

$$\text{ment} = \frac{-b}{2a} = -1 \Rightarrow b = 2a, \quad \begin{cases} 1 = 9a + 3b + c \\ 9 = a - b + c \end{cases} \Rightarrow \begin{cases} -1 = 1a + 4b \\ -2 = 2a + b \end{cases}$$

$$\xrightarrow{b=2a} a = -\frac{1}{2}, \quad b = -1 \Rightarrow 9 = -\frac{1}{2} + 1 + c \Rightarrow c = \frac{11 + 1 - 2}{2} = \frac{10}{2} = 5$$

$$\Rightarrow \boxed{y = -\frac{1}{2}x^2 - x + \frac{10}{2}}$$

$$2x^2 + mx + m + 4 = 0, \quad \begin{cases} P > 0 \\ S > 0 \\ \Delta > 0 \end{cases} \Rightarrow \begin{cases} P \rightarrow \frac{m+4}{2} > 0 \Rightarrow m > -4 \\ S \rightarrow \frac{-m}{2} > 0 \Rightarrow m < 0 \\ \Delta \rightarrow m^2 - 4(m+4) > 0 \end{cases}$$

$$\Delta \rightarrow m^2 - 4m - 16 > 0 \Rightarrow (m-12)(m+4) > 0$$

$$\leftarrow \begin{array}{c} \begin{array}{ccccccc} & & - & + & & - & + \\ & & + & - & & + & - \end{array} \\ \begin{array}{ccccccc} & & - & + & & - & + \\ & & + & - & & + & - \end{array} \end{array}$$

$$\boxed{m = (-4, -4)}$$

$$\alpha + \beta = \frac{1}{\alpha\beta}, \quad 3x^2 + (2m-1)x + 2 - m = 0 \Rightarrow \begin{cases} \alpha + \beta = \frac{-b}{a} = \frac{-(2m-1)}{3} \\ \alpha\beta = \frac{c}{a} = \frac{2-m}{3} \end{cases} \Rightarrow$$

$$\frac{-(2m-1)}{3} = \frac{1}{\frac{2-m}{3}} \Rightarrow 2m^2 - 2m + 2 = 9 \Rightarrow 2m^2 - 2m - 7 = 0$$

$$\Rightarrow m = \frac{2 \pm \sqrt{4 + 56}}{4} = \frac{2 \pm \sqrt{60}}{4} = \frac{1 \pm \sqrt{15}}{2}$$

$$\begin{cases} m = -1 \\ m = \frac{3}{2} \end{cases}$$

صواب کردم $\Delta = -27$ و شرط دوسه
نقد جواب صحیحی

$$x^2 - x - 4 = 0 \quad S' = x_1^2 + \frac{1}{x_1} + x_2^2 + \frac{1}{x_2} = \frac{x_1^3 + x_2^3}{x_1 x_2} + \frac{x_1 + x_2}{x_1 x_2} =$$

$$P' = \left(x_1^2 + \frac{1}{x_1}\right) \left(x_2^2 + \frac{1}{x_2}\right) = x_1^2 x_2^2 + x_1^2 \frac{1}{x_2} + x_2^2 \frac{1}{x_1} + \frac{1}{x_1 x_2} = \frac{x_1^3 x_2^2 + x_1^2 x_2^3 + x_1^2 x_2 + x_1 x_2^2}{x_1^2 x_2^2} = \frac{-46 + 9 - \frac{1}{4} = -\frac{221}{4}}{4}$$

$$y = x^2 - S'x + P' \rightarrow x^2 - \frac{221}{4}x - \frac{221}{4} = 0 \Rightarrow \boxed{4x^2 - 221x - 221 = 0}$$

$$\sqrt{m} = t \Rightarrow \left(t^2 + \frac{1}{t^2} + 1\right)(t^2 - 1) = 2t \Rightarrow \frac{t^4 + t^2 + 1}{t^2} (t^2 - 1) = 2t$$

$$\Rightarrow \frac{t^4 - 1}{t^2} = 2t \Rightarrow t^3 = t^4 - 1 \xrightarrow{t^3 = m} x^2 - 2x - 1 = 0 \Rightarrow x = 1 \pm \sqrt{2}$$

$$\Rightarrow \begin{cases} x_1 = 1 + \sqrt{2} \\ x_2 = 1 - \sqrt{2} \end{cases} \Rightarrow x_1 + x_2 = 1 + \sqrt{2} + 1 - \sqrt{2} = \boxed{2}$$

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$$\Rightarrow u_1 = \pm \frac{y}{y_3}$$

$$\left. \begin{aligned} r + \frac{y}{z} &= \frac{a}{z} \Rightarrow a = 1 \\ -r - \frac{y}{z} &= -\frac{1}{z} \Rightarrow a = -1 \end{aligned} \right\} \ominus \quad \wedge -(-1) = \boxed{14}$$

$$1 - \frac{2}{3} = -\frac{1}{3} \Rightarrow a = -1$$

• (10)

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ملحق لغتہ سرا

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$$1 = -9 - 2(-3 + b)$$

$$\Rightarrow b = 8$$

دو عامل بهای برابرند ، $2 \times 1 + 1 \times 1 - 1 = 0$ ،
 و از طرفی

9

$$\begin{bmatrix} -4x1 \\ \frac{1}{f} \end{bmatrix} = \begin{bmatrix} 1,0 \end{bmatrix} = \boxed{-2}$$

$$\Rightarrow n'' + 9n - n = 0$$

$$\eta^Y + \lambda \eta = 0$$

$$n(n+1) = 0$$

$$\eta \rightarrow \begin{matrix} \overset{0}{\underline{\underline{n=-a}}} \\ -a \end{matrix} \quad \begin{matrix} m=0 \rightarrow \\ \underline{\underline{m=a}} \end{matrix}$$