

$$x > c \Rightarrow y = x + \frac{1}{x}$$

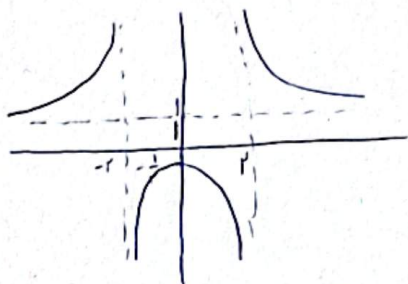
$$y \geq 2 \quad (-)$$

$y \geq 2$ چون دور y قدر مطلق

است برای صفی‌ها نعم همین

اسی طرح $\sin x = y = \sin^{-1} y$

$$x^2 - y^2 - z^2 = 0$$



$$R_f = IR - \left(-\frac{1}{F}, 1\right]$$

$$x'' + px' + q = x_1 y + x_2 y$$

$$x^{r+(p-y)} x^{-(r+\tilde{r}y)}$$

$$x = \frac{y - r \pm \sqrt{y^2 + 4y + 1r^2}}{r}$$

$$x = \frac{y-r \pm \sqrt{y^2 + 4y + 1r}}{2} \Rightarrow Dy = R - (-4, -1) = R5$$

$$x' - x = t \Rightarrow D_b = [-\frac{1}{\epsilon}, +\infty)$$

$$y = \frac{b + \frac{1}{f}}{t+1} \quad \begin{cases} t = -\frac{1}{f} & y = 0 \\ t = +\infty & y = 1 \end{cases} \quad \begin{array}{l} D_f = \mathbb{R} \\ R_f = [0, 1) \end{array}$$

$$y = \sqrt{2x - 1}$$

$$-\frac{b}{r_a} = r \Rightarrow y = \sqrt{-1} = -1$$

$$-\infty < y < +\infty$$

$$R_f = [-r_2, +\infty)$$

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(الف)
 $F(n) = -n + F(n-1) \rightarrow -\frac{b}{Pa} \cdot r$
 $R_{F(n)} = (-\infty, \mu]$
 $F(n)_{max} = \mu$

$$R \sqrt{f(n)} = [0, \sqrt{n}]$$

$$P_f = (0.9 + \infty)$$

$$y = \log_p \left(\underbrace{x + \frac{1}{x}}_{x > 0} \right) \rightarrow x + \frac{1}{x} \geq 5$$

$$y \geq \log_r^r$$

$$R_f = [1, +\infty)$$

$$y \geq 1$$

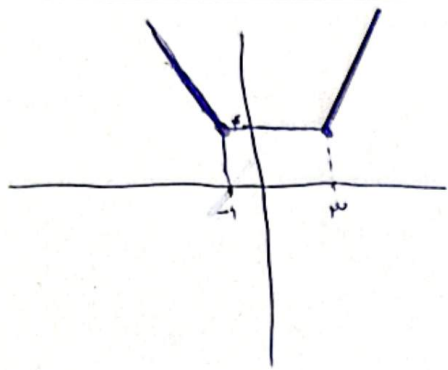
(-)

الف) $\mathbb{R}$
 $f(x) = x^3 - x + 1$

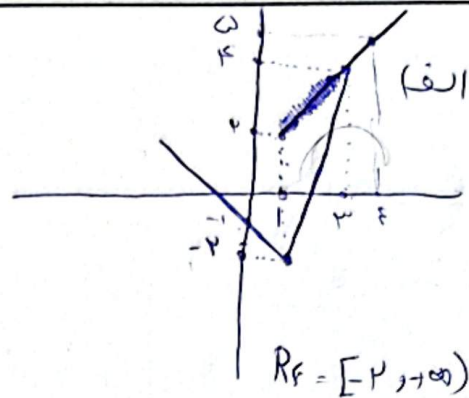
$$R_F = 1R$$

$$f_{(x)} \rightarrow 0^+ \quad \log(f_{(x)}) = -\infty$$

$$f(n) \rightarrow +\infty \quad (\log f(n) = +\infty)$$

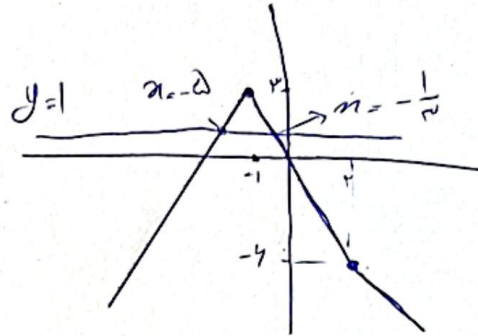


$$Rf = [1, +\infty)$$



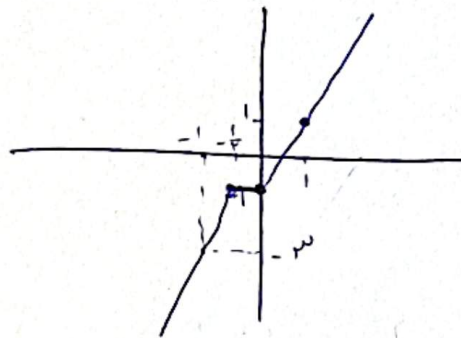
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$$[-\infty, -\frac{1}{2}]$$



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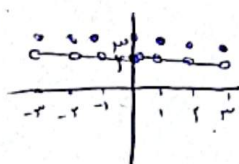
$$Rf = \mathbb{R}$$



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$$y = [x] + [-x] + 3$$

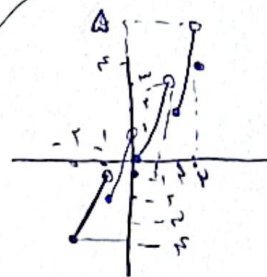
$$Ry = \{2, 3\}$$



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$$\begin{aligned} -2 \leq x < -1 &\rightarrow 3x+2 \\ -1 \leq x < 0 &\rightarrow 3x+1 \\ 0 \leq x < 1 &\rightarrow 3x \\ 1 \leq x < 2 &\rightarrow 3x-1 \end{aligned}$$

$$x=2 \rightarrow y=5$$



$$Rf = [2, 3]$$

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$$y \begin{cases} \sin = 0 \rightarrow y = 1 \\ \sin = 1 \rightarrow y = 1 \\ \sin = \frac{1}{2} \rightarrow y = \frac{3}{2} \end{cases}$$

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$$\sin^2 = 0 \rightarrow y = 1$$

$$\sin^2 = 1 \rightarrow y = 3$$

$$\sin^2 = \frac{1}{2} \rightarrow y = \frac{3}{2}$$

$$1 \leq y \leq 3$$

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