

$$3m^2 - an + 1 = 0 \quad B = 3a \rightarrow P = \frac{a}{3} \text{ و } 3x^2 + 2x + \frac{a}{3} = 0$$

$$\Delta = \frac{4}{9} \rightarrow 12a = a \rightarrow a = 1 \text{ و } -1 \rightarrow 1 - (-1) = 2$$

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$$4m^2 - (m+1)x + 1 = 0 \quad \frac{1}{\sqrt{a}} + \frac{1}{\sqrt{b}} = a$$

$$\hookrightarrow P = \frac{1}{4a} \quad S = \frac{m+1}{4a}$$

$$\frac{\sqrt{a} + \sqrt{b}}{\sqrt{ab}} = a \rightarrow a\sqrt{ab} = \sqrt{a} + \sqrt{b} \xrightarrow{\text{مربع}} 2ab = a + b + 2\sqrt{ab}$$

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

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$$En^2 + kn^2 - 9n - 1 = 0 \quad \alpha + \beta = 1 \quad \alpha\beta = -1$$

$$\hookrightarrow n^2 - n - 1$$

$$(n^2 - n - 1)(En + m) = En^2 + kn^2 - 9n - 1 \rightarrow En^2 - En^2 - 1n + mn^2 - mn - 1$$

$$\rightarrow En^2 + (m-1)n^2 - (1+m)n - 1 = En^2 + kn^2 - 9n - 1$$

$$\rightarrow k = m - 1 \quad -1 - m = -9 \rightarrow m = 8 \rightarrow k = 7$$

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$$m^2 + 4m + 9 = 0 \quad \alpha < \beta < 0 \quad 3\alpha^2 + 2\beta^2 - 5\alpha + 16$$

$$0 = 34 - 5a = \frac{-9 \pm \sqrt{81 - 5a}}{2} \rightarrow -3 + \sqrt{9-a} \rightarrow \beta$$

$$-3 - \sqrt{9-a} \rightarrow \alpha$$

$$3\alpha^2 = 5a - 3a + 11\sqrt{9-a}$$

$$2\beta^2 = 34 - 4a - 14\sqrt{9-a}$$

$$9 + 4\sqrt{9-a} - 5a = 12\sqrt{9-a} + 16$$

$$5 - 12\sqrt{9-a} = 5a - 4\sqrt{9-a}$$

$$\rightarrow a = 1$$

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$$m^2 - 2m^2 - 2 = 0 \rightarrow 6x - 7y - 2 = 0$$

$$\rightarrow \frac{V \pm \sqrt{49}}{2}$$

$$\rightarrow m_1 = \frac{V + \sqrt{49}}{2}$$

$$m_2 = \frac{V - \sqrt{49}}{2}$$

$$P_1 = -\frac{V + \sqrt{49}}{2}$$

$$P_2 = 2\left(-\frac{V + \sqrt{49}}{2}\right)^2 = 2\left(\frac{V^2 + 49 + 14\sqrt{49}}{4}\right)$$

$$S = 0$$

$$= 59 + 7\sqrt{49}$$

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$$r n^r - a n + b = 0 \rightarrow \begin{cases} s = \frac{a}{r} \\ p = \frac{b}{r} \end{cases}$$

$$r a n^r + a n - 4 \begin{cases} s = -\frac{1}{r} \rightarrow \alpha + \beta = \frac{1}{r} = \frac{a}{r} \Rightarrow a = 1 \\ p = -4 \rightarrow b = -4 \end{cases}$$

$$\rightarrow \left[\frac{ab}{\varepsilon} \right] = \textcircled{-4}$$

$$\alpha = 1 - \beta \quad \varepsilon \circ \beta^r + r \circ (1 - \beta)^r - r \circ \beta = 1 \Rightarrow r \circ \beta \frac{(\beta - 1)}{-\alpha} = -1$$

$$\rightarrow \alpha \beta = \frac{1}{r} = -\frac{b}{a}$$

$$\rightarrow a = -r \circ b \rightarrow a n^r - a n - b = 0$$

$$\rightarrow -r \circ b n^r + r \circ b n - b = 0 \rightarrow |\alpha - \beta| = \frac{\sqrt{a}}{|a|} = \textcircled{\frac{r}{\sqrt{a}}}$$

$$n^r - (a+1)n + a = 0 \rightarrow \alpha, \alpha + r \rightarrow s = a+1 = r\alpha + r$$

$$n^r - (4a+1)n + b = 0 \rightarrow \beta, \beta + r \quad p = a = a^r + r a^{r+1} \Rightarrow a+1 = a^r + r a^{r+1} + 1$$

$$\begin{cases} \alpha^r + r\alpha + 1 = r\alpha + r \rightarrow \alpha^r = 1 \rightarrow \alpha = \pm 1 \quad \frac{r\alpha}{\alpha^r} \quad \alpha = 1 \\ n^r - 1 \circ n + b = 0 \rightarrow s = 1 = r\beta + r \quad \underline{\alpha = r} \\ \rightarrow \beta = 1 \rightarrow b = \varepsilon \times 4 = 4\varepsilon \\ \text{and } \rightarrow r\varepsilon - 4 = \textcircled{r\varepsilon} \end{cases}$$

$$n^r + n - 1 - m^r = 0$$

$$\hookrightarrow s = -1$$

$$p = -1 - m^r$$

$$\alpha^r + \beta^r = s^r - r p$$

$$= (-1)^r - r(-1 - m^r)$$

$$1 + r + r m^r \rightarrow r m^r + r$$

$$= \frac{-b}{ra} = 0 \rightarrow \min = \textcircled{r}$$

$$y = a(n+1)^{r+1} \rightarrow \Delta = \sqrt{-\varepsilon a} = r \sqrt{-a}$$

$$a n^r + r a n + a + 1$$

$$-1 + \sqrt{\frac{-1}{a}}$$

$$\rightarrow \frac{-ra \pm r \sqrt{-a}}{r} \div \frac{-a \pm \sqrt{-a}}{a} < -1 - \sqrt{\frac{-1}{a}}$$

$$\alpha^r + \beta^r = s^r - r p = r \left(1 - \frac{1}{a}\right) = \Delta \rightarrow \alpha = -\frac{r}{r}$$

$$y = -\frac{r}{r} n^r - \frac{\varepsilon}{r} n + \frac{1}{r} \xrightarrow{n=0} y = \textcircled{\frac{1}{r}}$$