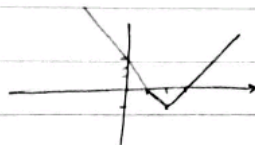


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/ /

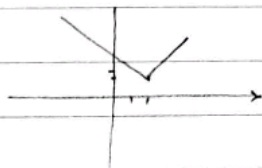
طاهار حیدران عصار - یازدهم پسرده - تالیف ۷

$$y = |x-2| + |x-1| - |x| \rightarrow \begin{matrix} 2 \rightarrow 0 \\ 1 \rightarrow -1 \\ 1 \rightarrow 2 \end{matrix}$$



(۲) $[-1, +\infty)$ ✓

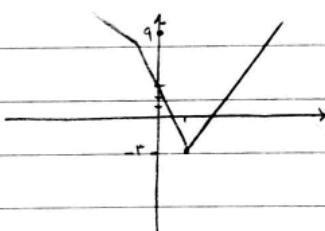
$$y = x + |2x-5| \rightarrow \begin{matrix} 2 \\ -x+5 \end{matrix} \begin{matrix} 2x-5 \\ -x+5 \end{matrix} \rightarrow$$



(۲) $[2, +\infty)$ ✓

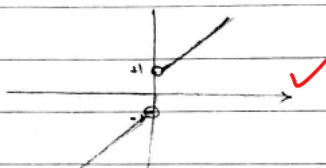
$$\begin{matrix} -2 & 1 \\ -2x+5 & 2x-5 \\ 2x-5 & -2x+5 \end{matrix} \rightarrow |2x-5| - |x+2|$$

$$\Rightarrow k = -2 \quad \checkmark$$



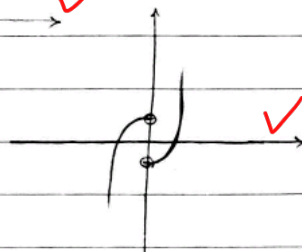
(۲) $(-\infty, -2]$ ✓

$$y = x + \frac{x}{|x|} \rightarrow \begin{matrix} 0 \\ x-1 \end{matrix} \begin{matrix} x \\ x+1 \end{matrix}$$

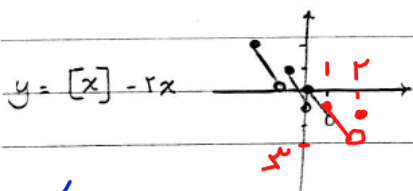


(۲) $(-\infty, -1]$ ✓

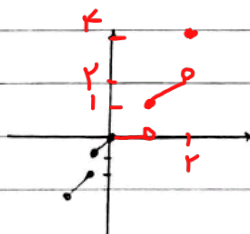
$$y = x|x| - \frac{x}{|x|} \rightarrow \begin{matrix} 0 \\ -x^2+1 \end{matrix} \begin{matrix} x^2-1 \\ x^2-1 \end{matrix}$$



✓



$$y = [x]|x|$$



(۵) $(-\infty, 2]$ ✓

باید دوباره $[-2, 2]$ رسم کردی!

باید حتماً بازه بندی ها رو بنویسی

$$3x - [2x] \rightarrow 3(x - [x]) \rightarrow x - [x] \rightarrow [0, 1) \quad \checkmark$$

(۲)

$$4x - 4[x] \rightarrow 4(x - [x]) \rightarrow x - [x] \rightarrow [0, 1) \xrightarrow{\times 4} [0, 4) \quad \checkmark$$

$$x - \infty \left[\frac{x}{\infty} \right] \rightarrow x - [x] \rightarrow [0, 1) / \infty \left(\frac{x}{\infty} - \left[\frac{x}{\infty} \right] \right) \rightarrow [0, \infty) \quad \checkmark$$

$$[2x] - 2x \rightarrow 2([x] - x) \rightarrow [x] - x \rightarrow (-1, 0] \quad \checkmark$$

Parsian

$$r \sin^2 x + r \cos^2 x \rightarrow -\sqrt{r^2 + r^2} \leq r \sin^2 x + r \cos^2 x \leq \sqrt{r^2 + r^2} \rightarrow [-\sqrt{1r}, \sqrt{1r}] \checkmark \quad (2) \quad 4$$

$$r \sin^2 x - r \cos^2 x \rightarrow -\sqrt{r^2 + r^2} \leq r \sin^2 x - r \cos^2 x \leq \sqrt{r^2 + r^2} \rightarrow [-\infty, \infty] \checkmark$$

$$[r \sin x + a \cos x] \rightarrow r \sin x + a \cos x \rightarrow [\sqrt{r^2 + a^2}, \sqrt{r^2 + a^2}] \rightarrow -9, -a, -r, -r, -1, \dots, 1, r, r, \varepsilon, a \checkmark$$

$$\sqrt{\cos x - r \sin x} \rightarrow \cos x - r \sin x \rightarrow [-\sqrt{a}, \sqrt{a}] \rightarrow [-\frac{\varepsilon}{\sqrt{a}}, \frac{\varepsilon}{\sqrt{a}}] \rightarrow [0, \frac{\varepsilon}{\sqrt{a}}] \checkmark$$

$$\sin^2 x + r \sin x + r \rightarrow \frac{-r}{r}, f(\frac{-r}{r}) = \frac{-1}{\varepsilon} \text{ فقط} \quad (2) \quad 4$$

$$\begin{aligned} \swarrow -1 &\rightarrow 1 - r + r = 0 \quad [0, 9] \checkmark \\ \searrow 1 &\rightarrow 1 + r + r = 9 \end{aligned}$$

$$r \sin^2 x + r \sin x + r \rightarrow \frac{-r}{\varepsilon} \rightarrow f(\frac{-r}{\varepsilon}) \rightarrow \frac{1}{\lambda}$$

$$\begin{aligned} \swarrow -1 &\rightarrow r - r + r = 1 \\ \searrow 1 &\rightarrow r + r + r = 1 \end{aligned}$$

$$[\frac{1}{\lambda}, 1] \checkmark$$

$$\sin^2 x + r \cos^2 x \rightarrow r \cos^2 + 1 \rightarrow \cos^2 = 1 \rightarrow [1, \varepsilon] \checkmark$$

$$\frac{r \cot x}{1 + \cot^2 x} \rightarrow \frac{r \cos x}{\sin x} \cdot \frac{\sin x}{1} \rightarrow r \cos x \sin x = \sin^2 x \rightarrow [-1, 1] \checkmark$$

$$\sin^4 x + \cos^4 x \rightarrow rk = 4, k = r \rightarrow r^{-r} = \frac{1}{\varepsilon}, 1 \rightarrow [\frac{1}{\varepsilon}, 1] \checkmark$$

از بهای فقط عدد می یاد بیرون

$$[\sin^4 x + \cos^4 x] \rightarrow rk = 4, k = \varepsilon \rightarrow r^{-r} = \frac{1}{\lambda}, 1 \rightarrow [\frac{1}{\lambda}, 1] \rightarrow [0, 1] \checkmark$$

$$\frac{rx^2 + vx - c}{(x + \varepsilon)} \rightarrow \frac{(rx - 1)(x + \varepsilon)}{x + \varepsilon} \rightarrow rx - 1$$

$$D = R_1 - \{ \varepsilon \} \quad R = 1R - \{ -9 \}$$

Parsian

$$\frac{x^3 - 1}{x - 1} \rightarrow \frac{(x - 1)(x^2 + x + 1)}{x - 1}$$

$$x^2 + x + 1 \rightarrow$$

$$\left| \frac{1}{x} \right| \rightarrow [\frac{1}{\varepsilon}, +\infty) = R_2 \checkmark$$

در تقسیم به این روش