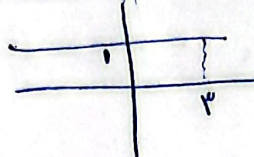
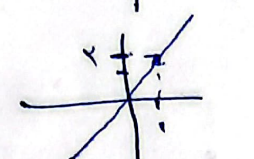


الف) $\begin{cases} y_1^3 - x_1^2 < x_1^2 \\ y_1^3 - x_1^2 < x_1^2 \end{cases} \rightarrow x_1^3 = y_1^3 \rightarrow y_1 = y_2$ ۱۵

ب) $|y_1| = -x_1^2 + x_1 + 3 \Rightarrow |y_1| = |y_1| \quad y_1 = \pm y_2 \quad \begin{matrix} \text{صلبیت} \\ x < 0 \rightarrow y = 3 \end{matrix}$

ج) $x \geq 0 \rightarrow |y - 2| \geq 0 \rightarrow y = 2 \quad \begin{matrix} x = 0 \rightarrow \cos y \rightarrow -1 \\ \text{خط مشی} \end{matrix}$

الف $y = 1$ 

ب $y = 2x$ 

جمع عبارت ها منفی هم نشد

$\sqrt{x-2} + |y-2| = 0$

$x = 2$
 $y = 2$

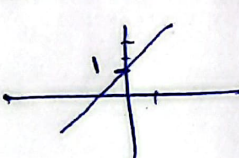
الف) $y = x \rightarrow y = 1 = x \rightarrow y = ax + b \rightarrow a = 1, b = 0$

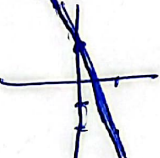
ب) $\frac{-b}{2a} = 1 \rightarrow \frac{-a}{2} = 1 \rightarrow a = -2 \quad 1 + 2(0) = 1$

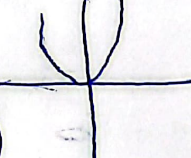
ج) $y = 1 \rightarrow 1 = 2(1) - 4(1) + b \rightarrow b = 5$

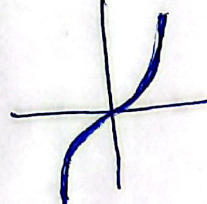
د) $\frac{-a}{2b} = 2 \rightarrow \frac{-a}{2} = 2 \rightarrow a = -4 \rightarrow a = \frac{1}{2} \rightarrow 1 = 2(\frac{1}{2}) + b \rightarrow b = -\frac{1}{2}$

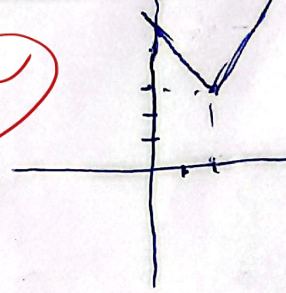
ه) $a + 2b = 10$

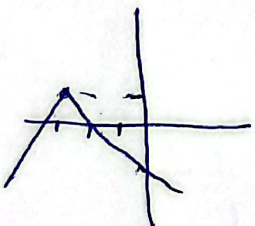
الف 

ب 

ج 

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الف 

ب 

iii) $x^2 - \epsilon x \neq 0 \rightarrow \underbrace{-\epsilon x \pm \sqrt{1\epsilon}}_2 = 0, \epsilon, \text{DIR} - [\epsilon, \cdot]$

ب) $\sqrt[4]{49-64} \rightarrow \text{منفي} \rightarrow D_0 = \mathbb{R}$

8.) $x^2 + x - 6 \neq 0 \Rightarrow \Delta \Rightarrow 1 \mp \sqrt{1 - 4(-6)} \Rightarrow D_2 \cap \mathbb{R}$

$$b) \quad x^{\frac{1}{2}} - \epsilon x^{\frac{1}{2}} \rightarrow x^{\frac{1}{2}} \xrightarrow{\text{sub}} x^{\frac{1}{2}} - \epsilon z^0 \rightarrow x = \pm x \quad x(x - \epsilon)^{z^0}$$

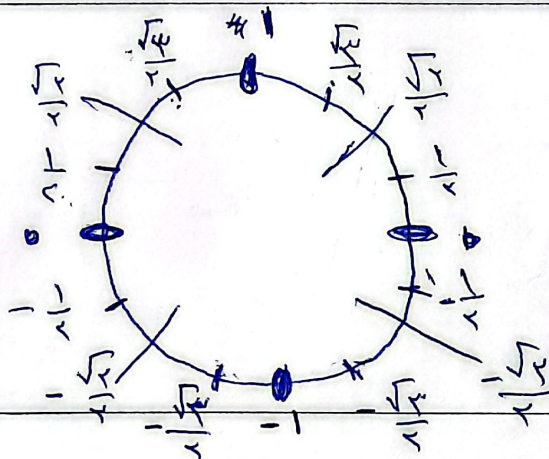
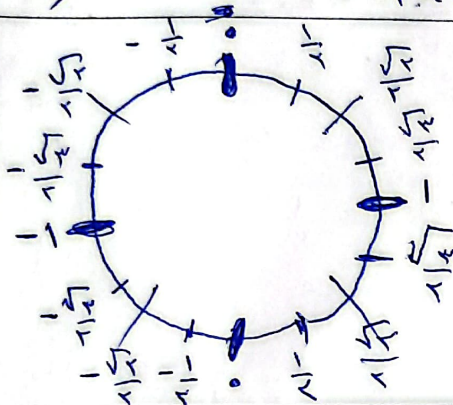
ج) $\left. \begin{array}{l} x - y \geq 0 \\ y - x \geq 0 \end{array} \right\} \rightarrow x \leq y \leq x \quad [x, x]$

$$\hookrightarrow D = \mathbb{R} - \{0, \pm r\}$$

ج) $\mathbb{R}^2 \rightarrow \mathbb{R}^2 \rightarrow \mathbb{R}$ هومومورفزم

2.) $x - \epsilon \geq 0 \rightarrow x \geq \epsilon$, $x - \epsilon \neq 0 \rightarrow x \neq \epsilon \rightarrow D = [x, +\infty) - \{\epsilon\}$

$\Rightarrow |x| + x^y \neq 0 \Rightarrow |x| \neq -x^y \rightarrow \mathbb{R} \rightarrow [x, y + \emptyset) - [x]$



القوس $\frac{1}{2} \cos$ $\rightarrow$ $\frac{1}{2}$ $\rightarrow \sin: \frac{\sqrt{12}}{4}, \frac{11\pi}{9}$

$$\left(\frac{\frac{\sqrt{3}}{2}}{-\frac{1}{2}} \right) \xrightarrow{\text{قرينة}} -\frac{\sqrt{3}}{2} \rightarrow \sin: \frac{2\pi}{3}, \frac{4\pi}{3}$$