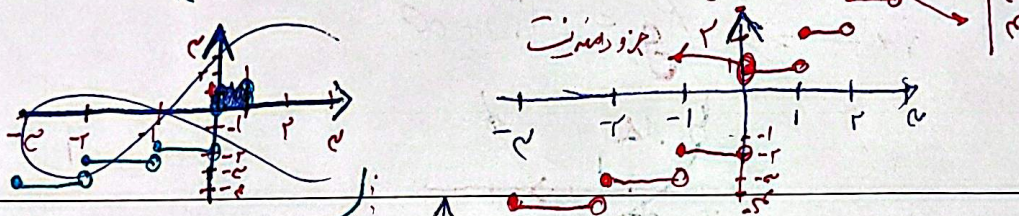


$\begin{cases} 1 \times 1 - 1 \times 1 = 0 \\ 0 \times 0 - 1 \times 1 = -1 \end{cases} \quad R_f = [-1, 1]$

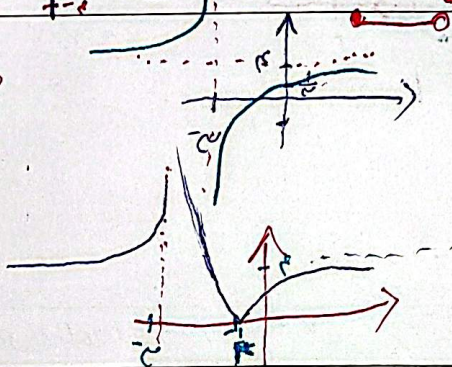
$\begin{cases} 1 \rightarrow 1 \times 1 - 1 \times 1 = -1 \\ -1 \rightarrow 0 \times 1 - 1 \times 1 = -1 \end{cases} \quad R_g = [-1, -1]$

$\begin{aligned} 1 \times 1 \times 1 &\rightarrow \frac{x}{x} & 1 \times 1 \times 2 &\rightarrow \frac{x}{x} + 1 & 1 \times 1 \times 3 &\rightarrow \frac{x}{x} + 1 \\ -1 \times 1 \times 0 &\rightarrow \frac{-x}{x} - 1 & -1 \times 1 \times 1 &\rightarrow \frac{-x}{x} - 1 & -1 \times 1 \times 2 &\rightarrow \frac{-x}{x} - 1 \end{aligned}$

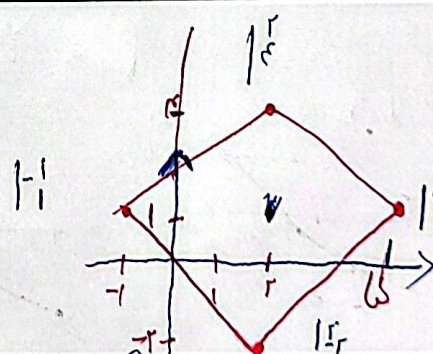


ابتدا $\frac{x+1}{x+2}$ را در نظر بگیرید

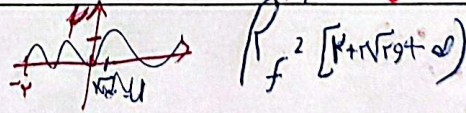
در ادامه می بینیم



$\begin{aligned} & \text{از } x - x + 1 + 1 - 1 = 0 \quad x - 1 + 1 - 1 = 0 \\ & \text{از } x - 0 + 1 - 1 = 0 \quad x - 0 + 1 - 1 = 0 \\ & \text{از } x - 0 + 1 - 1 = 0 \quad x - 0 + 1 - 1 = 0 \end{aligned}$



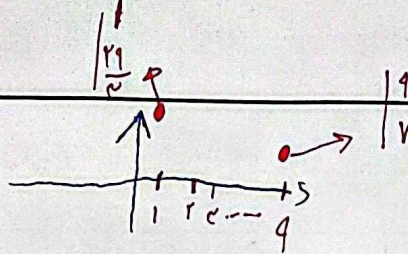
$\text{از } \sqrt{x + \frac{1}{x}} = t \rightarrow f(x) = t + \frac{1}{t}$



$\begin{aligned} \sin x = 1 &\rightarrow R_f = [0, 1] \\ \sin x = \frac{1}{2} &\rightarrow R_f = [0, 1] \\ \sin x = -1 &\rightarrow R_f = [0, 1] \end{aligned}$

$y = 1 + \sin x - \sin x - \sin x = -\sin x + \sin x + 1$

$$D_f = \{b, 2, 3, 4, 5, 6, 7, 8, 9\} \Rightarrow$$



$$\frac{f(19 + 11)}{2} = \frac{225}{2} = 112.5 \rightarrow 112.5$$

حاصل بخشای بر تابع

$$a \geq 0 \quad b + c < 0$$

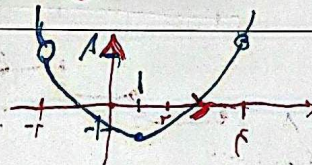
$$b + c < 1$$

$$b \geq 1 \quad c < -2$$

از روی دانه ۲ به سمت چپ بدون عبارت زیر را دیکته کنیم:

$$\sqrt{1 + x^2} \Rightarrow R_g = [2, +\infty)$$

$$\frac{x(x-5)(x+2)}{(x+1)} < x^2 - 5x$$



از روی بزه مستوی شریک

تابع در $x = -2$ و $x = 5$

تغییر نمی شود همیشه منقسم تابع $-1 < c$

$$f\left(\frac{1}{-2}\right) = f(-1) = 3$$

$$-2 + 4$$

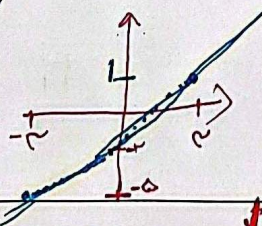
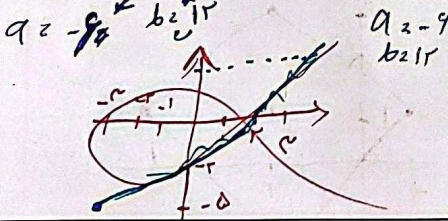
$$a + b = 2 \quad c = -1$$

برای خطی بودن ضابطه داده شده لازم است تا عبارت زیر صفر باشد

$$(x-1)^2 < x^2 + ax + b - 1 \Rightarrow a = -2, b = 2$$

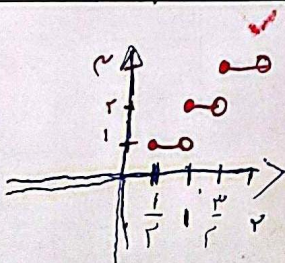
$$y = x - 2$$

ضابطه داده شده



$$-6 \leq x \leq 12 \rightarrow -1 \leq y \leq 10$$

$$R_f = [1, 10]$$



$$2 \leq 0 + 1$$

$$2 \leq 1 + 1$$

$$3 \leq 1 + 2$$

$$\frac{1}{2} \leq x \leq \frac{1}{2}$$

$$\frac{1}{2} \leq x \leq \frac{1}{2}$$

$$\frac{1}{2} \leq x \leq \frac{1}{2}$$

سپرده خطی