

نام و نام خانوادگی: پاسخنامه تشریحی تکلیف شماره V کلاس: یا: B

$$\text{if } x = \lambda \begin{cases} g(x) = 2\sqrt{x} \\ f(x) = x \end{cases}$$

$$x + 2\sqrt{x} = a + b\sqrt{\lambda + c}$$

$$a = x \quad b = 2$$

$$\lambda + c = x \quad c = -x$$

$$\frac{a+b}{c} = \frac{x}{-x} = -1$$

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$$x = x \rightarrow \frac{x+x}{x-\lambda+x} = \frac{x}{-1} = -x$$

$$g(x) = (x, -\frac{1}{x}), (0, 2)$$

$$x = 1 \rightarrow \frac{1+x}{1-x+x} = \frac{x}{0} = \text{تج}$$

$$f(x)$$

$$x = x \rightarrow \frac{x+x}{x-1+x} = \frac{x}{0} = \text{تج}$$

$$x = 0 \rightarrow \frac{x}{x}$$

$$f(x) = (x, -\frac{1}{x}), (0, \frac{x}{x})$$

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$$\text{الف) } (\frac{1}{x}, x), (\frac{x}{x}, -1), (x, x), (-\frac{1}{x}, 2)$$

$$\text{ب) } (1, x), (-1, x), (\sqrt{x}, -1), (x, x), (-x, x), (2, -\frac{1}{x})$$

$$\text{ج) } (x, 19), (1, x), (x, 9), (-1, 1)$$

$$\text{د) } xf = (1, x), (x, -1), (x, x), (-1, x), \frac{xf}{9} = (1, -x), (x, -1), \dots$$

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$$xf = (x, x), (x, x), (x, 18), (-x, 0)$$

$$xf + g = (x, 9), (x, 9), \dots, (-x, 2)$$

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$$x = -x \rightarrow x(x)^2 + 1 = 19 \quad (-x, 19)$$

$$x = 1 \rightarrow x(-1)^2 + 1 = x \quad (1, x)$$

$$x = x \rightarrow x(x)^2 + 1 = 9 \quad (x, 9)$$

$$x = -1 \rightarrow x(0)^2 + 1 = 1 \quad (-1, 1)$$

$$[x] + [-x] = \begin{cases} 0 & x \in \mathbb{Z} \\ -1 & x \notin \mathbb{Z} \end{cases}$$

پس $0 \neq g(x) + g(x)$ زمان x صحیح باشد.

$$\sqrt{x} - x \gg 0 \rightarrow 0 < x < 1$$

$$x = 0, 1$$

$$f(0) = f(1) = 0$$

$$(\frac{x}{x+1})x = 0 \quad x = 0, 1$$

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سوال 3

$f(1) = \sqrt{0-1-F} = 0$ $f(\mu) = \sqrt{10-F-F} = \sqrt{\mu}$ $f(F) = \sqrt{10-19-F} = 0$ $f(0) = \sqrt{10-10-F} = 0$ $f(x) = (1,0), (\mu, \sqrt{\mu}), (F,0)$	$\frac{f(x)}{g(x)} = (1,0), (\mu, \frac{\sqrt{\mu}}{\mu}), (F,0)$	6
الف) $y = (x-1)^{\mu+1} \rightarrow$ $\sqrt[3]{y-1} = x-1$ $\sqrt[3]{y-1} + 1 = x$ $R_f = \mathbb{R} = (-\infty, +\infty)$	ب) $y x^{\mu} - \mu x y - 1 = 0$ $x = \frac{\mu y \pm \sqrt{F_y^{\mu} + F_y}}{\mu y}$ $F_y^{\mu} + F_y \geq 0$ $F_y(y+1) \geq 0$ $R_f = (-\infty, -1] \cup [0, +\infty)$	
الف) $x_s = -\frac{b}{\mu a} = -\frac{-F}{\mu} = \mu$ ب) $x_s = -\frac{b}{\mu a} = -\frac{9}{\mu} = \mu$ ج) $x_s = -\frac{b}{\mu a} = -\frac{-F}{\mu} = \mu$ د) $x_s = -\frac{9}{-\mu} = \mu$	$y_s \xrightarrow{\text{جائز}} 9, [9, +\infty)$ $y_s \xrightarrow{\text{جائز}} 13, (-\infty, 13]$ $y_s \xrightarrow{\text{جائز}} \sqrt{-V}, \sqrt{-V}, +\infty) = [9, +\infty)$ $y_s \xrightarrow{\text{جائز}} 9, \sqrt{9}, +\infty) = [9, +\infty)$	8
الف) $\mathbb{R}$ ب) $\mathbb{R}$ ج) $\sqrt{\mathbb{R}} = [0, +\infty)$ د) $[0, +\infty)$ زيارته الـ μ كفت		9
الف) $R_f = \mathbb{R} - \{\mu\}$ ب) $R_f = \mathbb{R} - \{\mu\}$		10