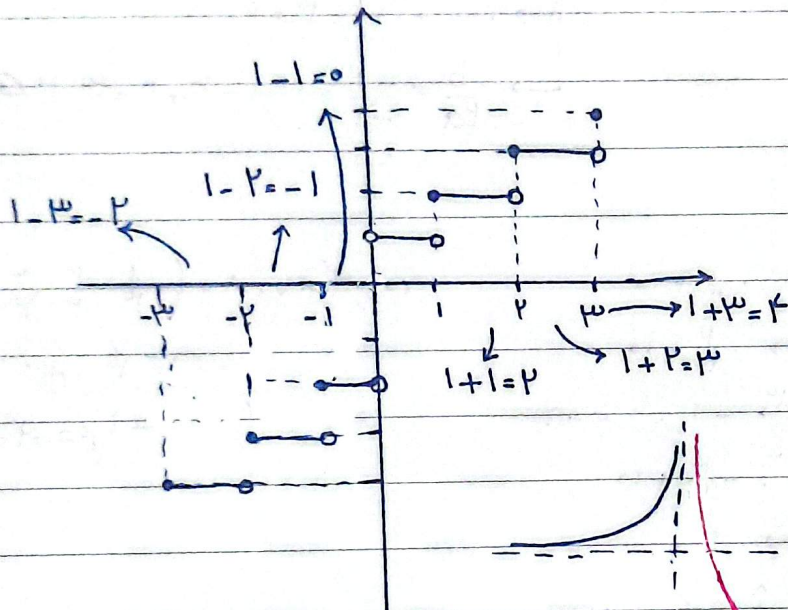


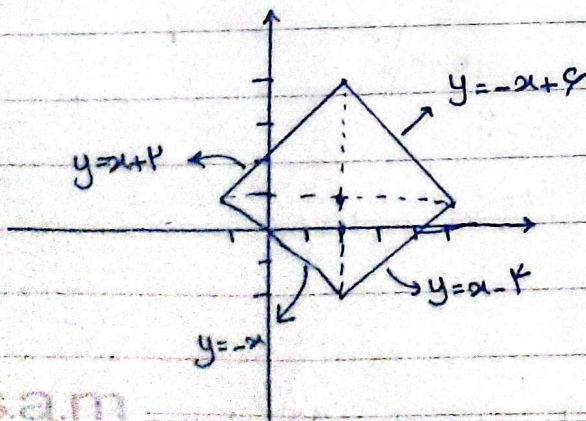
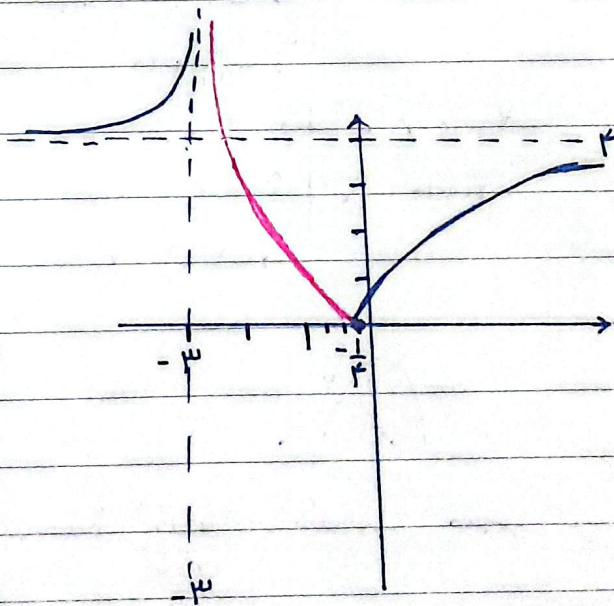
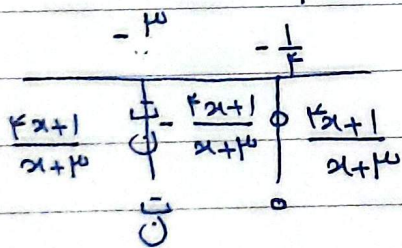
۱. $[-1, 1] = \mathbb{R}_f$ $1 \rightarrow 2$ $1 \rightarrow 1$ $0 \rightarrow 0$ $0 \rightarrow 0$ $0 \rightarrow 0$

۲. $[-1, -1] = \mathbb{R}_f$ $1 \rightarrow -1$ $0 \rightarrow -1$ $0 \rightarrow -1$ $0 \rightarrow -1$ $0 \rightarrow -1$



$1 \rightarrow \frac{x}{2} + 1 = 2$

$2 \rightarrow 1 + 2 = 3$



$x \geq 1$ $\left\{ \begin{array}{l} x - 1 + y - 1 = 3 \rightarrow y = -x + 6 \\ y \geq 1 \end{array} \right.$

$x \leq -1$ $\left\{ \begin{array}{l} 1 - x + y - 1 = 3 \rightarrow y = x + 4 \\ y \geq 1 \end{array} \right.$

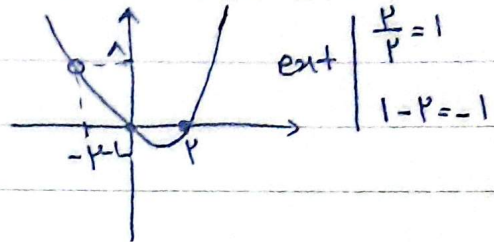
$x \leq -1$ $\left\{ \begin{array}{l} 1 - x + 1 - y = 3 \rightarrow y = -x \\ y \leq 1 \end{array} \right.$

$x \geq 1$ $\left\{ \begin{array}{l} x - 1 + 1 - y = 3 \rightarrow y = x - 4 \\ y \leq 1 \end{array} \right.$

$$a=b=-1$$

$$\frac{x^{10}-1}{x+1} = \frac{x(x-1)(x+1)}{x+1} = x^2-1 \xrightarrow{x=-1} 1-1=0$$

$$[0, +\infty) - \{1\} = [-1, +\infty) - \{1\}$$

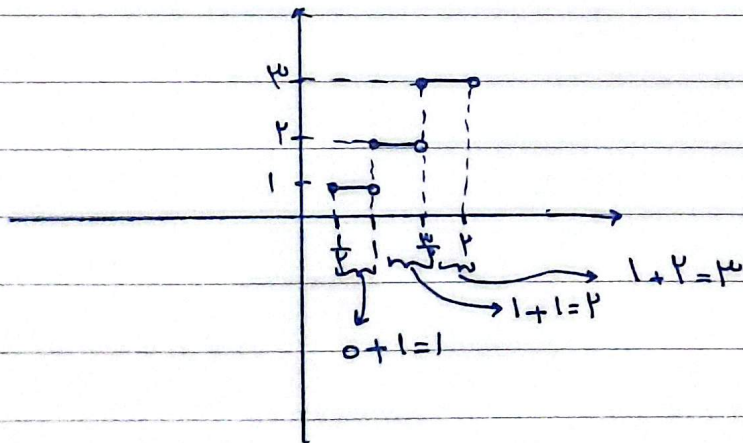


$$\varphi\left(\frac{a+b}{c}\right) = \varphi\left(\frac{-1}{-1}\right) = \varphi(1) = 0$$

$$x^{10} + ax^9 + bx - 1 = (x-0)^{10} \rightarrow (x-1)^{10} = x^{10} - 10x^9 + 45x^8 - \dots - 10x + 1$$

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$$\left[\begin{array}{l} \sqrt[9]{(1-1)^9} = -1 \\ \sqrt[9]{(1-1)^9} = 1 \end{array} \right\} \rightarrow R_f = [-1, 1]$$



sam