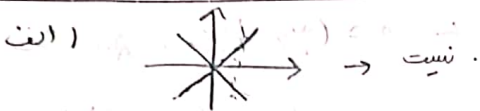


الف) $4a = a^2 + 2 \rightarrow a^2 - 4a + 2 = 0$
 $(a-1)(a-2) = 0$
 $a=1, a=2$

✓ (ب)



مجموع دو عبارت نامعنی معجزه بین هر کدام معجزه اند

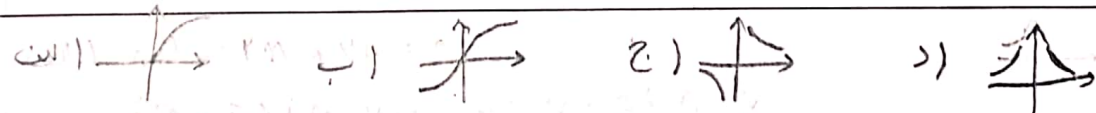
الف) $n=2 \rightarrow |y-1|=1 \rightarrow y=2$
 $y-1=1 \rightarrow y=2$
 $y-1=-1 \rightarrow y=0$
 ب) $n=0 \rightarrow y^2 - y = 0 \rightarrow y(y-1) = 0 \rightarrow y=0, y=1, y=-1$
 ج) $n=0 \rightarrow \cos^2 \frac{y}{2} = 0 \Rightarrow \frac{y}{2} = \frac{\pi}{2} \Rightarrow y = \pi$
 $\frac{y}{2} = \frac{3\pi}{2} \Rightarrow y = 3\pi$
 د) $n=0 \rightarrow y \in \mathbb{R}$

۱, ۷۵

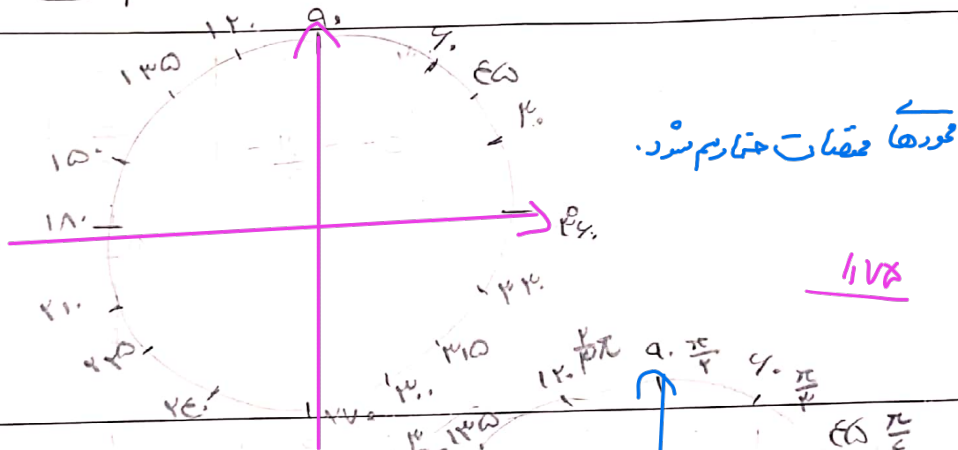
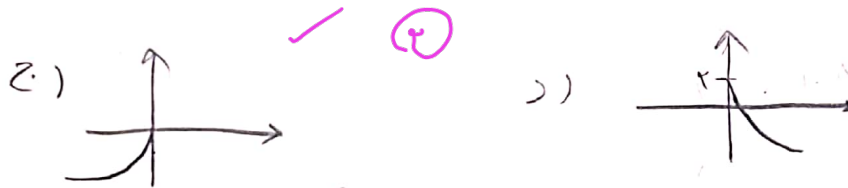
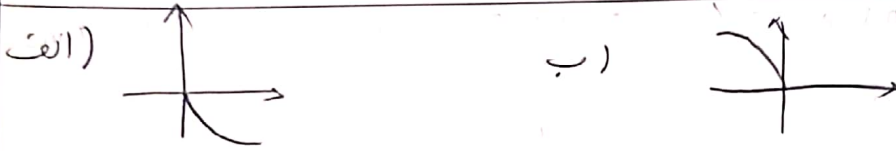
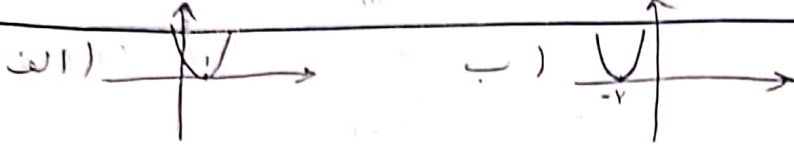
الف) $n=1 \rightarrow 1+|y-1|=2 \rightarrow |y-1|=1 \rightarrow y-1=1 \rightarrow y=2$
 $y-1=-1 \rightarrow y=0$

✓ (ب)

ب) $\begin{cases} y_1 = -\frac{1}{2}n_1 \\ y_2 = -\frac{1}{2}n_2 \end{cases} \Rightarrow y_1 = y_2 \Rightarrow y_1 = y_2$

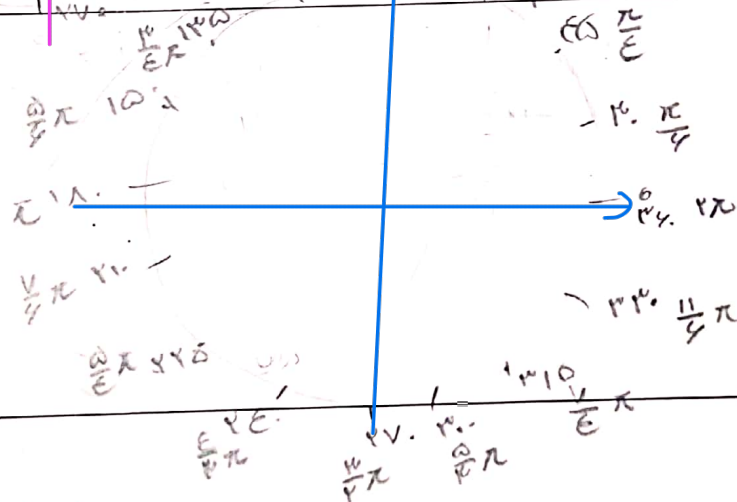


✓ (ب)



محورها مختصات متعامد شوند.

$\frac{1}{\sqrt{2}}$



الف) $\frac{1}{p}$ ب) $\frac{1}{p}$

ج) $\frac{1}{p}$ د) $-\frac{1}{p}$