

$$\alpha = 2\beta$$

$$S = 1\beta = \frac{\alpha}{2}$$

$$P = 2\beta^2 = \frac{\alpha^2}{2}$$

$$P^2 = \frac{\alpha^2}{2}$$

$$P_1 \pm \frac{\alpha}{2}$$

$$\left\{ \begin{array}{l} \beta_1 = \frac{\alpha}{2} \rightarrow \alpha_1 = 2 \\ \beta_2 = -\frac{\alpha}{2} \rightarrow \alpha_2 = -2 \end{array} \right.$$

$$\frac{\alpha}{2} = 2 + \frac{\alpha}{2}$$

$$\alpha = 2$$

$$\frac{\alpha}{2} = -2 - \frac{\alpha}{2}$$

$$\alpha = -2$$

$$\left. \begin{array}{l} \alpha = 2 \\ \alpha = -2 \end{array} \right\} \rightarrow \alpha = 1$$

$$\frac{1}{\sqrt{\alpha}} + \frac{1}{\sqrt{\beta}} = \omega$$

$$\frac{\sqrt{\alpha} + \sqrt{\beta}}{\sqrt{\alpha\beta}} = \omega$$

$$\frac{1}{\sqrt{\alpha}} \rightarrow \frac{1}{\sqrt{\beta}}$$

$$\sqrt{\alpha} + \sqrt{\beta} = \frac{\omega}{2}$$

$$\alpha + \beta + 2\sqrt{\alpha\beta} = \frac{\omega^2}{4}$$

$$\frac{1+1}{4} + 2\sqrt{\frac{1}{4}} = \frac{\omega^2}{4}$$

$$\frac{11-h}{4} = \frac{1}{4}$$

$$11-h = 1 \quad h = 10$$

$$-x^2 + 10x + 1 = 0$$

$$P = \frac{1}{10} = 0.1$$

$$(r_1, \omega \alpha \pm r_1, \alpha \beta^2) + (r_2, \omega \alpha^2 - r_2, \alpha \beta^2) = 15r_1 + 10\omega$$

$$\alpha < \beta \rightarrow \omega$$

$$r_1 \omega (\alpha \pm \beta^2) + r_2 \omega (\alpha^2 - \beta^2) = 15r_1 + 10\omega \xrightarrow{\times \omega} \omega (\alpha \pm \beta^2) + (\alpha^2 - \beta^2) = 15r_1 + 10\omega$$

$$\omega (\alpha^2 - \beta^2) - 5 \times \frac{\sqrt{10}}{10} = \omega (15 - 10) + 9 \times \frac{\sqrt{10} - 10}{1} = 15r_1 + 10\omega$$

$$S = -7 \quad P = 0$$

$$10 \cdot \frac{-1 \pm \sqrt{1+4}}{2} + 4 \sqrt{10} - 10 = 15\sqrt{10} + 10 \Rightarrow \alpha = 1$$

$$\alpha + \beta = 1 \xrightarrow{(\cdot)} \alpha \pm \beta^2 + 2\alpha\beta (\alpha + \beta) = 1$$

$$\alpha \pm \beta^2 + 2(-1)(1) = 1$$

$$\alpha \pm \beta^2 = 3$$

$$\alpha + \beta = 1 \xrightarrow{(\cdot)} \alpha \pm \beta^2 + 2\alpha\beta = 1 \quad \alpha \pm \beta^2 = 3$$

$$(\alpha^2 + h\alpha - 9\alpha - 1 + \beta^2 + h\beta^2 - 9\beta - 1 = 0 \quad (\alpha \pm \beta^2) + h (\alpha + \beta^2) - 9 (\alpha + \beta) - 2 = 0$$

$$11 + h - 9 - 1 = 0 \quad h = -1 \quad h = -1$$

$$x^2 + t \rightarrow t^2 - vt - \omega = 0$$

$$\frac{v \pm \sqrt{v^2 + 4\omega}}{2} = \frac{v \pm \sqrt{49}}{2}$$

$$\frac{v - \sqrt{49}}{2} = 0 \rightarrow \alpha = 2$$

$$x = \frac{v \pm \sqrt{49}}{2}$$

$$\alpha = \pm \sqrt{\frac{v \pm \sqrt{49}}{2}}$$

$$S = 0$$

$$P = - \left(\frac{v \pm \sqrt{49}}{2} \right)^2$$

$$P = \frac{(9+49) + 14\sqrt{49}}{4} = \frac{111 + 14\sqrt{49}}{4} = \frac{29 + \sqrt{49}}{2}$$

$$1P = 15P + 15 = 15 \times \frac{29 + \sqrt{49}}{2} = \frac{435 + 15\sqrt{49}}{2}$$

$$r_1 \alpha^2 + a\alpha - 4 = 0 \quad s_1 = -\frac{1}{r} \quad p_2 = -\frac{r}{a} = \alpha\beta = -r \quad -9$$

$$r_1 r^2 - a\alpha + b = 0 \quad s_r = \frac{a}{r} = s_1 + 1 \quad \frac{a}{r} = \frac{1}{r} \quad (a=1)$$

$$p_2 = \frac{b}{r} = (\alpha + \omega_1\omega)(\beta + \omega_1\omega) = \alpha\beta\omega + \alpha\beta + \omega_1\omega(\alpha + \beta)$$

$$\alpha\beta\omega = r + \omega_1\omega(-\frac{1}{r}) = \frac{b}{r} \quad b = \alpha\beta\omega - 4 - \omega_1\omega = -4$$

$$\left[-\frac{4 \times 1}{r}\right], \left[-\frac{r}{r}\right] = -r$$

$$s = 1 \quad p = -\frac{b}{a} \quad -v$$

$$r_1 \beta^2 + r_2 \alpha^2 + r_3 \beta^2 - r_4 \beta^2 = 1 \quad r_1 (\alpha^2 + \beta^2) + r_2 (\beta^2 - \alpha^2) = 1$$

$$r_1 \left(1 + \frac{r_2 b}{a}\right) + r_2 \left(\frac{b}{a}\right) = 1$$

$$\alpha\beta^2 - \alpha\beta = b, \quad \beta^2 - \beta = \frac{b}{a}$$

$$r_1 + \frac{r_2 b}{a} = 1 \quad \frac{r_2 b}{a} = -r \quad \frac{b}{a} = -\frac{1}{r} \quad p = \frac{1}{r}$$

$$n^2 - s_1 n + p = n^2 - n + \frac{1}{r} = 0 \rightarrow \text{انقلاب} = \frac{\sqrt{D}}{2a} = \frac{\sqrt{1 - \frac{4}{r}}}{1} = \frac{\sqrt{1 - \frac{4}{r}}}{1} = \frac{\sqrt{r-4}}{r} = \frac{\sqrt{r-4}}{r}$$

$$\text{انقلاب} = r \quad n^2 - (a+1)n + a = 0$$

$$\frac{\sqrt{(a+1)^2 - 4a}}{1} = r$$

$$\alpha^2 - 2a - r = 0 \quad (a-r)(a+1) = 0$$

$$a = r \quad n^2 - r n + r = 0 \rightarrow a = r \checkmark$$

$$a = -1 \quad n^2 - 1 = 0 \quad \times$$

$$n^2 - 1 \cdot n + b = 0$$

$$\text{انقلاب} = r = \sqrt{1 - 4b}$$

$$1 - 4b = r$$

$$4b = 9 \quad b = \frac{9}{4} \rightarrow n^2 - 1 \cdot n + \frac{9}{4} = 0$$

$$p_1 = r \quad p_2 = 2r \rightarrow p_2 - p_1 = r$$

$$\alpha^2 \beta^2: s^2 - 2p \xrightarrow{s=-1} 1 - 2(-1 - r^2) = 2r^2 + 3 \rightarrow \text{min} \Big|_r$$

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$$\frac{r - (-\omega)}{r} = 1 \rightarrow \alpha = -1 \rightarrow \text{ex} \Big|_1 \quad a + b + c = 0$$

$$a - b + c = 1$$

$$\alpha^2 \beta^2: s^2 - 2p = \left(-\frac{b}{a}\right)^2 - 2\left(\frac{c}{a}\right) = 1 - \frac{2c}{a} = 0 \quad \frac{2c}{a} = 1 \quad \frac{c}{a} = \frac{1}{2}$$

$$a = -2c \rightarrow c - (-2c) = 1 \quad 3c = 1 \quad c = \frac{1}{3} \quad \frac{b}{a} = 2$$