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نام و نام خانوادگی (نام و نام خانوادگی) پاسخنامه تشریحی تکلیف شماره ۱۳۰ کلاس

$$x_3 = 2 \rightarrow -\frac{b}{a} = 2 \rightarrow \frac{-1}{2(a-1)} = 2 \rightarrow 2a - 2 = -1 \rightarrow a = \frac{1}{2}$$

$$a = \frac{1}{2} \rightarrow -\frac{1}{2}x^2 + x + 3 = y \xrightarrow{y=0} -\frac{1}{2}x^2 + x + 3 = 0 \xrightarrow{\text{ضرب در ۲}} x^2 - 2x - 6 = 0$$

$$(x+2)(x-4) = 0 \rightarrow \begin{cases} x = -2 \\ x = 4 \end{cases} \rightarrow \text{جواب}$$

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$$\Delta > 0 \rightarrow 4 - 4m^2 > 0 \rightarrow m^2 < 1 \rightarrow -1 < m < 1$$

$$\text{نشان} \rightarrow \alpha < 0 \quad m < 0 \quad (1) \wedge (2) \Rightarrow -1 < m < 0$$

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$$x = \frac{3 - \sqrt{5}}{2} \rightarrow 3x = 3 - \sqrt{5} \rightarrow 3x - 3 = -\sqrt{5} \xrightarrow{\text{ضرب در ۲}} 9x^2 - 11x + 8 = 0$$

$$9x^2 - 11x + 8 = 0 \rightarrow \frac{3 + \sqrt{5}}{2} \text{ ظاهر شود}$$

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$$S = -\frac{b}{a} = \frac{1}{2} = 2 \quad \begin{cases} \alpha + \beta = 2 \\ 3\alpha + \beta = 12 \end{cases} \rightarrow \beta = 2 - \alpha \rightarrow 3\alpha + 2 - \alpha = 12 \rightarrow 2\alpha = 10 \rightarrow \alpha = 5$$

$$p = \frac{m+1}{2} \rightarrow \alpha\beta = \frac{m+1}{2} \rightarrow (5)(2) = \frac{m+1}{2} \rightarrow m+1 = 20 \rightarrow m = 19$$

$$r(s^2 - 12) - (5)(\frac{\sqrt{5}}{2}) = 2 \quad m = 19$$

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$$y = a(x-h)^2 + k \quad \begin{cases} h = 2 \\ k = 9 \end{cases} \rightarrow y = a(x-2)^2 + 9 \xrightarrow{(0, 9)} 9 = a(0-2)^2 + 9 \rightarrow 0 = 4a \rightarrow a = 0$$

$$9a + 9 = 0 \rightarrow 9a = -9 \rightarrow a = -1 \Rightarrow y = -(x-2)^2 + 9$$

$$-(x-2)^2 + 9 = 0 \rightarrow (x-2)^2 = 9 \rightarrow x-2 = \pm 3 \rightarrow \begin{cases} x = -1 \\ x = 5 \end{cases} \rightarrow (-1, 0)$$

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$\alpha\beta = \frac{9\beta}{\alpha} \quad \alpha + \beta = \frac{V}{\alpha} \longrightarrow \alpha^2 + \beta\alpha = V \xrightarrow{\alpha=3} 9 + 3\beta = V \rightarrow \beta = \frac{V-9}{3}$ $\hookrightarrow \alpha^2\beta = 9\beta \rightarrow \alpha^2 = 9 \rightarrow \alpha = \pm 3$ $\frac{1}{\alpha} + \frac{1}{\beta} = \frac{5}{0} \rightarrow \frac{V}{\alpha} \times \frac{\alpha}{9\beta} = \frac{V}{9\beta} \rightarrow \frac{V}{9\beta} \xrightarrow{\beta=\frac{V-9}{3}} \frac{V}{9} \quad \left[\frac{V}{9} \right]$	✓ ✓ 5 6
$\alpha + \beta = -m \xrightarrow{\text{جواب}} \alpha^2 + m\alpha - pm = 0 \quad \alpha^2 - m\beta = 1$ $\alpha\beta = -pm \quad \alpha^2 = m(r-\alpha) \quad m(r-\alpha) - m\beta = 1 \implies$ $-m(\alpha + \beta - r) = 1 \implies m(m+r) = 1 \rightarrow m^2 + rm - 1 = 0$ $(m+3)(m+r) \begin{cases} \epsilon = m & \Delta \cdot X \\ r = m & \Delta \cdot \checkmark \end{cases} \quad -m \begin{cases} -r & \checkmark \\ \epsilon & \checkmark \end{cases}$	✓ 1, 5
$\frac{-\Delta}{\epsilon\alpha} = 1 \rightarrow \frac{rm^2 + pm - 1}{\epsilon m} \rightarrow \frac{m^2 + 18m - 1}{rm} = 1 \rightarrow m^2 - rm - 1 = 0$ $(m-3)(m+r) \begin{cases} m = 3 & \text{مستبعد} \\ m = -r & \text{مستبعد} \end{cases} \quad m < 0 \rightarrow m = -r \rightarrow -r^2 + 3r + 7 = 0$ $\begin{cases} r \\ -1 \end{cases} \rightarrow \begin{cases} r > 0 \\ r < 0 \end{cases} \rightarrow \begin{cases} r = 3 \\ r = -7 \end{cases}$	✓ 5
$C = \omega \quad (r, y) \Rightarrow \epsilon a + r b + \omega = 7 \rightarrow \epsilon a + r b = 1$ $x_5 = -\frac{b}{c} = r \Rightarrow b = -\epsilon a$ $a = \frac{1}{\epsilon} \quad \frac{1}{\alpha} + \frac{1}{\beta} = \frac{5}{p} = -\frac{b}{c} = -\frac{1}{\omega}$ $a(r-1)^2 + 4(\cdot, r) \quad a = \frac{1}{r}$ $m^2 - rm - 1 = 0$ $\frac{1}{\alpha} + \frac{1}{\beta} = \frac{-1}{r}$ $-\frac{1}{\epsilon}x^2 + x + \omega = 0$	9 5
$x = r \rightarrow \epsilon - 14a - 1 + 18r + 9a + r = 0 \rightarrow \epsilon^2 - 14\epsilon - 1 = 0 \quad \Delta = 14$ $\frac{r \pm \epsilon}{4} \rightarrow \begin{cases} a = 1 \\ a = -\frac{1}{r} \end{cases} \rightarrow a = 1 \rightarrow x^2 - 14x + 1 = 0 \rightarrow (x-4)(x-10) \rightarrow \begin{cases} x = 4 \\ x = 10 \end{cases}$ $\epsilon = r, \frac{r}{r}$	10 1, 10