

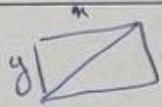
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به دلیل نوشتن نام، نام خانوادگی و نمره شما (۱۰) می باشد

$$\frac{\omega + a}{t} = \frac{\sqrt{5}\omega}{t} \quad 10 + 2a = 5\sqrt{5} + t \rightarrow a = 2.5\sqrt{5} \quad \frac{2 + 2.5\sqrt{5}}{t} = \frac{1.5\sqrt{5}}{t}$$

$$\frac{s_2}{s_1} = \frac{(2.5\sqrt{5} + 2)t}{\omega \times t} = \frac{2.5\sqrt{5} + 2}{\omega}$$

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$$\frac{\sqrt{x^2 + y^2}}{x} = \frac{1 + \sqrt{5}}{t} \rightarrow \frac{x^2 + y^2}{x^2} = \frac{9 + 2\sqrt{5}}{t} \rightarrow 1 + \frac{y^2}{x^2} = \frac{9 + 2\sqrt{5}}{t} \rightarrow \frac{y^2}{x^2} = \frac{9 + 2\sqrt{5}}{t} - 1$$

$$\frac{y^2}{x^2} = \frac{9 + 2\sqrt{5} - t}{t} = \frac{1 + \sqrt{5}}{t} \rightarrow \left(\frac{y}{x}\right)^2 = \frac{1 + \sqrt{5}}{t} \rightarrow \left(\frac{y}{x}\right)^2 = \frac{1 + \sqrt{5}}{1.5\sqrt{5}}$$

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$$r(a^2, b_2) = \langle a = 0, a = -x \rangle \quad \frac{x}{t} + (-\infty, -x] \cup [0, +\infty) \quad r(-2a), \quad x, 2a \quad \frac{x}{t} > a \text{ (ع)}$$

$$\textcircled{1} \cap \textcircled{2} = (-\infty, -x] \cup [0, \frac{x}{t}]$$

$$r(a^2, b_2) = t + 9a^2 - 12a \quad \forall a^2 - 4a + t \quad \langle a = 2a, a = \frac{x}{t} \rangle \checkmark$$

$$\frac{a+1}{a} = \frac{\frac{x}{t} + 1}{\frac{x}{t}} = \frac{a}{\frac{x}{t}} = \frac{a}{t} \checkmark$$

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

$$3(x+1) - x\sqrt{x-1} - 3 + \sqrt{x-1} - x\sqrt{x-1} + 3x\sqrt{x-1} - 3\sqrt{x-1} + 9 = -x^2 + 11x - 1$$

$$\frac{n+12+6\sqrt{3}}{n+12+5\sqrt{3}} \checkmark$$

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$$n+12 > n+1 \text{ (ع)}$$

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$$\textcircled{1} \cap \textcircled{2} \quad n > 1$$

$$r(-n), \quad x > n$$

$$r(\sqrt{x}, n) \neq, \quad t \neq r(-n, n \neq -2) \quad \sqrt{x} \neq t, \quad n \neq 2$$

$$(r-\sqrt{x}, n)(\omega\sqrt{x}, n) - (\sqrt{r-x}, 2)(\omega\sqrt{x}, n) = (r-n)(\sqrt{r-x}+2)(2-\sqrt{r-x})$$

$$10\sqrt{x}, n, \quad \omega x - 10 + \omega n - 10 - \omega\sqrt{x}, n = 4 \cdot n^2 \quad n^2 + 10n - 24 = 0$$

$$(n+12)(n-2) \quad n = -12 \quad \text{و به همین دلیل ندارد قطعی دارد} \quad n = 2a \quad \text{ع ق ق}$$

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$$\frac{1}{x^2} + \frac{1}{(1-x)^2} = \frac{14}{9} \rightarrow \frac{(1-x)^2 + x^2}{x^2(1-x)^2} = \frac{14}{9} \rightarrow \frac{x^2 - 2x + 1 + x^2}{(x^2 - 2x + 1)^2} = \frac{14}{9} \xrightarrow{x^2 - 2x + 1 = a} \frac{2a + 1}{a^2} = \frac{14}{9}$$

$$14 \cdot a^2 = 18a + 9 \rightarrow x = \frac{4}{11} \rightarrow x^2 - 2x = \frac{4}{11} \rightarrow \frac{1 + \sqrt{17}}{11} \rightarrow \textcircled{1}$$

$$x = \frac{-4}{11} \rightarrow x^2 - 2x = \frac{4}{11} \rightarrow \frac{1 - \sqrt{17}}{11} \rightarrow \textcircled{1}$$

$$1 + 1 = 2$$

$$-x^4 + 6x^2 + 4\omega x - 1 = 0 \rightarrow \begin{matrix} x_1 = -\omega \\ x_2 = 1 \\ x_3 = \omega \end{matrix}$$

$$(-\infty, -\omega) \cup [1, \omega] \textcircled{1}$$

$$-x^4 + 4x^2 - 1 = 0 \rightarrow \begin{matrix} x = 1 \\ x = -1 \end{matrix}$$

$$[1, 1] \textcircled{1}$$

$$x_1 > x_2 \rightarrow x_1 > x_2 \textcircled{1}$$

$$\textcircled{1} \textcircled{1} \textcircled{1} = \{1\} \rightarrow \textcircled{1}$$

$$\frac{14-x}{x} = |x+1| + |x-1|$$

$$\frac{14-x}{x} = x+1+1-x \rightarrow 14-x = 2x+2 \rightarrow 14-x = 4x+2 \rightarrow x = 1 \rightarrow y = 4$$

$$\rightarrow \sqrt{(x+1)^2 + (2-x)^2} = \sqrt{5}$$

$$\frac{1}{2}x + 1 = x + 1 \rightarrow x = 0 \rightarrow y = 4$$

$$\frac{1}{2}x + 1 = x + 1 \rightarrow x = 1 \rightarrow y = 4$$

$$\sqrt{x^2 + 1} = \sqrt{(x+1)^2} = |x+1|$$

$$s_1 = \frac{x^2}{x} = x$$

$$s_2 = \frac{4x^2}{x} = 4$$

$$\left. \begin{matrix} s_1 = x \\ s_2 = 4 \end{matrix} \right\} x+4=4$$

$$\frac{1}{x} + \frac{1}{x+9} = \frac{1}{x}$$

$$(x+9) \cdot \frac{1}{x} + \frac{1}{x+9} = \frac{1}{x} \rightarrow x+9 + \frac{1}{x+9} = \frac{1}{x} \rightarrow x+9 = \frac{1}{x} \rightarrow x^2 + 9x = 1 \rightarrow x^2 + 9x - 1 = 0 \rightarrow (x+4)(x+5) = 0$$

$$x = -4 \rightarrow \textcircled{1}$$