

Date: / /

Subject: MathA: $f(x) = ax + b$ B: $f(x+1) + f(x+2) = 3x + f(3)$ C: $f(x) = x$

$$f(x) = ax + b \quad f(x+1) + f(x+2) = 3x + f(3)$$

$$a(x+1) + b + a(x+2) + b = 3x + (3a+b) \rightarrow$$

$$(a+a)x + (a+2a) + (b+b) = 3x + 3a+b$$

$$2ax + 3a + 2b = 3x + 3a + b \quad 2ax + 2b = 3x + a + b$$

$$2a = 3 \quad 2b = a + b \quad f(x) = x$$

$$y = \sqrt{f(x) - x^2} = \sqrt{x - x^2} \quad -\frac{b}{2a} = \frac{1}{2}$$

$$y_{\max} \rightarrow R_f = \sqrt{[-1, \frac{1}{2}]} = \sqrt{[-1, \frac{1}{2}]}$$

$$f(x) = \frac{x^2 - f}{x+1} \quad D_f = R - \{a, b\} \quad R_f = [(-\infty, -1) \cup (1, \infty)]$$

$$\frac{x(x^2 - f)}{x+1} = \frac{x(x-1)(x+1)}{x+1} = x(x-1)$$

$$x^2 - fx \quad x_{\min} = -\frac{b}{2a} = 1 \quad y_{\min} = -1$$

$$R_f = [-1, +\infty) \quad C = -1 \quad x^2 - fx = 1$$

$$(x-f)(x+1) = 0 \quad x = f \text{ or } -1 \quad D_f = R - \{-1, f\}$$

$$f(-1) = \frac{-1^2 - f(-1)}{-1+1} = \frac{-1 + f}{0}$$

$$y = \sqrt{x^2 + ax^2 + bx - 1}$$

$$y = \sqrt{(x-1)^2}$$

$$y = x-1 \quad a = -2 \quad b = 2$$

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

$$R_f = [-1, 1]$$

$$y = \left(\frac{x+1}{1-x} \right)^{\frac{1}{2}}$$

$$y = \sqrt{\frac{x+1}{1-x}}$$

در تون های لریک با نیاید (۱۵)

منفی باشد $\frac{x+1}{1-x} \rightarrow D_p = [-1, 1)$

$$D_p = (-\infty, 0) \cup (1, +\infty) \quad R_p = (-\infty, -\frac{1}{2}) \cup (a, +\infty)$$

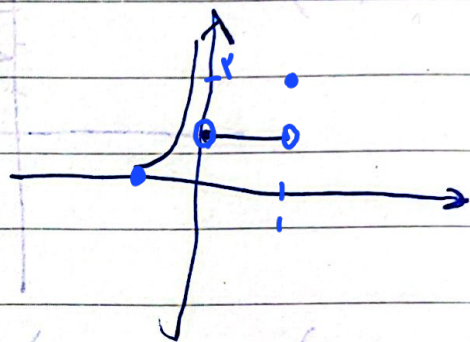
$$b = -1 \quad a = 1 \quad a + b = 0$$

$$a = 1 \quad b = 1 \quad \int_1^2$$

$$-1 \leq x < 0 \quad -\frac{1}{x}$$

$$0 \leq x < 1 \rightarrow \text{غیر}$$

$$0 < x \leq 1 \rightarrow [x] = 0 \quad f(x) = 1$$



$$\frac{1}{2} \leq x < 1 \quad [x] = 0 \rightarrow 1$$

$$1 \leq x < \frac{3}{2} \quad [x] = 1 \rightarrow 2$$

$$\frac{3}{2} \leq x < 2 \quad [x] = 1 \rightarrow 2$$

در 0, 1, 2



$$(x+1)^p < (ax+w)^p \quad (x+1)^p - (ax+w)^p < 0$$

$$x_1 = \frac{1}{1-a}$$

$$x_2 = -\frac{1}{1+a}$$

$$a = -1 \text{ غلط} \quad a = 1$$

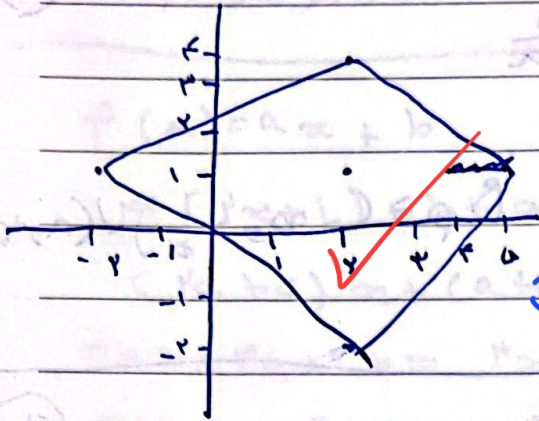
$$b = -1$$

$$a = b = \frac{1}{2}$$

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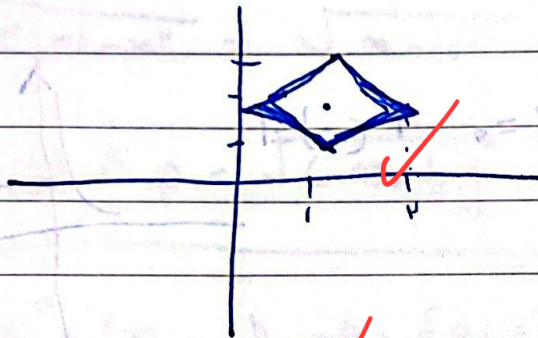
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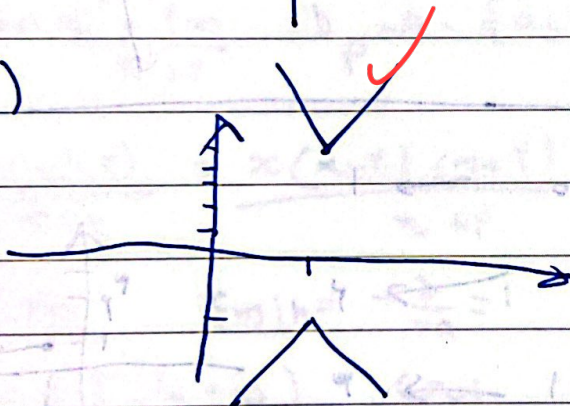


از جمله (۲۰۱) کتاب (تفاوت)
 ی رویه و در دست گردید
 در سال با ذکر ضابطه بنویس خواسته است

الف)



ب)



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●

$$x + a > 0$$

$$a > -x$$

$$x - a > 0$$

$$a < x$$

$$|a| < x$$

④