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معادله را منفرد می کنند $\rightarrow$ ریشه α و β

$$\frac{4\alpha + \beta^5}{5\beta^2} = \frac{4\alpha}{5\beta^2} + \frac{\beta^3}{5}$$

$$\alpha^2 - 5\alpha + 2 = 0$$

$$\beta^2 - 5\beta + 2 = 0 \rightarrow \beta^2 = 5\beta - 2$$

$$\alpha + \beta = 5$$

$$\alpha^2 - 5\alpha + 2 = 0$$

$$\Delta = 25 - 4 \times 2 = 17$$

$$\alpha = \frac{5 \pm \sqrt{17}}{2}$$

$$\frac{\alpha^3}{5} + \frac{\beta^3}{5} = \frac{\alpha^3 + \beta^3}{5} = \frac{(\alpha)^3 - 3\alpha(2)(5)}{5}$$

$$= 19$$

$$- \frac{3}{2} \text{ تا } 3 \rightarrow \alpha \text{ نقطه}$$

راس $\leftarrow 5$

مجموعه ریشه ها برابر با دو برابر محور تقارن

$$\begin{vmatrix} -\frac{3}{2} & 2 \\ -4 & -4 \end{vmatrix} \text{ روی خط شکسته}$$

نقاط دارای عرض یکسان نقاط هم عرض هستند

و روی محور هم قرار دارند مجموعه ضلعها / مجموعه ریشه ها است

$$\frac{-b}{2a} \Rightarrow 1,5$$

$$\alpha^2 + 2k\alpha + 5 = 0$$

$$\left[\frac{k^2}{2} \right] = 4$$

-3

$$\frac{\sqrt{\Delta}}{|a|} = \frac{4}{2} k \rightarrow 4k^2 - 20 = \frac{14}{9} \rightarrow k^2 = 9$$

$$\begin{vmatrix} 3 & -5 \\ y & y \end{vmatrix}$$

$$\frac{-\Delta}{2a} = 10$$

راس (1 و -1)

-4

$$\alpha^2 + \beta^2 = 5 \rightarrow (\alpha + \beta)^2 - 2\alpha\beta = 5$$

$$y = a(\alpha^2 + 2\alpha - \frac{1}{2})$$

$$\frac{-b}{2a} = \frac{3-5}{2} = -1$$

$$4 - 2\alpha\beta = 5$$

$$\alpha\beta = \frac{1}{2} \rightarrow \frac{c}{a}$$

$$1 = (1 - 2 - \frac{1}{2})$$

$$a = \pm \frac{1}{3}$$

$$\frac{-b}{a} = -2$$

$$-\alpha^2 + 5\alpha + m = 0$$

$$\begin{vmatrix} \alpha & \beta \\ - & + & - \end{vmatrix}$$

$$\alpha = \frac{9}{2}$$

-5

$$\Delta > 0 \Rightarrow 25 - 4 \times 1 \times m > 0$$

$$a < 0$$

$$m > \frac{25}{4}$$

$$\begin{vmatrix} 0 & 0 \\ -\frac{9}{4} & \frac{25}{4} \end{vmatrix}$$

$$25 < -3, -9, -5, -9$$

$$\frac{-25}{4} < m < -\frac{9}{4}$$

$$y = \underbrace{mx^r}_{\psi} - 12x + \underbrace{\omega m - 1}_{12}$$

$$y = \psi x^r - 12x + 12$$

$$\text{Min } y = \underline{r}$$

$$\frac{-b}{ra} = \frac{12}{9} = \underline{r}$$

$$\frac{-12\psi + r_m(\omega m - 1)}{r_m} = r \rightarrow \omega m^r - \psi m - r\psi = 0$$

$$\frac{m}{m} = 1$$

$$\frac{-b \pm \sqrt{\Delta}}{ra} = \frac{\psi \pm r\psi}{1} = \psi \pm \frac{12}{9} = \psi \pm \frac{4}{3}$$

$$\alpha\beta x^r + r(a+r)x + ra - 1 = 0$$

$$\frac{ra - 1}{1} \rightarrow \alpha\beta = a^r \rightarrow ra - 1 = a^r \Rightarrow a^r - ra + 1 = 0$$

$$(a-1)^r = 0 \rightarrow a = 1$$

$$x^r - vx^r - \omega = 0 \rightarrow t = x^r$$

$$t^r - vt + -\omega = 0 \rightarrow rp^r - \psi sp + r\psi = ?$$

$$+ = \frac{-b \pm \sqrt{\Delta}}{ra} = \frac{v \pm \sqrt{r^2 + r}}{r} = v \pm \sqrt{r}$$

$$r \times (v \pm \sqrt{r})^r = \frac{r}{\sqrt{v \pm \sqrt{r}} \times \sqrt{v \pm \sqrt{r}}} = \frac{-v \pm \sqrt{r}}{r}$$

$$y = kx^r - rx - 9 \rightarrow \Delta \begin{vmatrix} -b \\ ra \end{vmatrix} \begin{vmatrix} r \\ k \end{vmatrix}$$

$$-r\left(\frac{r}{k}\right) - r \Rightarrow \frac{-r - rk}{k} = 0 \Rightarrow rk - r = 0 \Rightarrow k = r$$

$$\frac{-r - rk}{k} = \frac{-r - 12}{r} = -1$$

$$-mx^r + mx + 1 = -m - x$$

$$mx^r + (-m-1)x + 1 - m = 0 \rightarrow \Delta < 0$$

$$\omega m^r + 4m + 1 < 0 \rightarrow (m+1)(\omega m+1) < 0$$

$$m \in \left(-1, \frac{1}{\omega}\right)$$

