

$$\rightarrow y \leq \frac{n+1}{n} \leq |x| + \frac{1}{|x|} \xrightarrow{\substack{|x| > 0 \\ a) > 0}} \boxed{[y, +\infty) \not\subset \mathbb{R}} \quad \textcircled{1} \quad \textcircled{2}$$

$$\pi = \frac{y-r \pm \sqrt{(r-y)^2 + r(r+y)}}{r} \xrightarrow{D \geq 0} \quad y+r-\cancel{ry} + \frac{+1r}{+ly} \geq 0 \rightarrow \underbrace{y^2}_{-r^2} + \underbrace{ly}_{-r^2} + 1r \geq 0$$

الف) $y \leq \log \frac{(x^3 - x + 1)}{(R \leq R)} \leq \log (\infty + \infty) \Rightarrow \boxed{R_y \checkmark R}$

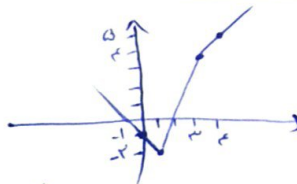
$\downarrow$
 $(\infty + \infty)$
 ما لا نهاية تتابع التزايد

٢) $R = f(\infty + \infty)$

2.1) $y \in \sqrt{-n^2 + n - 1} \Rightarrow R = \sqrt{[-\infty, 1]} \Rightarrow R \in [0, 1]$

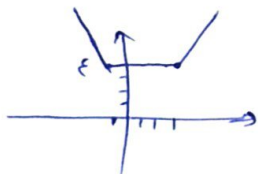
$a < 0, r \rightarrow \infty$ y ext $\left| \begin{array}{l} -\frac{b}{r^2} = -\frac{1}{r} \Rightarrow r \geq 1 \\ y = -1 + n - 1 = n \end{array} \right.$

$$y_s \quad |r_n - r| = |n - n|$$



$$R_s [-r, +\infty)$$

→) $y = |x-2| + |x+1|$



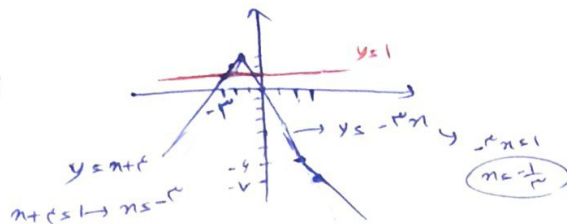
$$R_S(t, +\infty)$$

یا اللہانی (۴) اختلاف دور سے

(۲) (۷)

$$|x-2| - |2x+1| \leq 1$$

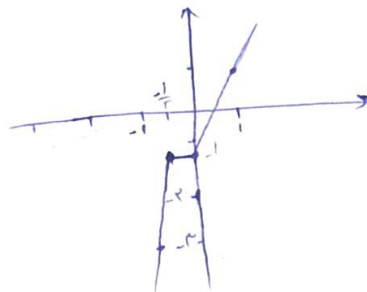
$$|x|, |x-2|, |2x+1|$$



$$(-\infty, -1] \cup [-1/2, +\infty)$$

$$y \leq 2x - |2x+1| + |x|$$

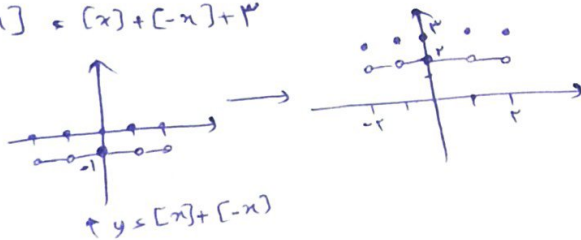
$$|x-2|, |x-1|, |x|, |x+1|$$



$$R_{y \leq 2x}$$

(۲) (۸)

$$الف) y \leq [x] + [x-n] \leq [x] + [-x] + 3$$



$$R_{y \leq [x] + [-x]}$$

(۲) (۹)

$$\Rightarrow y \leq [x] - [x]$$

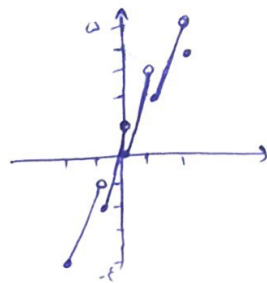
$$(-2, 2) \rightarrow [x] + [x-1]$$

$$(-1, 0) \rightarrow [x] + [x-1]$$

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

$$[1, 2) \rightarrow [x] - 1$$

$$\{2\} \rightarrow 2$$



$$R_{y \leq [x] - [x]}$$

$$الف) \sin^2 x - \sin^2 x + 1$$

$$\frac{b}{a} \leq \frac{1}{2} \leq \frac{1}{2} - \frac{1}{2} + 1 \leq \frac{1}{2}$$

$$R_{x \in [\frac{1}{2}, \frac{1}{2}]}$$

$$\Rightarrow y \leq \sin^2 x + \sin^2 x + 1$$

$$\frac{b}{a} \leq -\frac{1}{2} \leq -\frac{1}{2} + 1 \leq \frac{1}{2}$$

$$R_{x \in [1, 1]}$$

(۲) (۱۰)