

۲۰ افزودن!

α
 3α

$$S = 4\alpha$$

$$P = 3\alpha^2 = \frac{4}{3} \Rightarrow \alpha^2 = \frac{4}{9} \Rightarrow \alpha = \frac{2}{3}, -\frac{2}{3}$$

$$S = \frac{a}{p} = \frac{1}{3} \cdot \frac{1}{-1} - \frac{1}{3} \Rightarrow a = 1, -1 \quad 1 - (-1) = 19 \checkmark$$

(۲)

$$\sqrt{\frac{1}{\alpha}} + \sqrt{\frac{1}{\beta}} = \frac{\sqrt{\alpha} + \sqrt{\beta}}{\sqrt{\alpha\beta}} = a \quad P = \frac{1}{14} \Rightarrow \sqrt{P} = \frac{1}{4}$$

$$\Rightarrow (\sqrt{u} + \sqrt{v})^2 = \left(\frac{a}{4}\right)^2 = u + v + \frac{2}{4}$$

$$\Rightarrow u + v = \frac{m+14}{14} = \frac{13}{14} \Rightarrow m = -1 \quad \rightarrow -u^2 + 3m + 2 = 0$$

$$P = -2 \checkmark$$

(۲)

$$S = 1 \Rightarrow \text{معادله: } u^2 - u - 2$$

$$P = -2$$

با $\alpha + \beta$ و $\alpha \cdot \beta$ معادله درجه دو می سازیم

$$(2m+1)(u^2 - u - 2)$$

$$= 2m^3 - 3m^2 - 9m - 2$$

سهین چون درجه 3 داریم باید به پراتر رنگه هم ضرب کنیم
بأنوجه به ضرب درجه 3، 2- آخر عبارت 1 عبارت مورد نظر پیدا میشود <

$$K = -3 \checkmark$$

(۲)

$$\Delta = 4(9-a)$$

$$a = \frac{-4 \pm \sqrt{\Delta}}{2} \begin{cases} a = -2 - \sqrt{9-a} \\ a = -2 + \sqrt{9-a} \end{cases}$$

$$\Rightarrow 3a^2 + 2\beta^2 = 9 - 5a + 4\sqrt{9-a} = 12\sqrt{2} + 10$$

$$\Rightarrow a = 1 \checkmark$$

(۲)

$$u^2 = t \quad t^2 - vt - \omega = 0 \Rightarrow t = \frac{v \pm \sqrt{v^2 + 4\omega}}{2}$$

$$\Delta = 49$$

$$S = -\square + \square = 0$$

$$P = -\square \times \square = -\square^2 = -\frac{v + \sqrt{49}}{2}$$

$$2P^2 - 3SP + 1S = 59 + 7\sqrt{49} \checkmark$$

(۲)

$$rm^r - an + b = 0$$

$$S = -\frac{1}{r}$$

$$rm^r + n - 4 = 0$$

$$\alpha = -\frac{r}{r} = -1, \beta = 1, 0$$

$$ram^r + an - 4$$

$$S' = S + 1 = \frac{1}{r} = \frac{q}{r} \rightarrow q = 1$$

$$rm^r - n + b = 0$$

$$\alpha' = -1, 0 \quad \beta' = r$$

$$p' = -r = \frac{b}{r} \rightarrow b = -4$$

چون ششها قرینه

$$\left[\frac{qb}{r} \right] = [-1, 0] = -r$$

$$|\alpha - \beta| = \frac{\sqrt{\Delta}}{|a|}$$

$$\rightarrow \frac{r}{\sqrt{0}} \checkmark$$

$$am^r - an - b = 0 \rightarrow n^r - n - \frac{b}{a} = 0$$

$$\beta^r - \beta - \frac{b}{a} = 0 \Rightarrow \beta^r - \beta = \left(+\frac{b}{a} \right) \Rightarrow -\frac{b}{a} = \frac{1}{r_0}$$

$$r_0 \beta^r + r_0 \alpha^r - r_0 \beta = 1 \sqrt{\frac{1}{r_0}} \Rightarrow r_0 \beta^r + \alpha^r - \beta = \frac{1}{r_0} \Rightarrow (\alpha + \beta)^r - r \alpha \beta = 1 - \frac{r b}{a}$$

$$n^r - (a+1)n + a = 0 \Rightarrow \begin{cases} S = a+1 \\ P = a \end{cases} \rightarrow \begin{cases} r\alpha + r = a+1 \\ \alpha^r + r\alpha = a \end{cases}$$

$$\Rightarrow \alpha = 1, \beta = r$$

$$S = r \quad P = r$$

$$a = r$$

$$m^r - (ra+1)n + b = 0 \begin{cases} S' = ra+1 = 10 \\ P' = b = r^r \end{cases} \quad \alpha' = r \quad \beta' = r$$

$$P' - P = r^r - r = r \checkmark$$

$$n^r + n - 1 - m^r = 0 \Rightarrow \alpha^r + \beta^r = S^r - rP = 1 + r + rm^r = rm^r + r$$

$$\min_{m=0} rm^r + r = r \checkmark$$

$$\text{ext} = \left| \begin{matrix} -1 \\ 1 \end{matrix} \right| \quad y = a(n - (-1)^r) + 1$$

$$\alpha^r + \beta^r = S^r - rP = (-r)^r - r \left(\frac{1+a}{a} \right) = \frac{ra+r}{a} = -1 \Rightarrow a = -\frac{r}{r}$$

$$y = -\frac{r}{r} n^r - \frac{r}{r} n + \frac{1}{r} \xrightarrow{n=0} y = \frac{1}{r} \checkmark \text{ فرضیه}$$