

$$a(n+1) + b + a(n+1) + b = 2an + 2a + b$$

$$2an + a + b + a + b = 2a + 2b + 2a + b$$

$$2an + b + 2a \quad (2a - 2)n + b = 2a \quad \Rightarrow \quad (2a - 2)n + b = 2a$$

$$\frac{a^n - 1}{a - 1} = \frac{a^{n+1} - a}{a - 1} \Rightarrow \frac{a(a^n - 1)}{a - 1} = a(n+1) \Rightarrow R_{min} = \frac{a}{(a-1)} \Rightarrow R_f \in [1, \infty) \cup \{A\}$$

$$\frac{a^n - 1}{a - 1} \neq 1 \Rightarrow \frac{a^n - 1}{a - 1} = a(n+1) \Rightarrow \frac{a^n - 1}{a - 1} = a(n+1) \Rightarrow \frac{a^n - 1}{a - 1} = a(n+1)$$

$$f\left(\frac{1}{-r}\right) = f(-1) = \frac{-1 + f}{1} \Rightarrow \frac{-1 + f}{1} = \frac{1}{-r}$$

$$\frac{a^n - 1}{a - 1} = a(n+1) \Rightarrow \frac{a^n - 1}{a - 1} = a(n+1) \Rightarrow \frac{a^n - 1}{a - 1} = a(n+1)$$

نیز در ابعاد این جدول به هم وصل است
 عبارت درجه ۳ است که به
 بخش نیز برساند

$$\sqrt{(n-2)^2} = \sqrt{n^2 - 4n + 4} = n - 2 \Rightarrow a = -4 \quad b = 12$$

$$D_f \in [9, 17]$$

$$f(x) = n - 2 \Rightarrow -4 \leq n \leq 12 \Rightarrow \sqrt{n-2} \leq 10 \Rightarrow R_f \in [-1, 1]$$

$$R_f \quad n \neq 1 \Rightarrow \frac{a^n - 1}{a^n + b} \neq 1 \Rightarrow a^n - 1 = n^2 + b$$

$$(a-1)a^n = b+1 \Rightarrow (a-1)a^n = (b+1) \Rightarrow a \neq 1, b \neq -1$$

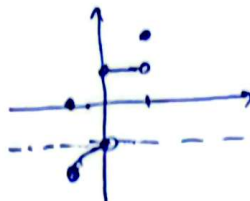
$$a + b = 0$$

$$0 \rightarrow 1 \Rightarrow 1$$

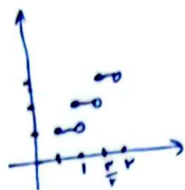
$$1 \rightarrow 1 \Rightarrow 1$$

$$-1 \rightarrow 0 \Rightarrow \frac{1}{2} \Rightarrow -1 \Rightarrow \frac{1}{2}$$

$$-1 \Rightarrow 0$$



$$\begin{aligned} \left[\frac{1}{7}, 1\right) &\Rightarrow 1 \\ \left[1, \frac{3}{7}\right) &\Rightarrow 2 \\ \left[\frac{3}{7}, 2\right) &\Rightarrow 3 \end{aligned}$$



$$\cdot \left(\frac{a+1}{a+b+3} < 1 \Rightarrow 0 < a+1 < a+b+3 \right)$$

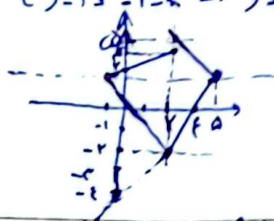
$$\Rightarrow \frac{a+1}{a+b+3} \rightarrow -1$$

$$\frac{b+1}{a+b+3} = 1 \Rightarrow b+1 = a+b+3 \Rightarrow b(1-a) = 2$$

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

$$\begin{aligned} x \geq 2 \Rightarrow |y-1| &= 3 - (x-2) = 5-x \\ \begin{cases} y-1 \leq 5-x \Rightarrow y \leq 6-x \\ y-1 \geq x-5 \Rightarrow y \geq x-4 \end{cases} & \begin{cases} y \geq 1 \\ y < 1 \end{cases} \end{aligned}$$

$$x < 2 \Rightarrow |y-1| = 3 - (2-x) = 1+x \\ \begin{cases} y-1 \leq 1+x \Rightarrow y \leq 2+x \\ y-1 \geq -1-x \Rightarrow y \geq -x \end{cases} & \begin{cases} y \geq 1 \\ y < 1 \end{cases}$$



$$\text{الف} \quad |y-1| = |x-1|$$

$$y = |x-1|$$

$$\Rightarrow y = 1 - |x-1|$$

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

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

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

$$\text{ب) } |y-2| = 3 + |x-1|$$

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

$$y-2 = 3 + |x-1| \Rightarrow y = 5 + |x-1|$$

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

این معادله را می توان به صورت یک تابع خطی با عرض از مبدأ ۱ و دامنه ۱ تا ۳ و این تابع خطی به دو دایره در $\mathbb{R}^2$ است