

$$\frac{1}{n-1} = |n-1|$$

$$\frac{-1}{n-1} = n-1 \Rightarrow n^2 - 2n + 1 = 0$$

$$\Delta < 0 \quad \times$$

(۲)

۱

$$\frac{1}{n-1} = n-1 \Rightarrow n^2 - 2n + 1 = 0$$

$$n(n-2) = 0$$

$$n = 0 \quad \times$$

$$\boxed{n=2} \quad \checkmark$$

الف) $\left| \frac{2n-1}{n} \right| < 2 \xrightarrow{n \neq 0} -2 < \frac{2n-1}{n} < 2$

$$\begin{aligned} -2n < 2n-1 < 2n &\rightarrow 2n-1 > 0 \\ 2n < 2n-1 < -2n &\rightarrow 2n-1 > -2n \end{aligned}$$

(۲)

$$I \cap II \Rightarrow n \in \left(\frac{1}{2}, +\infty \right) \quad \checkmark$$

ب) $\left| \frac{n-2}{2n+1} \right| > 1 \quad \frac{n-2}{2n+1} > 1 \rightarrow \frac{n-2}{2n+1} > 0$

$$\frac{n-2}{2n+1} < -1 \quad \frac{2n-1}{2n+1} < 0 \quad I \cap II \rightarrow n = \left(-2, \frac{1}{2} \right) \quad \checkmark$$

$$\begin{aligned} n^2 < |n+2| \\ -n-2 < n^2 < n+2 \end{aligned} \rightarrow \begin{aligned} n^2 - n - 2 < 0 \\ (n+2)(n-2) \end{aligned}$$

$$\frac{-2}{-} \quad \frac{2}{+}$$

$$n = [-2, 2]$$

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

(۲)

$$n^2 + n + 2 > 0$$

$$\Delta < 0$$

$$|n - \alpha| < \beta$$

$$\left| n - \frac{1}{2} \right| < \frac{d}{2}$$

$$\boxed{\alpha = \frac{1}{2}} \quad \checkmark$$

$$\beta = \frac{d}{2}$$

$$n - \frac{1}{2} = \frac{d}{2}$$

$$|n+1| - |2n| > |n-2|$$

$$-1 + 2 = 1 \quad \checkmark$$

(۲)

$$n \geq 2 \quad n+1 - 2n + n-2 = -1 \rightarrow \min$$

$$0 < n < 2 \quad n+1 - 2n - n+2 = -2n+3 \rightarrow \frac{3-2n}{2}$$

$$-1 \leq n < 0 \quad n+1 + 2n - n+2 = 2n+3 \leq 2 \rightarrow \max$$

$$n < -1 \quad -n-1 + 2n - n+2 = 1 \rightarrow \min$$

۴

$$\left| \frac{1}{2}n \right| - 2$$

$$\left| \frac{1}{2}n+2 \right| - 2$$

$$\left| \frac{1}{2}n+2 \right| - 2+1 \rightarrow$$

عنوان جدید

$$\left| \frac{1}{2}n+2 \right| - 2 = \left| \frac{1}{2}n \right| - 2$$

$$|n+4| + 2 = 2 \left| \frac{1}{2}n \right|$$

$$n^2 + 4n + 8 + 2 = n^2 \quad \left\{ \begin{aligned} & 2n+3=0 \\ & \boxed{n=-3} \quad \checkmark \end{aligned} \right.$$

(۲)

۵

$$[|1-n| > |m+1|] \quad n \geq 1 \quad m \geq Rf(m) = a \quad \begin{matrix} n=-1 \\ n=1 \end{matrix} = \begin{matrix} \delta \\ -\delta \end{matrix} \Rightarrow (-\delta, \delta]$$

$$-1 < n < 1 \quad m \geq Rf(m) = -2m - 1 \quad \begin{matrix} n=-1 \\ n=1 \end{matrix} = \begin{matrix} \delta \\ -\delta \end{matrix} \Rightarrow (-\delta, \delta]$$

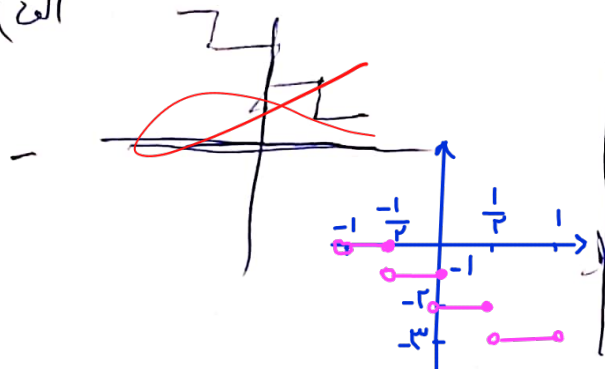
$$n < -1 \quad m \geq Rf(m) = -\delta \quad [n][n][n][n] = [-\delta, +\delta]$$

چون برآورد داریم، بر دو نقطه شامل اولاد می آین باز مرزها

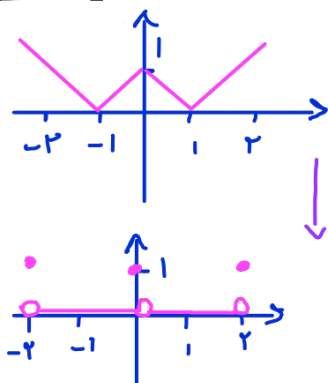
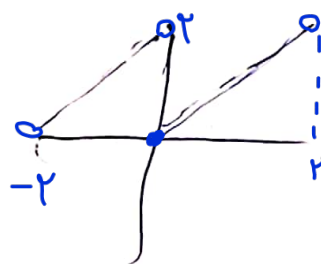
$$\frac{1}{n} \ominus \left[\frac{1}{n} \right] \quad \left[1 + \frac{1}{n} \right] \quad \left[\frac{1}{n} \right] \quad n \geq \frac{1}{n} - \left[\frac{1}{n} \right] + 1$$

$$0 \leq -\left[\frac{1}{n} \right] + \frac{1}{n} < 1 \quad n \geq Rf = \left[\frac{1}{n} \right] \quad [-1, 0) \quad \text{دقت!}$$

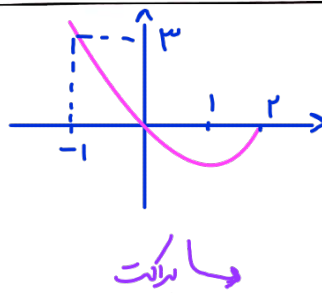
الف)



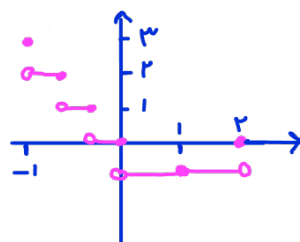
ب)



برآورد



برآورد



$$a + [b] = f, r$$

$$[a] + [b] = f$$

$$b - [a] = r, f$$

$$[b] - [a] = r$$

$$r[b] = f \quad [b] = r \quad [a] = 1$$

$$b - 1 = r, f$$

$$b = r, f \quad a = 1, r \quad a + b = f, r$$

$$1 - \sqrt{2} = -(\sqrt{2} - 1)$$

$$(1 - \sqrt{2})(1 + \sqrt{2}) = -1$$

$$([1 + \sqrt{2}]^4) = [19\sqrt{2}, -] \quad 19\sqrt{2}$$

$$|1 - \sqrt{2}| < 1$$

$$(1 - \sqrt{2})^4 = \frac{\delta}{1000}$$

$$(1 + \sqrt{2})^4 + (1 - \sqrt{2})^4 = 19\sqrt{2}$$

$$(1 + \sqrt{2})^4 = 19\sqrt{2} - 0.100\delta$$