

19/78! آفرین! ایجاد واریاسیون
داده هم رقتی
ب

$$f(2x+1) + f(x+2) = 3x + f(3) \quad x=1 \quad 2f(3) = 3x + f(3) \quad f(3) = 3x$$

$$f(2x+1) + f(x+2) = 3x + 3 \quad f(3) = 3$$

$$a(2x+1) + b + a(x+2) + b \quad 3a = 3 \quad a = 1$$

$$2ax + a + b + ax + 2a + b \quad 3 + 2b = 3 \quad b = 0 \quad f(x) = x$$

$$3 + 2b = 3 \quad b = 0$$

$$f(x) = x$$

$$\sqrt{x-x^2} = \sqrt{-x^2+x}$$

$$\frac{-b}{2a} = \frac{-1}{-2} = \frac{1}{2}$$

$$-\frac{1}{2} + \frac{1}{2} = \frac{1}{2}$$

$$(-\infty, \frac{1}{2}] \rightarrow [0, \frac{1}{2}]$$

$$f(x) = \frac{x^3 - 4x}{x+2} \quad R - \{a, b\} \rightarrow a, b \rightarrow -2, 2$$

$$\frac{x(x^2-4)}{x+2} \quad \Rightarrow [2, +\infty) - \{1\} \rightarrow c = -1$$

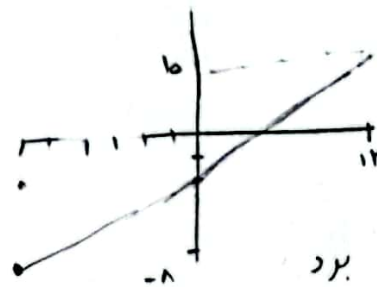
$$\frac{x(x+2)(x-2)}{(x+2)} = x^2 - 2x$$

$$x^2 - 2x = 1 \quad x^2 - 2x - 1 = 0 \quad f - f(-1) = 34$$

$$\frac{2+4}{2} = 3 \quad \frac{2-4}{2} = -1$$

$$\sqrt[3]{x^3 + 0x^2 + bx - 1} \quad \sqrt[3]{(x-2)^3} = x-2 \quad a = -4 \quad b = 12$$

$$[-4, 12]$$



$$\Rightarrow [-1, 10]$$

$$\left(\frac{n+1}{1-n}\right)^{\frac{1}{a}} \rightarrow \text{با این روش}$$

$$\frac{n+1}{1-n}$$

$$\frac{-1}{-1} + \frac{1}{1} = 2 \quad [-1, 1]$$

$$y = \frac{ax^2-1}{x^2+b} \rightarrow 0 \quad -\frac{1}{b} \quad a$$

$$(-\frac{1}{b}, a)$$

$$DF \rightarrow [-1, 1]$$

$$b = 1 \quad a = 1$$

$$a+b = 2$$

$$\frac{[x]}{x} + \frac{|x|}{x}$$

$$[-1, 1]$$

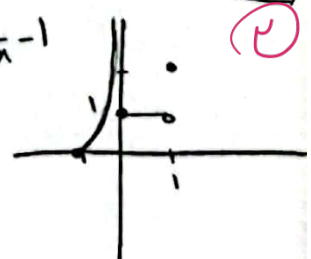
$$[-1, 0)$$

$$\frac{-1}{x} + \frac{-x}{x}$$

$$-\frac{1}{x} - 1$$

$$[0, 1) \rightarrow 1$$

$$1 \rightarrow 2$$



$$y = [x] + [x + \frac{1}{y}] \quad (\frac{1}{y}, 2)$$

$$[\frac{1}{y}, 1) \quad [x + \frac{1}{y}]$$

$$[1, \frac{3}{y}) \quad 1 + [x + \frac{1}{y}]$$

$$[\frac{3}{y}, 2) \quad 1 + [x + \frac{1}{y}]$$

$$1 - (-2) = 3$$

$$a=1 \quad b=-2$$

$$1-2 = -1$$

$$1, 2$$

$$V$$

$$|\frac{x+1}{ax+3}| < 1 \quad \frac{|x+1|}{|ax+3|} < 1$$

$$|x+1| < |ax+3|$$

$$x^2+1+2x < a^2x^2+9+4ax$$

$$x^2(1-a^2) + (2-4a)x - 8 < 0$$

$$a = \pm 1$$

در این صورت

دو ضلعی در زیر است پس تابع در هر دو ضلع

$$x = \frac{y}{1-a}$$

$$x = \frac{-f}{1+a}$$

$$A$$

$$2$$

$$|x-2| + |y-1| = 3$$

$$y > 1 \quad 3 - |x-2| + 1 = y$$

$$y < 1 \quad |x-2| - 3 + 1 = y$$

$$الف) |x-1| + |y-2| = 1$$

$$ب) |x-1| - |y-2| = -3$$

$$|y-2| - |x-1| = 3$$

$$y = 3x + |ax+b|$$

$$3x + |ax+b|$$

$$x = -\frac{b}{a}$$

$$-\frac{b}{a}$$

$$(3-a)x+b \quad (3+a)x+b$$

$$a < 3$$

$$a > -3$$