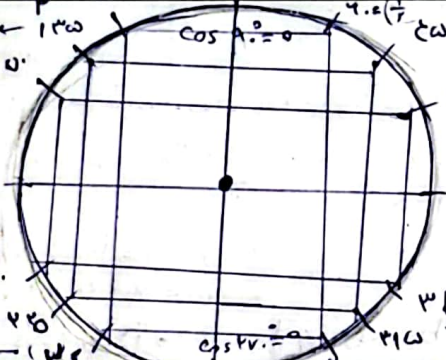
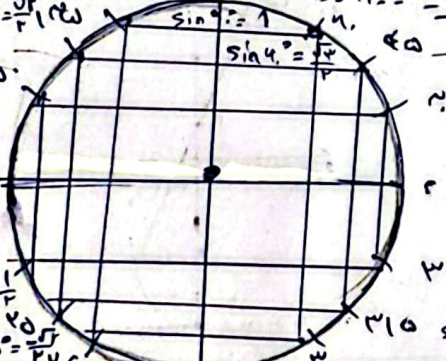


الف) $y = \frac{n+2}{n^2-2n}$ $\rightarrow n^2-2n \neq 0 \Rightarrow n(n-2) \neq 0 \Rightarrow n \neq 0 \quad n-2 \neq 0 \Rightarrow n \neq 2$ $\star Df = \mathbb{R} - \{0, 2\}$ ب) $y = \frac{n+2}{n^2-2n+4}$ $\rightarrow \Delta = b^2-4ac = (-2)^2 - 4 \times 1 \times 4 = 4 - 16 = -12 < 0$ $\star Df = \mathbb{R}$ ج) $y = \frac{n+2}{n^2+n+2}$ $\rightarrow \Delta = b^2-4ac \rightarrow 1^2 - 4 \times 1 \times 2 = 1 - 8 = -7 < 0$ $\star Df = \mathbb{R}$ د) $y = \frac{n+2}{n^2-2n}$ $\rightarrow n^2-2n \neq 0 \Rightarrow n(n-2) \neq 0 \Rightarrow n \neq 0, n \neq 2$ $\star Df = \mathbb{R} - \{0, 2\}$	6
الف) $y = \sqrt{4-n} + \sqrt{n-2}$ $\rightarrow 4-n \geq 0 \Rightarrow n \leq 4$ $n-2 \geq 0 \Rightarrow n \geq 2$ $\star Df = [2, 4]$ ب) $y = \frac{n+1}{n^2+1}$ $\rightarrow n^2+1 > 0$ $\star Df = \mathbb{R}$ ج) $y = \frac{\sqrt{n}}{n-2}$ $\rightarrow n-2 \neq 0 \Rightarrow n \neq 2$ $n \geq 0$ $\star Df = [0, +\infty) - \{2\} = [0, 2) \cup (2, +\infty)$ د) $y = \frac{n+3}{\ln(n+1)}$ $\rightarrow \ln(n+1) \neq 0 \Rightarrow n+1 \neq 1 \Rightarrow n \neq 0$ $\star Df = \mathbb{R} - \{0\}$	7
$\cos 120^\circ = -\frac{\sqrt{3}}{2}$ $\cos 150^\circ = -\frac{\sqrt{3}}{2}$ $\cos 180^\circ = -1$ $\cos 210^\circ = -\frac{\sqrt{3}}{2}$ $\cos 240^\circ = \frac{\sqrt{3}}{2}$ $\cos 270^\circ = 0$ $\cos 300^\circ = \frac{\sqrt{3}}{2}$ $\cos 330^\circ = \frac{\sqrt{3}}{2}$ $\sin 120^\circ = \frac{\sqrt{3}}{2}$ $\sin 150^\circ = \frac{1}{2}$ $\sin 180^\circ = 0$ $\sin 210^\circ = -\frac{1}{2}$ $\sin 240^\circ = -\frac{\sqrt{3}}{2}$ $\sin 270^\circ = -1$ $\sin 300^\circ = -\frac{1}{2}$ $\sin 330^\circ = \frac{1}{2}$ 	8
$\sin 120^\circ = \frac{\sqrt{3}}{2}$ $\sin 150^\circ = \frac{1}{2}$ $\sin 180^\circ = 0$ $\sin 210^\circ = -\frac{1}{2}$ $\sin 240^\circ = -\frac{\sqrt{3}}{2}$ $\sin 270^\circ = -1$ $\sin 300^\circ = -\frac{1}{2}$ $\sin 330^\circ = \frac{1}{2}$ 	9
الف) $\cos(\frac{\sqrt{3}\pi}{4}) = \frac{1}{2}$ $\sin m = \frac{1}{2} \Rightarrow \sin 30^\circ = \frac{1}{2} \Rightarrow \sin(\frac{\pi}{6}) = \frac{1}{2}$ ب) $\cos(\frac{4\pi}{4}) = \frac{\sqrt{3}}{2}$ $\sin m = \frac{\sqrt{3}}{2} \Rightarrow \sin 60^\circ = \frac{\sqrt{3}}{2} \Rightarrow \sin(\frac{\pi}{3}) = \frac{\sqrt{3}}{2}$	10