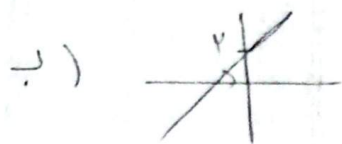
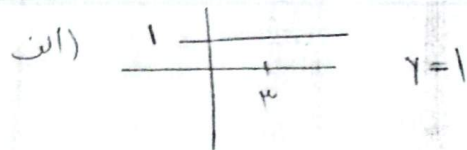


الف) تابع است $y^3 = 2x^2 + x \rightarrow y = \sqrt[3]{2x^2 + x}$

ب) $x=1 \rightarrow |y| = -1 + 1 + 3 \Rightarrow y = \pm 3$ شیب

ج) $x-4 \geq 0 \rightarrow x=4$ $y-2=0 \rightarrow y=2$ تابع است

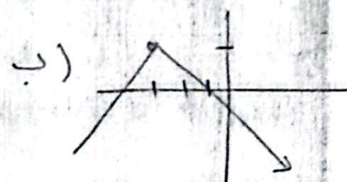
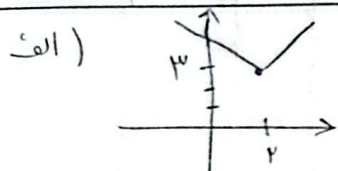
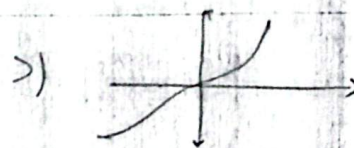
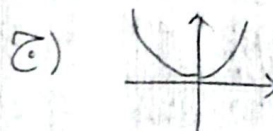
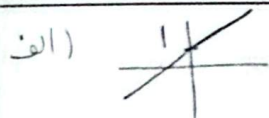
د) $-1 \leq x \leq 1 \rightarrow x=0 \rightarrow \cos y = 90.62/0.6$ شیب



الف) $y=x$ $a+2b=1+2(0)=1$

ب) $\min \int -\frac{b}{2a} \rightarrow -\frac{a}{2} = 2 \rightarrow -a = 4 \rightarrow a = -4$

$1 = 2^2 - 4(2) + b \Rightarrow b = 5$ $a+2b \rightarrow -4+10 = 4$



الف) $y = \frac{n+\varepsilon}{n^2-\varepsilon n}$

ب) $n(n-\varepsilon) \neq 0 \quad D_f = \mathbb{R} - \{0, \varepsilon\}$

ج) $\Delta = b^2 - 4ac \rightarrow \Delta = -15$
 $D_f = \mathbb{R}$

د) $n^2(n^2-\varepsilon) \neq 0$
 $n = \pm \sqrt{\varepsilon}$

هـ) $\Delta = b^2 - 4ac \rightarrow \Delta = -15$
 $D_f = \mathbb{R} - \{0, \pm \sqrt{\varepsilon}\}$

الف) $4-n \geq 0$

$n \leq 4 \rightarrow D_f = (-\infty, 4]$

ب) $n^2+1 \neq 0 \rightarrow n^2 \neq -1 \rightarrow n^2 = -1$

جواب صحیح ندارد چون مربع هیچ عدد حقیقی منفی نمی شود

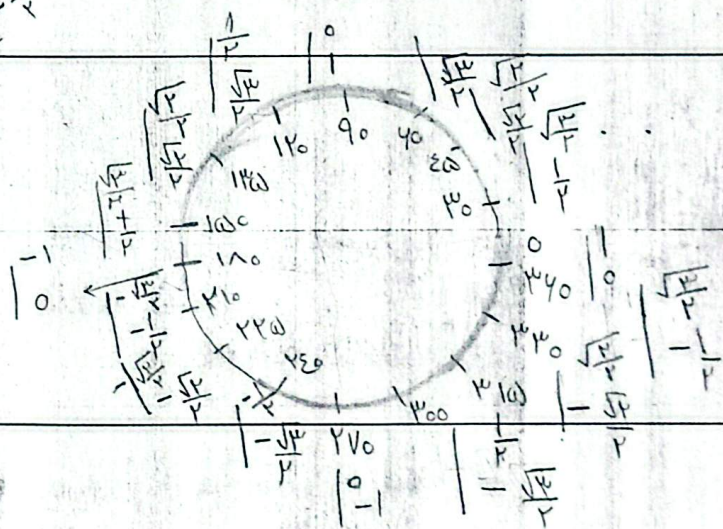
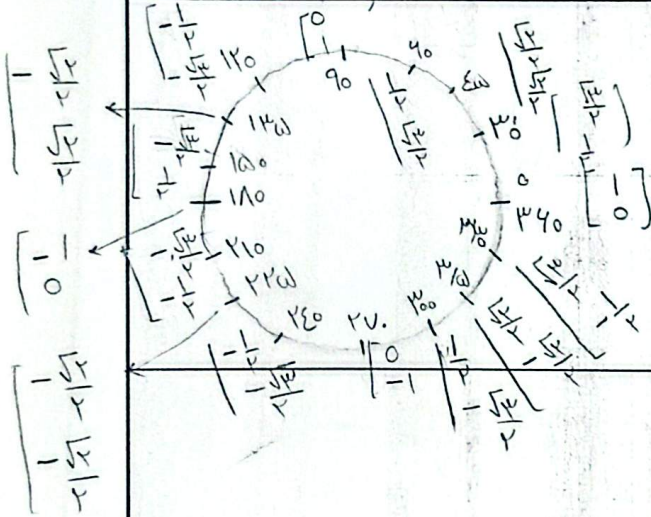
ج) $n \geq 2 \quad n \neq \varepsilon$

$[2, \varepsilon) \cup (\varepsilon, +\infty)$

د) $|n| + n^2 \neq 0$

$n^2 \geq 0, |n| = 0, n^2 = 0$

$D_f = \mathbb{R} - \{0\}$



الف) $\frac{\pi}{4} < \theta < \frac{\pi}{2}$

ب) $\frac{4\pi}{3} < \theta < \frac{\pi}{3}$