

$$x=1 \rightarrow (f(x)) = (x + f(x)) \rightarrow f(x) = 3$$

نمونه تر راه حل بنویس!

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$$2x+1 + x+2 = 3x+3 \rightarrow \text{تابع همنی}$$

$$y = \sqrt{2x-x^2} \rightarrow \frac{-b}{2a} = \frac{1}{-1} \rightarrow R_f = \left[0, \frac{1}{2} \right] \rightarrow \left[0, \frac{1}{2} \right]$$

عمدت زیر را بنویس!

$$n+2 \neq 0 \rightarrow n \neq -2$$

$$\begin{matrix} a=-2 & c=-1 \\ b=2 & \end{matrix} \Rightarrow \frac{c-2}{-2} = \left(-\frac{1}{2} \right)$$

$$\frac{x^2-6x}{x+2} \neq 1 \rightarrow x(x-2) = 1 \rightarrow \begin{cases} x=2 \\ x=-1 \end{cases}$$

$$R = \{-2, 2\}$$

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$$y = x(x-2) = x^2-2x \Rightarrow \frac{-b}{2a} = \frac{2}{2} = 1 \rightarrow x=1$$

$$f(-1) = 3$$

~~$$x^3 + ax^2 + bx + c = 0$$~~

$$\begin{matrix} x-2 & -1 \\ 1 & 0 \end{matrix} \begin{bmatrix} -1 & 1 \\ 1 & 1 \end{bmatrix}$$

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$$\sqrt[3]{x^3+ax^2+bx-1} \rightarrow \sqrt[3]{(x+1)^3} = \sqrt[3]{x^3+3x^2+3x+1} \rightarrow \begin{cases} a=3 \\ b=3 \end{cases}$$

$$P_1 = R - \{1\} \quad 1-x \neq 0 \rightarrow x \neq 1$$

$$\frac{x+1}{1-x} > 0 \rightarrow \frac{-1}{-1+1}$$

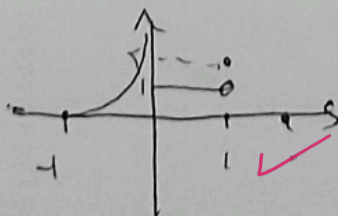
$$1-1=0 \rightarrow \text{Def } (-1, 1) \times$$

۱۵

$$\frac{ax^2-1}{x^2+b} \neq 1 \rightarrow ax^2-1 \neq x^2+b \rightarrow \begin{cases} a=1 & b=-1 \end{cases}$$

$$\begin{aligned} x^2 > 0 &\rightarrow \frac{-1}{b} < -1 \rightarrow b < 1 \\ x < 0 &\rightarrow \frac{1}{a} < 1 \rightarrow a < 1 \end{aligned}$$

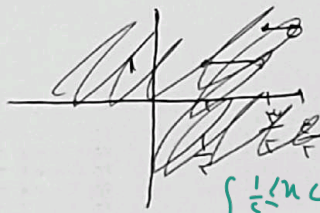
$$a+b < 2$$



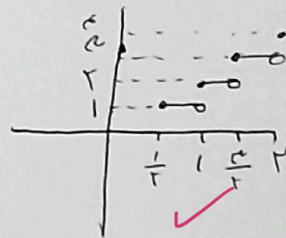
بازه بندی ها را بنویس!

$$\begin{aligned} -1 &\leq x < 0 & \frac{-1}{x} - 1 \\ 0 &\leq x < 1 & 1 \\ x &< 2 & \frac{1}{x} + 1 \end{aligned}$$

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$$\begin{cases} \frac{1}{2} \leq x < 1 & \frac{1}{2} \\ 1 \leq x < \frac{5}{2} & \frac{1}{2} \\ \frac{5}{2} \leq x < 2 & \frac{5}{2} \end{cases}$$



بانه بندي!
۳ يايه خط

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$$\cdot \left| \frac{x+1}{ax+3} \right| < 1$$

$$D = R - \left\{ -\frac{c}{a} \right\} \Rightarrow b = -\frac{3}{a}$$

راه حل پايه زياده افزون

$$\frac{(1-a)x-5}{ax+3} < 0 \rightarrow a=1 \rightarrow \frac{-5}{x+3} < 0 \rightarrow x+3 > 0 \rightarrow x > -3$$

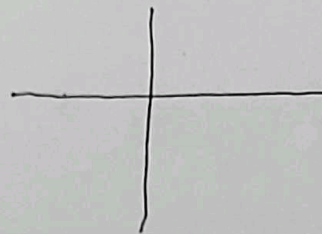
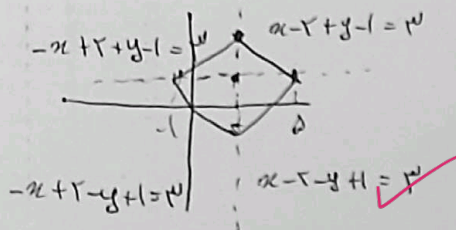
$$\left| \frac{x+1}{x+3} \right| < 1$$

$$x > -3$$

$$x > -3 \rightarrow b = -3 \rightarrow a = 1$$

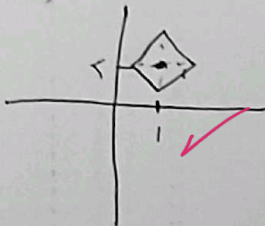
$$b = -3$$

$$a = 1$$

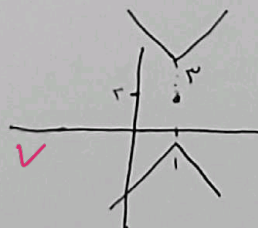


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آرئيب خواصا هم علامت بانه!

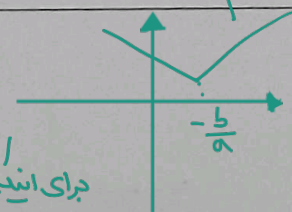
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$$g = (3-a)x - b \rightarrow a \neq 3$$

$$a = R - \{3\}$$

براي اينكه يرد تابع R ابات بايد شيب خواصا هم علامت بانه

$$|a| < 3 \rightarrow -3 < a < 3$$



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۱۰