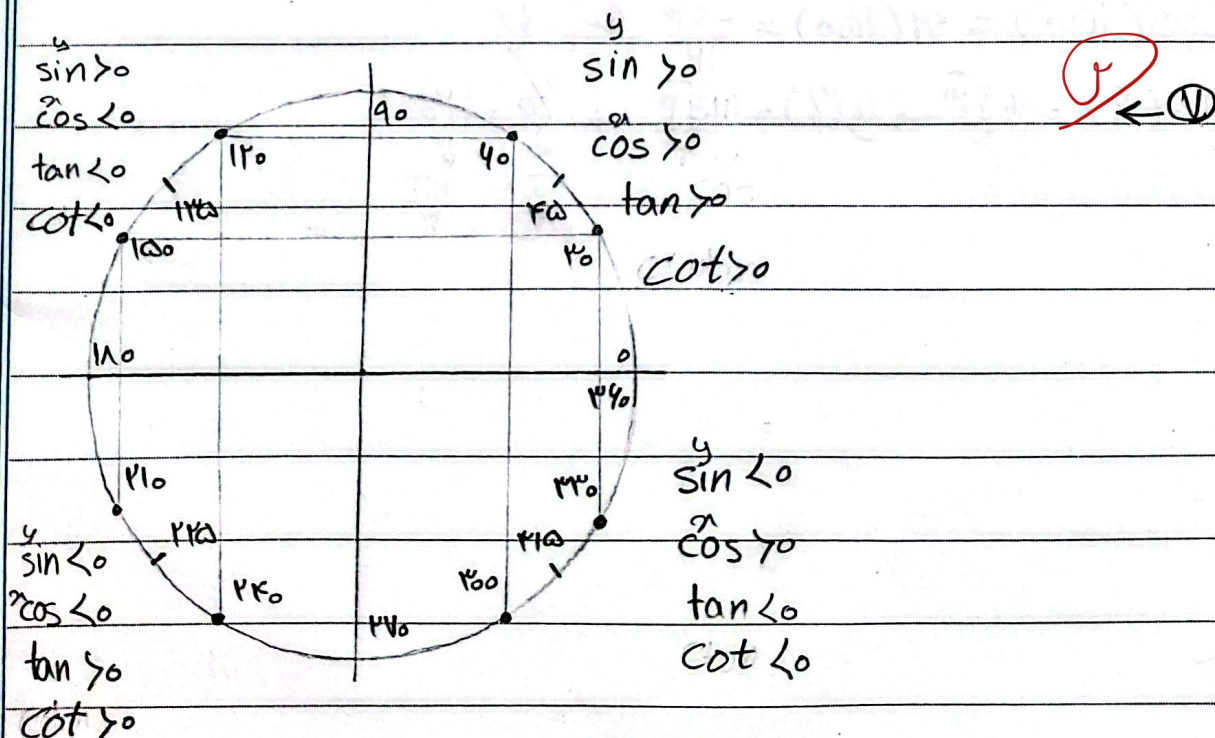
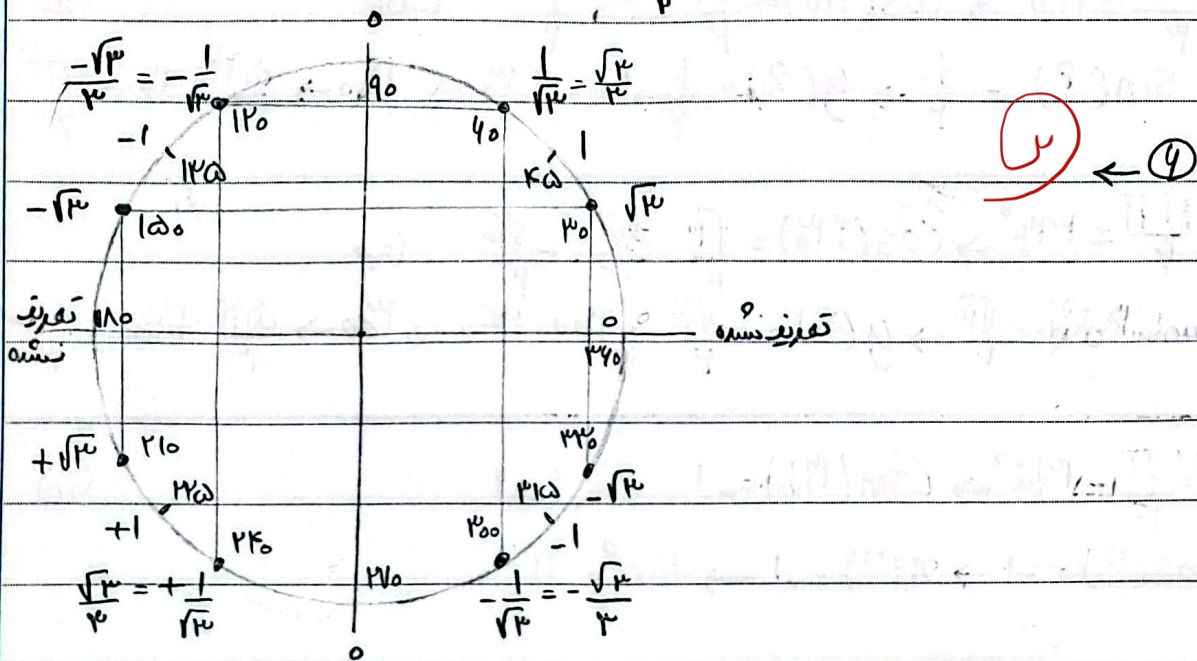
$$90^\circ \rightarrow \frac{0}{1} = 0$$

$$180^\circ \rightarrow \frac{-1}{0} = \text{تعریف نشده}$$

$$45^\circ \rightarrow \left(\frac{1}{\sqrt{2}} \right) = \frac{1}{\sqrt{2}} = 1$$

$$270^\circ \rightarrow \frac{1}{0} = \text{تعریف نشده}$$

$$60^\circ \rightarrow \left(\frac{1}{2} \right) = \frac{1}{2} = \frac{1}{2}$$



$$\sin \rightarrow y \rightarrow y(120^\circ) = \frac{\sqrt{3}}{2} \quad 120^\circ = \frac{2\pi}{3} \text{ (الف)}$$

$$\cos \rightarrow x \rightarrow x(120^\circ) = -\frac{\sqrt{3}}{2} \quad 120^\circ = \frac{2\pi}{3} \text{ (ب)}$$

$$\tan \rightarrow \frac{\sin}{\cos} \rightarrow \tan(120^\circ) = \frac{1}{-\sqrt{3}} \quad 120^\circ = \frac{2\pi}{3} \text{ (ج)}$$

$$\cot \rightarrow \frac{\cos}{\sin} \rightarrow \cot(120^\circ) = -1 \quad 120^\circ = \frac{2\pi}{3} \text{ (د)}$$

$$\frac{2\pi}{3} = 120^\circ \rightarrow \cos(120^\circ) = -\frac{1}{2} \xrightarrow{\text{قرینه}} \frac{1}{2} \text{ (الف)}$$

$$\sin(?) = \frac{1}{2} \rightarrow y(?) = \frac{1}{2} \rightarrow 30^\circ, 150^\circ \rightarrow 30^\circ \rightarrow \frac{\pi}{6}, 150^\circ \rightarrow \frac{5\pi}{6}$$

$$\frac{11\pi}{6} = 330^\circ \rightarrow \cos(330^\circ) = \frac{\sqrt{3}}{2} \xrightarrow{\text{قرینه}} -\frac{\sqrt{3}}{2} \text{ (ب)}$$

$$\sin(?) = -\frac{\sqrt{3}}{2} \rightarrow y(?) = -\frac{\sqrt{3}}{2} \rightarrow 240^\circ, 300^\circ \rightarrow 240^\circ \rightarrow \frac{4\pi}{3}, 300^\circ \rightarrow \frac{5\pi}{3}$$

$$\frac{7\pi}{6} = 210^\circ \rightarrow \tan(210^\circ) = -\frac{1}{\sqrt{3}} \text{ (الف)}$$

$$\cos(?) = -1 \rightarrow x(?) = -1 \rightarrow 180^\circ = \pi$$

$$\cos(120^\circ) = x(120^\circ) = -\frac{\sqrt{3}}{2} \xrightarrow{\text{قرینه}} \frac{\sqrt{3}}{2}$$

$$\sin(?) = +\frac{\sqrt{3}}{2} \rightarrow y(?) = \frac{\sqrt{3}}{2} \rightarrow 60^\circ, 120^\circ$$

$$\downarrow \quad \downarrow$$

$$\frac{\pi}{3} \quad \frac{2\pi}{3}$$