

نام و نام خانوادگی زهره احمدی پاسخنامه تشریحی تکلیف شماره ۱۳... کلاس ... پایه دهم (خبر) ...

$$\frac{-1}{2a-2} = 1 \rightarrow 2a-2 = -1 \rightarrow 2a = 1 \rightarrow a = \frac{1}{2} \rightarrow -\frac{1}{2}x^2 + x + \frac{1}{2} = 0$$

$$x^2 - 2x - 1 = 0 \rightarrow (x-1)(x+1) = 0 \rightarrow \begin{cases} x=1 \\ x=-1 \end{cases} \leftarrow \text{جواب}$$

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$$m < 0 \text{ و } 2a - 4m^2 > 0 \rightarrow 4m^2 < 2a \rightarrow m^2 < \frac{2a}{4} \rightarrow -\frac{\sqrt{2a}}{2} < m < \frac{\sqrt{2a}}{2}$$

$$m \in \left(-\frac{\sqrt{2a}}{2}, \frac{\sqrt{2a}}{2}\right) \leftarrow \text{جواب}$$

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$$S = 2, p = \frac{4}{9} \rightarrow f(x) = x^2 - 2x + \frac{4}{9} \rightarrow f(x) = 9x^2 - 18x + 4$$

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$$2(\alpha^2 + \beta^2) + \frac{\alpha^2 - \beta^2}{(\alpha + \beta)(\alpha - \beta)} \rightarrow 2(14 - m) - 2\sqrt{14 - 11m} = 12$$

$$14 - 2m = 2\sqrt{14 - 11m} \rightarrow m = 4 \leftarrow \text{جواب}$$

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$$a(x-2)^2 + 9 \rightarrow 2a + 9 = 5 \rightarrow a = -1 \rightarrow -x^2 + 4x + 5 = f(x)$$

$$-(x-5)(x+1) > 0 \rightarrow \frac{-1}{-1+1} \rightarrow x \in (-1, 5) \leftarrow \text{جواب}$$

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$$\frac{1}{\alpha} + \frac{1}{\beta} = \frac{\alpha + \beta}{\alpha\beta} = \frac{V}{9\beta} \rightarrow \alpha\beta = \frac{9\beta}{\alpha} \rightarrow \alpha^2 = 9 \rightarrow \alpha = \pm 3$$

β > 0 زیرا

$$\alpha + \beta = -\frac{V}{9}$$

$$\boxed{\frac{V}{9\beta} = \frac{V}{9}}$$

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$$\left. \begin{aligned} \alpha^2 &= -m\alpha + 2m \\ -m\beta &= \beta^2 - 2m \end{aligned} \right\} + \frac{2}{m} \rightarrow \beta^2 - m\alpha = \lambda \rightarrow \alpha^2 + \beta^2 - 2m = \lambda$$

$$\alpha^2 - 2m = \lambda \quad m^2 + 2m = \lambda$$

$$m^2 + 2m - \lambda = 0 \rightarrow (m+1)(m-1) = 0 \rightarrow m = 1 \text{ or } -1$$

$$\text{If } m = -1 \rightarrow \alpha^2 - 2\alpha + \lambda = 0 \rightarrow \Delta < 0$$

$$\text{If } m = 1 \rightarrow \alpha^2 + 2\alpha - 1 = 0 \rightarrow \boxed{\alpha + \beta = -2}$$

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$$\alpha = -\frac{2}{m} \rightarrow \frac{4}{m} - \frac{\lambda}{m} + \frac{m}{1} + 1 = 0 \rightarrow \frac{m^2 - 2m - \lambda}{m} = 0$$

$$\boxed{m = -2} \rightarrow (m-1)(m+1) = 0 \rightarrow m = 1 \text{ or } -1$$

$$\text{If } m = 1 \rightarrow -2\alpha^2 + 2\alpha + 4 = 0 \rightarrow \alpha^2 - \alpha - 2 = 0 \rightarrow \alpha = 2 \text{ or } -1$$

$$\boxed{2} = K$$

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$$a(n-1)^2 + 4 = f(n) \rightarrow 4a + 4 = 4 \rightarrow \boxed{a = -\frac{1}{4}}$$

$$f(n) = -\frac{1}{4}n^2 + 4n + 4 \rightarrow \frac{\alpha + \beta}{\alpha\beta} = \frac{4}{-1} = \boxed{-\frac{1}{4}}$$

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$$\alpha^2 - 4(a+1)\alpha + 3(a+1)^2 = 0 \rightarrow 1 - 4(a+1) + 3(a+1)^2 = 0$$

$$3t^2 - 4t + 1 = 0 \rightarrow t = \frac{1}{3} \rightarrow \boxed{a = -\frac{1}{3}}$$

$$\text{If } a = 1 \rightarrow \alpha^2 - 8\alpha + 16 = 0 \rightarrow \boxed{\alpha = 4}$$

$$t = 2 \rightarrow \boxed{a = 1}$$

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$$\text{If } a = -\frac{1}{3} \rightarrow \alpha^2 - \frac{4}{3}\alpha + \frac{8}{3} = 0 \rightarrow \boxed{\alpha = \frac{2}{3}, \frac{4}{3}}$$