

تکلیف نمبر 45

دوازدهم رجب A

فانظر سعي

IV, VΔ

③

二

$$\{ \pi \Sigma_0$$

$$\leftarrow \frac{1}{3} = \lim (\leftarrow$$

$$f - xmg + \sigma = \frac{3 + 7m}{1 + xmg}$$

$$27(12.00) = 324 \quad + \quad \frac{12}{12-0.7}$$

✓

3 = 2

+



A hand-drawn diagram of a cell. It features a large, irregular outer boundary. Inside, there is a smaller, roughly circular nucleus with a central dot. To the right of the nucleus is a large, clear, oval-shaped vacuole. The entire diagram is drawn with simple black lines.

(2)

✓

$$= \frac{(Y-X)P}{(Y-X)3} \quad (r)$$

$$mT - \frac{1}{2}n - i \quad c > n$$

7

الف) $\frac{m+1}{m-9} = y \Rightarrow 2ym - 9y \leq m+1 \Rightarrow m(2y-3) = 9y+1 \Rightarrow R_f = 1R - \left\{ \frac{3}{2} \right\}$ ✓

ب) $\text{مربع بدین راکیان} = R - \left\{ \frac{a}{c} \right\} = 1R - \left\{ \frac{1}{2} \right\} \Rightarrow R_f = [0, +\infty) - \left\{ \frac{1}{2} \right\}$ ✓

ج) $\frac{x^2+3}{\sqrt{x^2+3}} + \frac{1}{\sqrt{x^2+3}} = \sqrt{x^2+3} + \frac{1}{\sqrt{x^2+3}}$ $\xrightarrow{\text{مقدار } a}$ $\frac{a+\frac{1}{a}}{a \geq 0} \rightarrow \text{کتابتین} = \sqrt{x^2+3} + \frac{1}{\sqrt{x^2+3}} = \frac{x}{\sqrt{x^2+3}} \Rightarrow$ (2)

د) $\min = \frac{1}{2} \Rightarrow R_f = \left[\frac{1}{2}, +\infty \right)$ ✓ $R_f = \left[\frac{1}{\sqrt{2}}, +\infty \right)$

$\frac{3m^2+5}{m^2+1} = y \rightarrow ym^2 - y + 3m^2 + 5 \rightarrow (y-3)m^2 = 5+y \rightarrow m = \sqrt{\frac{5+y}{y-3}} \geq 0$

$\frac{-5}{3} \rightarrow R_f = (-\infty, -\frac{5}{3}] \cup [3, +\infty)$ ✓ (2) (6)

تذکره ۲ = در مربع (۳) را به تابع می دهیم

$x^2 \rightarrow y = -\frac{5}{3} \quad \left\{ (-\infty, -\frac{5}{3}] \cup [3, +\infty) \right.$

$x^2 = +\infty \rightarrow y = 3$

مخرج ۰ $\rightarrow x^2 = 1 \rightarrow m = \pm 1$

$\min \sin = -1$ $\frac{2(-1)+5}{-1-2} = \frac{3}{-3} = -1$ (2) (5)

$\sin = 0 \rightarrow -\frac{5}{2}$

$\sin = 1 \rightarrow \frac{2+5}{1-2} = -\frac{7}{1} = -7$

$\Rightarrow R_f = [-7, -1]$ ✓

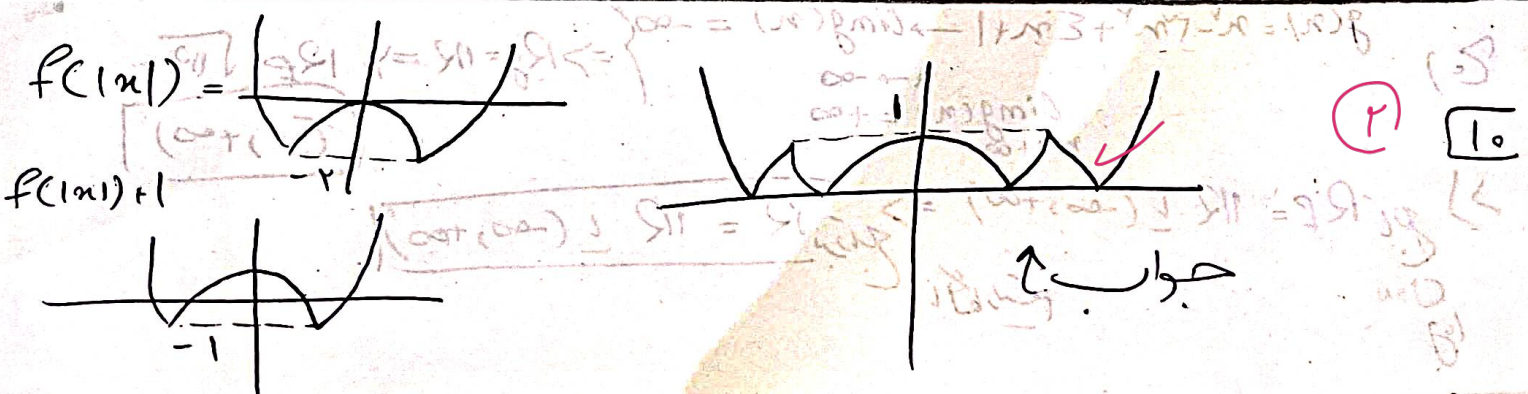
الف) $y = \frac{x}{x-1}$ $R_f = [0, +\infty) - \left\{ \frac{3}{2} \right\}$ (1) (A)

ب) $\sqrt{\frac{a(n-2)}{E(n-2)}} = \sqrt{\frac{a}{E}} = \frac{1}{2} = R_f$ ✓

جواب در نقطه مثبت مثبت !!
ریشه دوم غیر منفی

$\begin{cases} x \geq 0; & x^2 - 2m \\ x < 0; & -x^2 - 2m \end{cases}$ ✓

$R_f = [1, +\infty)$ (9) (V)



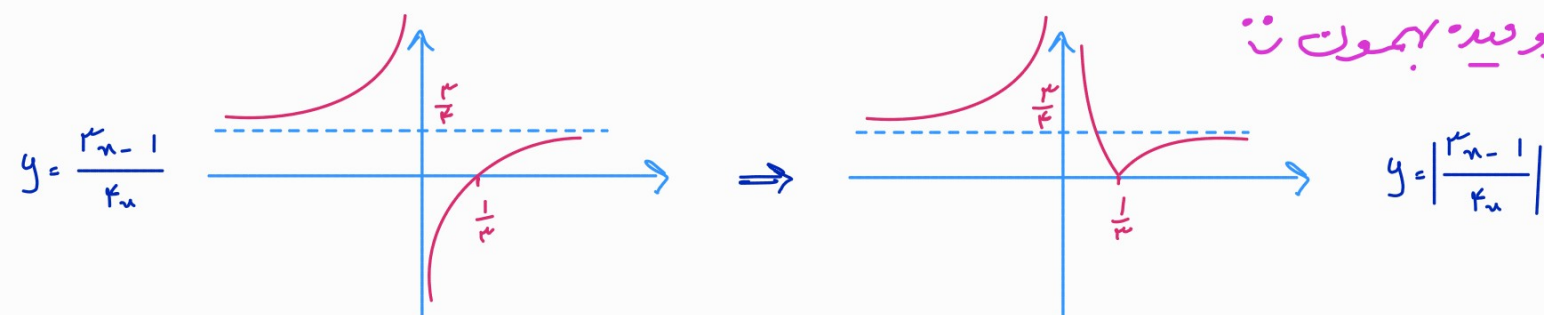
۸- اول برد عبارت داخل قدر مطلق
رو حساب می کنیم بعد قدر مطلق می گیریم

$$R_y = \left| \mathbb{R} - \left\{ \frac{3}{4} \right\} \right| = [0 + \infty)$$

فقط خواست باشد که $y = \frac{3}{4}$ هم هست داخل برد

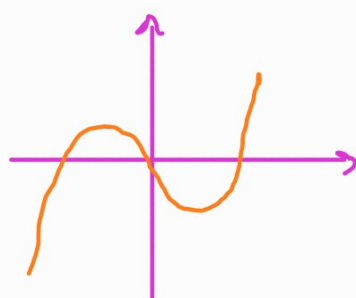
$y = -\frac{3}{4}$ عضو برد عبارت داخل قدر مطلق هست و وقتی قدر مطلق بگیریم $y = \frac{3}{4}$

رو صید بهمون ن



$$۸-ب) y = \sqrt{\frac{4(n-2)}{4(n-2)}} = \sqrt{\frac{4}{4}} = \frac{3}{2} \Rightarrow R_y = \left\{ \frac{3}{2} \right\}$$

$$y = \begin{cases} x^2 - 2x & x \geq 0 \\ -x^2 - 2x & x < 0 \end{cases}$$



$$\Rightarrow R_y = \mathbb{R}$$

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