

۲۰. آفرین! سب تر بنویس!

حواله اولی

$$y = \left(u - 2 \left[\frac{u}{2} \right] \right)^2 \Rightarrow \left(\frac{1}{2} \left(u - \left[\frac{u}{2} \right] \right) \right)^2 \quad (1)$$

$$\frac{1}{2} \left(\begin{bmatrix} 0 \\ 1 \end{bmatrix} \right) \Rightarrow \Sigma \begin{bmatrix} 0 \\ 1 \end{bmatrix} = 2$$

$$Ry = \begin{bmatrix} 0 \\ 1 \end{bmatrix} \quad \checkmark$$

$$\rightarrow 1 \log y = \sin u + \Sigma \quad \text{و } \log y \text{ و } \omega$$

$$\begin{bmatrix} 0 \\ 1 \end{bmatrix} \leftarrow y \leftarrow \begin{bmatrix} 0 \\ 1 \end{bmatrix} \Rightarrow Ry = \begin{bmatrix} 0 \\ 1 \end{bmatrix} \quad \checkmark$$

$$f(u) = \sqrt{\frac{u^2 - \epsilon}{u^2 - a}} \Rightarrow \quad (2)$$

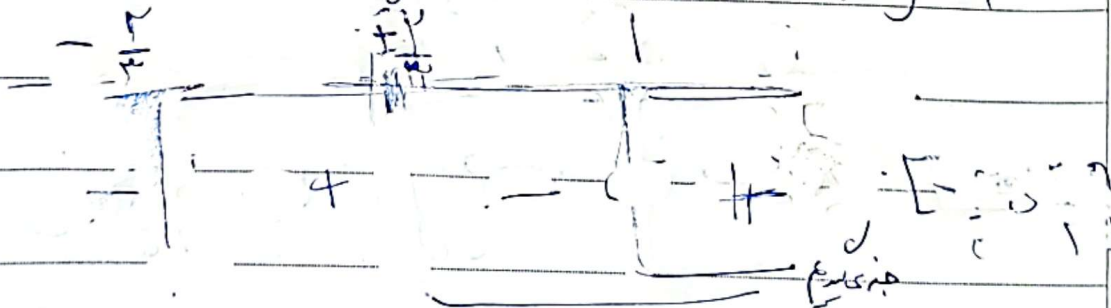
$$y = \sqrt{\frac{u^2 - \epsilon}{u^2 - a}} \Rightarrow y^2 \frac{u^2 - \epsilon}{u^2 - a} = u^2 - \epsilon$$

$$y^2 u^2 - \epsilon y^2 = u^2 - \epsilon$$

$$y^2 u^2 - u^2 = \epsilon y^2 - \epsilon$$

$$u^2 (y^2 - 1) = \epsilon (y^2 - 1)$$

$$u^2 = \epsilon y^2 - \epsilon \Rightarrow u = \pm \sqrt{\epsilon y^2 - \epsilon}$$



محقق

$$\Rightarrow \left[\begin{array}{c} -\frac{2}{3} \\ \frac{2}{3} \end{array} \right] \cup \left[\begin{array}{c} 1 \\ 1 \end{array} \right] \rightarrow \begin{array}{c} \text{ماتریس} \\ \text{باید متغیر} \end{array}$$

$$\frac{1}{2} + 1 = \frac{3}{2} \quad \checkmark$$

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$$\text{ان } f(u) = t^2 + 5t \Rightarrow \min = -\frac{b}{2a} \Rightarrow \text{جواب } (2)$$

$$n + \frac{1}{n} = (-\infty, -1] \cup [1, \infty) \Rightarrow \min$$

$$x = \pm \sqrt{n}, n$$

$$[1 + \sqrt{2}, \infty) = R_f$$

$$\rightarrow (3 - \sin u)(1 + \sin u) \Rightarrow$$

$$-\sin^2 + 2\sin u + 3 \quad \min \quad -1 - 2 + 3 = 0$$

$$\frac{-b}{2a} = \frac{-2}{-1} = 2 \quad \begin{array}{l} -1 + 2 + 3 = 4 \\ -1 + 2 + 3 = 4 \end{array} \Rightarrow$$

$$R_y = [0, 4]$$

اعداد طبيعى 1, 2, 3, ..., 9

تكرار $9 \times 10 + \frac{1}{x} (1 + 2 + 3 + \dots + 9)$

$$90 + \frac{1}{x} \left(\frac{10 \times 9 \times 10}{2} \right) \Rightarrow 90 - 10 = \frac{40}{x}$$

(c) از آنجایی که $a=0$ (مربع کامل) $\Rightarrow$ $f(u) = \sqrt{bu+c} \Rightarrow$

$$bu+c = 0 \quad b=1 \quad c=-1$$

$$g(u) = \sqrt{u^2 + 2} \Rightarrow Rg [2, +\infty)$$

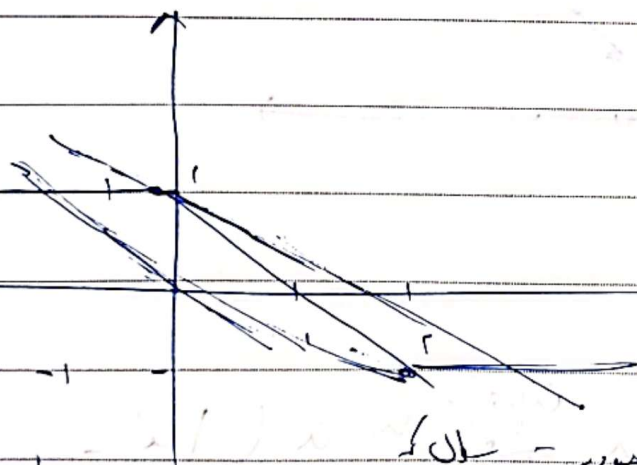
$$\min = 0 \Rightarrow 0^2 + 2 = \sqrt{2} \Rightarrow \sqrt{2} + 9$$

$$|u-2| - |u-1| = kn \Rightarrow$$

$$\begin{vmatrix} 0 & 2 \\ 0 & 1 \end{vmatrix}$$

$$\Rightarrow y = -\frac{1}{2}x$$

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



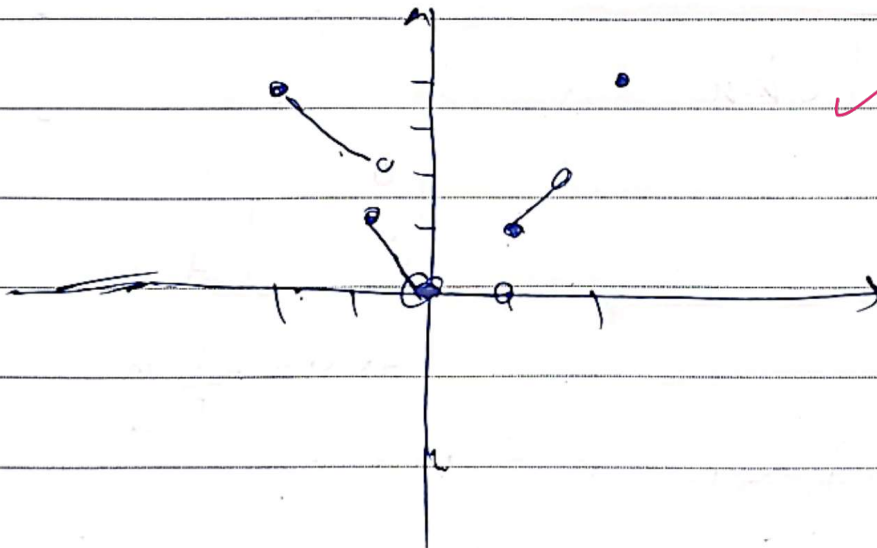
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$u[u] \quad [-2, -1) \quad [-1, 0) \quad [0, 1) \quad (1, \infty)$
 $[1, 2) \quad \{2\}$

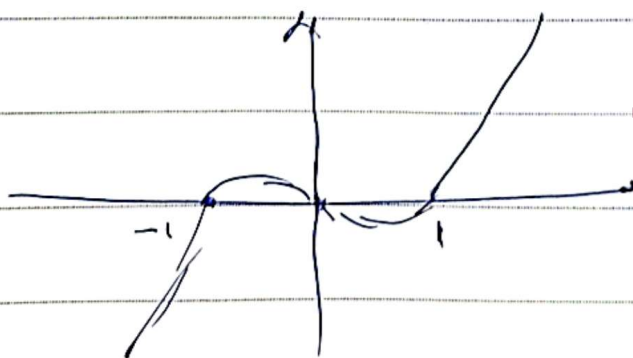
$-2 \times [-2, -1) = (-4, -2] \quad -1 \times [-1, 0) = (-1, 0]$
 $0 \times [0, 1) = \underline{0}$

$1 \times [1, 2) = [1, 2) \quad 2 \times 2 = 4$



$R_y = [0, 2] - \{2\}$

$u[u] = u \cup \{u\}$
 $u \cup \{u\} = u \cup \{u\}$



$= -1 \times [-1, 0) = (-1, 0]$
 $-1 \times [-1, 0) = (-1, 0]$

$$\frac{1}{n} + \frac{1}{n+1} + \frac{1}{n^2+n} \Rightarrow \text{مفرد مشترک} \quad (A) \quad \checkmark$$

$$\frac{n+1+n+1}{n^2+n} \Rightarrow \frac{2n+2}{n^2+n} = \frac{2(n+1)}{n(n+1)} = \frac{2}{n}$$

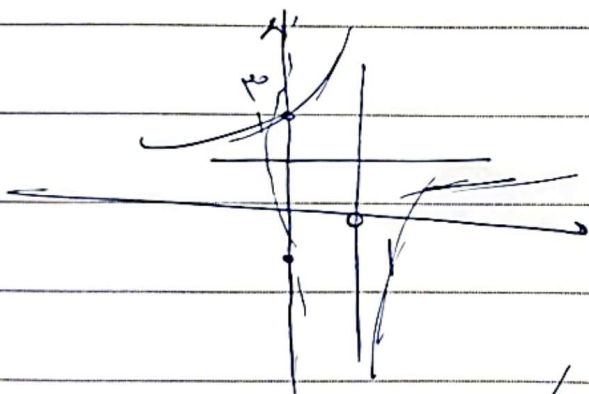
$$R = \{ \text{و نه } \} = \emptyset$$

این تابعی که اینجا طرز از دست

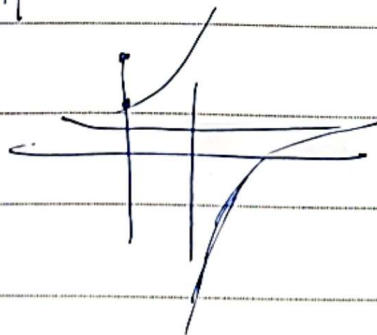
$$\Rightarrow -2 = \text{مشتق در } x=0 \text{ دو باره یکسان باشد}$$

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

$$\frac{n-2\sqrt{n}+3}{n-2\sqrt{n}+1} \Rightarrow \frac{(\sqrt{n}-3)(\sqrt{n}-1)}{(\sqrt{n}-1)(\sqrt{n}-1)} = \frac{\sqrt{n}-3}{\sqrt{n}-1} \quad (A) \quad \checkmark$$



مشتق
- مشتق
- مشتق



$$= \frac{1}{n} + \frac{1}{n+1} + \frac{1}{n^2+n} \quad (A) \quad \checkmark$$

$$\frac{u^2(u+2) - (u+2)}{u^2-1} = \frac{u^2-1(u+2)}{u^2-1} \Rightarrow 10 \quad (2)$$

اعدادی که در راسته جزئی داریم را مقبوضه می‌نامند $y = u+2$

$$\frac{u+2}{u^2-1} = \frac{1}{u-1} + \frac{3}{u+1} \quad (4)$$

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