

۱۸/۲۵

رومیاناده

$$y - 3x = \{(-1, 2), (0, 0), (1, 2)\}$$

$$y = 0, x = 1 \quad \checkmark$$

راه حل کامل بنویس

(۲)

$$\left. \begin{array}{l} R_f = [0, +\infty) \\ R_g = (-\infty, 2] \end{array} \right\} R_f \cup R_g = [-\infty, 2] \cup [0, +\infty) \quad \checkmark$$

(۲)



$$K_s = 1$$

$$y_s = \frac{y}{x}$$

$$-\frac{x^2}{y} + x + 3 > \frac{y}{x}$$

(۲)

$$-x^2 + 2x + 4 - 3 > 0$$

$$x^2 - 2x - 3 < 0 \rightarrow -1 < x < 3$$

$$-1 < x < 3$$

$$\frac{-1 \pm \sqrt{1+12}}{2}$$

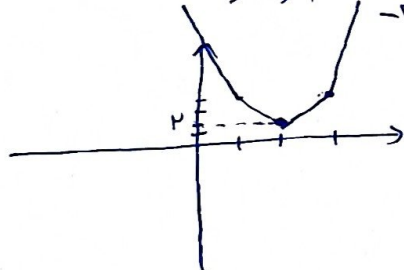
$$(a, b) = (-1, 3)$$

$$\min a = -1$$

$$\max b = 3$$

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

$$K_s = 1, 3, 2$$



	1	2	3
$-x^2 + 1$	$x - 1 + 3 - x$ $+ 4 - 2x$ $= 4 - 2x$	$x - 1 + 3 - x$ $+ 2x - 4$ $= 2x - 2$	$2x - 1$

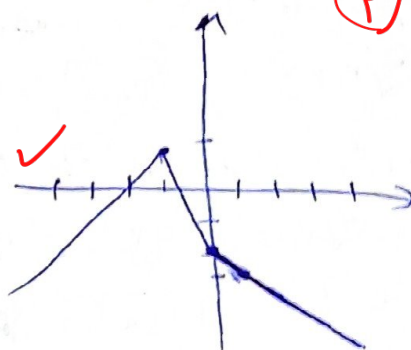
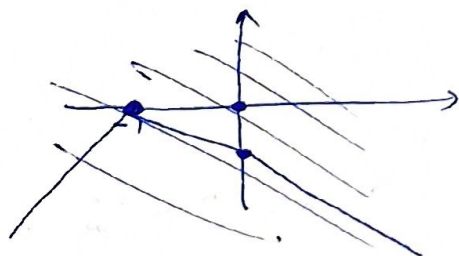
$$\min y = 2 \quad \checkmark$$

(۲)

$$K_s = -1, 0$$

	-1	0
$x+1$	$-3x-2$	$-x-2$

$$R_f = (-\infty, 1] \quad \checkmark$$



(۲)

$$x^2 + \omega x + m = 0$$

$$\rightarrow y = x + 2$$



پایسته رو بچون

$$\rightarrow 1 - \omega + m = 0 \rightarrow m = 1$$

محدوده $x = -1$ در این حالت $R = R - \{1\}$ در برنیت

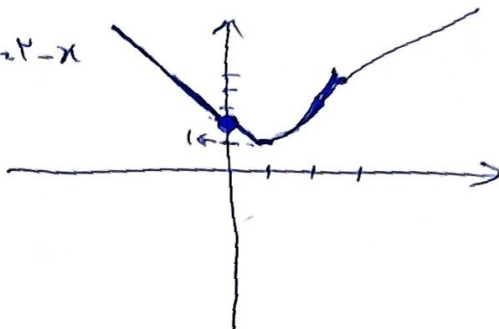
فقط چون علت حذف $m = 4$ رو درست نوشتن نمیشود

$$R = R - \{1\}$$

۱۵

$$x^2 + 2x + 2$$

$$|x| + 2 \rightarrow 2 - x$$



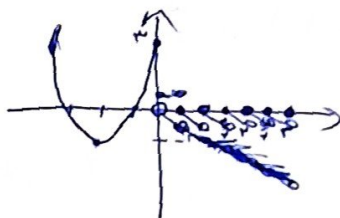
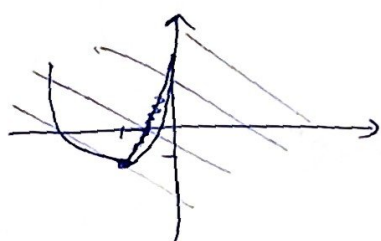
$$R_F = [1, +\infty)$$

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$$x^2 - 2x + 2$$

$$x_s = 1$$

$$y_s = 1$$



$$\rightarrow R_F = [-1, +\infty)$$

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$$x_s = -2$$

$$x^2 + 2x + 3 = (x+1)(x+3)$$

$$y_s = -1$$

$$x = -\frac{3}{4} \rightarrow y = a + 1 = \omega \rightarrow a = 2$$

$$-\frac{3}{4} = b \rightarrow ab = 2 \times (-\frac{3}{4}) = -\frac{3}{2}$$

۲

۹

$$D_f = D_g = [-1, 1]$$

$$x+1 \geq 0 \rightarrow x \geq -1$$

$$1-x \geq 0 \rightarrow x \leq 1$$

$$g(x) = 3\sqrt{x+1}\sqrt{1-x} \rightarrow 2\sqrt{x+1} + \sqrt{1-x}$$

$$(f(x))^2 = 3x^2 + 19 - 14x + 11\sqrt{1-x^2} = 11\sqrt{1-x^2} - 14x + 20$$

$$f(x) + g(x) = 3\sqrt{x+1}\sqrt{1-x} = 3\sqrt{(1+x)(1-x)} = 3\sqrt{1-x^2} \Rightarrow y = \frac{f(x)}{3} = \sqrt{1-x^2}$$

$$= \frac{3\sqrt{1-x^2}}{3} = \sqrt{1-x^2} \rightarrow R_F = [0, \sqrt{2}]$$

باید نه [1, 1]

محاسبه شود

۱, ۷۵

۱۰