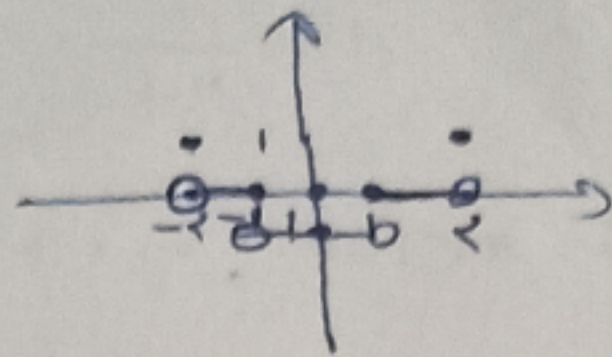


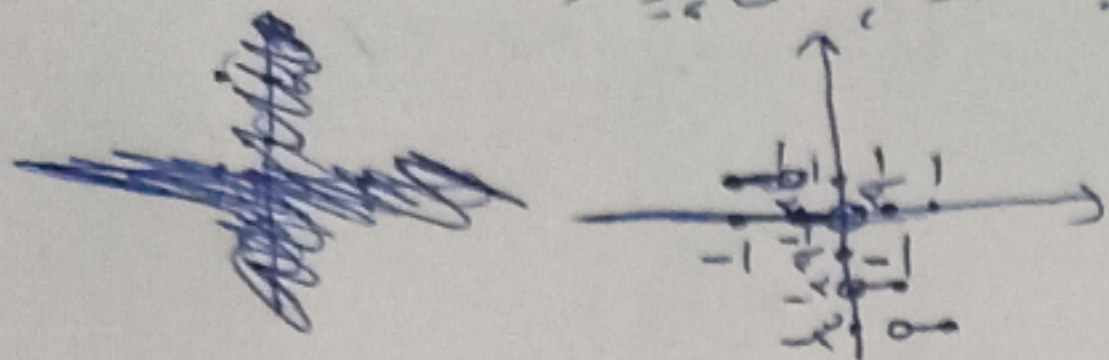
(الف)

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باید هر قسمت را جدا جدا دسته بندی و بررسی کنیم.



(ب) شکل به صورت پاره های پیوسته است



$$\left. \begin{array}{l} a + [b] = 4, 2 \\ b - [a] = 2, 4 \end{array} \right\} \rightarrow \left. \begin{array}{l} [a] + [b] = 4 \\ [b] - [a] = 2 \end{array} \right\} \rightarrow \left. \begin{array}{l} [a] = 1 \\ [b] = 2 \end{array} \right\}$$

$$\text{if } [b] = 2 \Rightarrow a = 1, 2$$

$$\text{if } [a] = 1 \Rightarrow b = 2, 4$$

$$\left. \begin{array}{l} 1 - \sqrt{2} = \frac{-1}{1 + \sqrt{2}} \\ 1 + \sqrt{2} = t \\ 1 - \sqrt{2} = \frac{-1}{t} \end{array} \right\} \rightarrow (1 + \sqrt{2})^9 + (1 - \sqrt{2})^9 = 191 \rightarrow t^9 + \left(\frac{-1}{t}\right)^9 = 191$$

$$[(1 + \sqrt{2})^9] = 191$$

$$t^9 + \frac{1}{t^9} = 191 \rightarrow t^{18} - 191t^9 + 1 = 0$$

$$t^9 = \frac{191 \pm \sqrt{191^2 - 4}}{2}$$

$$t^9 = 191, 95$$