

$$x = \frac{-b}{2a} = 2 \rightarrow \frac{1}{2a-2} = 2 \rightarrow a = \frac{3}{2}$$

$$y = -\frac{1}{2}x^2 + x + 3 = 0 \quad \begin{cases} x = -2 \\ x = 4 \end{cases}$$

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$$a(0) \rightarrow m(0) \text{ (1)}$$

$$\Delta > 0 \quad 2\omega - 4m^2 = 0 \rightarrow 4m^2 = 2\omega \rightarrow m^2 = \frac{\omega}{2} \rightarrow m = \sqrt{\frac{\omega}{2}} \text{ (2)}$$

$$\textcircled{1} \cap \textcircled{2} = \frac{\omega}{2} < m(0)$$

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$$P = \left(\frac{2+\sqrt{5}}{3} \right) \left(\frac{2-\sqrt{5}}{3} \right) = \frac{4-5}{9} = -\frac{1}{9}$$

$$S = \left(\frac{2+\sqrt{5}}{3} \right) + \left(\frac{2-\sqrt{5}}{3} \right) = 2$$

$$x^2 - 2x + \frac{1}{9} = 0 \rightarrow \text{ضرب در ۹}$$

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$$S = 4 \quad P = \frac{m+2}{2} \quad \begin{matrix} a, B = 4 \\ B = 4 - a \end{matrix}$$

$$2\alpha^2 + (4-\alpha)^2 = 4 \quad 2\alpha^2 + 16 - 8\alpha + \alpha^2 = 4 \quad 3\alpha^2 - 8\alpha + 12 = 0 \quad \alpha^2 - 2\alpha + 4 = 0 \quad (\alpha-1)^2 = 0 \quad \alpha = 1$$

$$P = \frac{m+2}{2} = 3 \quad m+2=4 \quad m=2$$

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$$y = a(mx) + 4 \rightarrow a(-2) + 4 = 0 \rightarrow 4 - 2a = 0 \rightarrow a = 2 \rightarrow y = 2x + 4 \Rightarrow x^2 + 4x - 4 = 0$$

$$-x^2 + 4x - 4 = 0$$

$$(-1, 4)$$

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$$p = \frac{aB}{a}$$

$$s = \frac{v}{a}$$

$$\alpha + \beta = \frac{v}{a} \quad \begin{cases} a = v \rightarrow v + \beta = \frac{v}{v} \rightarrow \beta = \frac{v}{v} \\ a = -v \rightarrow -v + \beta = \frac{v}{-v} \rightarrow \beta = -\frac{v}{v} \end{cases} \alpha$$

$$\alpha\beta = \frac{v\beta}{a} \rightarrow \alpha = 1 \rightarrow \alpha = \pm v$$

$$\frac{1}{\alpha} + \frac{1}{\beta} = \frac{1}{-v} + \frac{1}{\frac{v}{-v}} = -\frac{1}{v} + \frac{v}{v} = \frac{-1+v}{v} = \frac{v-1}{v} = \frac{v}{v} = 1$$

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$$s = m \quad p = -vm \quad \alpha + \beta = m \quad \beta = -m - \alpha$$

$$\alpha^v - m(-m - \alpha) = 1 \quad \alpha^v + m^v + m\alpha = 1$$

$$\alpha\beta = vm \rightarrow \alpha(-m - \alpha) = vm \rightarrow \alpha^v + \alpha m = vm$$

$$m = v \rightarrow x^v + vx - 1 = 0 \rightarrow S = -v$$

$$m = -v \rightarrow x^v - vx + 1 = 0 \quad \Delta < 0 \quad \alpha$$

$$\begin{cases} m^v + vm = 1 \\ m^v + vm - 1 = 0 \\ (m+v)(m-v) = 0 \end{cases} \begin{cases} m = -v \\ m = v \end{cases}$$

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$$\frac{-\Delta}{ca} = 1 \rightarrow \frac{-1 + vm^v + vm}{vm} = 1 \rightarrow vm^v - vm - 1 = 0 \quad \begin{cases} m = v \\ m = -v \end{cases}$$

$$m = 0 \quad (m-v)(m+v) = 0$$

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$$m = -v \rightarrow vx^v + vx + 1 \xrightarrow{\div -v} x^v - vx - v \rightarrow (x-v)(x+1) \quad \begin{cases} x = v \rightarrow k = v \\ x = -1 \end{cases}$$

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$$ax^v + bx + c = y \rightarrow \epsilon a + vb + \epsilon = y \rightarrow \epsilon a + vb = y \rightarrow va + b = 1 \quad \textcircled{1} \quad va - \epsilon a = 1 \quad \epsilon a = 1$$

$$n_s = \frac{b}{\epsilon a} = v \rightarrow -b = \epsilon a \rightarrow b = -\epsilon a \quad \textcircled{1}$$

$$y = \frac{1}{v}x^v + vx + \epsilon \quad \begin{cases} x = v \\ x = -1 \end{cases} \quad \begin{matrix} \frac{1}{v} \\ -1 \end{matrix}$$

$$\alpha + \beta = -1 + \frac{1}{v} = \frac{1}{v}$$

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$$\epsilon - \epsilon a - 1 + va + va + v = 0 \rightarrow \epsilon a^v - \epsilon a - 1 = 0 \quad \begin{cases} a = 1 \\ a = -\frac{1}{v} \end{cases}$$

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$$p = v(a+1)^v = vx \xrightarrow{a=1} vx = vx \rightarrow x = 1$$

$$p = v(a+1)^v = vx \xrightarrow{a=\frac{1}{v}} vx = vx \rightarrow x = \frac{v}{v}$$

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