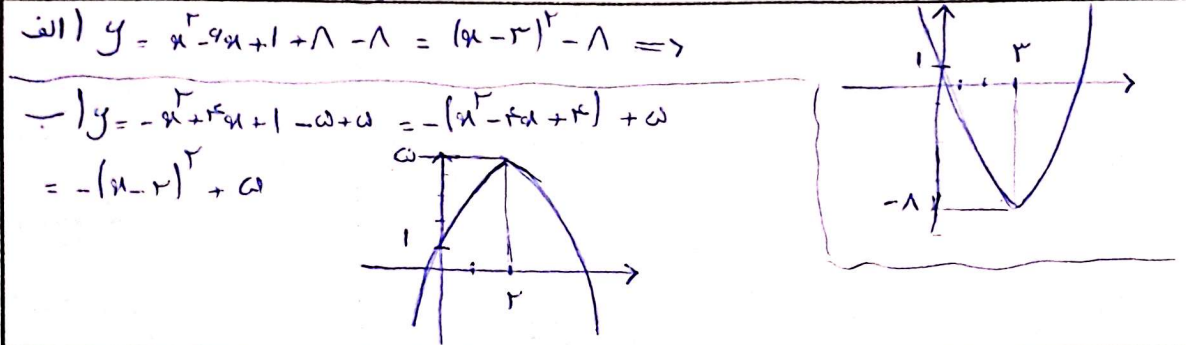


الف) $\min \left| \frac{b}{2a} \right| = 1 \quad 2(1)^2 - 4x + 1 = -1 \Rightarrow \text{ext: Min} \left| -1 \right| \leftarrow \text{پایخ}$

ب) $\max \left| \frac{b}{2a} \right| = \frac{3}{2} \Rightarrow \text{ext: Max} \left| \frac{3}{2} \right| \leftarrow \text{پایخ}$

$\frac{-\Delta}{2a} = \frac{-9-4}{-2} = \left(\frac{13}{2} \right)$



$\alpha\beta = -2, \alpha + \beta = 1 \Rightarrow \alpha = -1, \beta = 2$

$4(-1)^2 + k(1)^2 - 9(1) - 2 = 0$

$-4 - 2 + 9 + k = 0$

$K = -3$

$(\sqrt{\alpha} - \sqrt{\beta})^2 = (1)^2$

$\alpha + \beta - 2\sqrt{\alpha\beta} = 1$

$2m - 2\sqrt{m} - 1 = 0 \Rightarrow \sqrt{m} = \begin{cases} -\frac{1}{2} \text{ (غیرممکن)} \\ 1 \end{cases} \rightarrow m = 1$

$P' = \frac{c}{a} = \frac{-m}{2} = \left[-\frac{1}{2} \right] \leftarrow \text{پایخ}$

$\sum \text{شکل} = \left| \frac{m-2}{k} \right| \times |m| \times \frac{1}{k} = \frac{3}{k} \Rightarrow |m^2 - 2m| = 3$

$\begin{cases} |m|^2 - 2|m| - 3 = 0 \quad * \checkmark \\ |m|^2 - 2|m| + 3 = 0 \quad \rightarrow \Delta \times \end{cases}$

$* \rightarrow |m| = \begin{cases} -1 \text{ (غیرممکن)} \\ 3 \end{cases} \rightarrow m = \pm 3$

$P' = \frac{m}{2} = \left[\pm \frac{3}{2} \right] \leftarrow \text{پایخ}$

$b \text{ Min} \Rightarrow a > 0$

$$\frac{-\Delta}{r a} = -\frac{9-4a^2}{4a} = \frac{N}{r a} \Rightarrow \Lambda a^2 - Va - 1\Lambda = 0$$

$$\Rightarrow a = \begin{cases} -\frac{9}{4} \text{ (غیر طبیعی)} \\ 2 \end{cases}$$

$$a = 2$$

(بلصفا)

$\Rightarrow x = \left\{ \frac{a}{r} \right\}$ (در صورت طبیعی بودن) $\Rightarrow a = 3 \quad p = \frac{c}{a} = 3$

$$x - 1 \cdot x + b = 0 \quad (\text{احتمال نشینا} = 2) \Rightarrow \frac{\sqrt{\Delta}}{|a|} = 2 \Rightarrow \sqrt{1 - 4b} = 2 \Rightarrow 1 - 4b = 4$$

$$\Rightarrow b = -\frac{3}{4}$$

$$\Rightarrow x^2 - 1 \cdot x + \frac{3}{4} = 0$$

$$\hookrightarrow p' = \frac{r c}{r} = 3$$

$$p' - p = 3 - 3 = 0$$

$y_1 = -ax^2 + ax + r \text{ ext}_1 \quad \left| \frac{1}{r} \right.$

$$y_r = 1bx^2 - bx - 1$$

$$\text{ext}_r \quad \left| \frac{1}{r} \right.$$

$$y_r \Rightarrow \frac{1r}{1r} + (-1) + r = -\frac{1}{r}$$

$$y_1 \Rightarrow \frac{b}{r} - \frac{b}{r} - 1 = -1$$

$$y_1 \Rightarrow \frac{b}{\lambda} - \frac{b}{r} - 1 = -\frac{1}{r} \Rightarrow b = -\frac{9}{4}$$

$$b - a = 9$$

$$a = -12$$

$\alpha \beta = \frac{\beta}{r \omega \alpha} \Rightarrow \alpha = \pm \frac{1}{\omega} \left\{ \alpha + \beta = \frac{-r}{r \omega \alpha} \right\}$

$$\left\{ \begin{aligned} \alpha = \frac{1}{\omega} &\Rightarrow \beta = -1 \text{ (غیر طبیعی)} \quad \alpha < \beta \\ \alpha = -\frac{1}{\omega} &\Rightarrow \beta = 1 \end{aligned} \right.$$

$$\left. \begin{aligned} \beta = 0 &\Rightarrow \alpha = 0 \\ \alpha = 0 &\Rightarrow \beta = 0 \end{aligned} \right\} \Rightarrow \alpha = -\frac{r}{r \omega \alpha} \Rightarrow \alpha = -\frac{r}{r \omega \alpha}$$

$$y = -\omega x + r x + 1 = 0 \quad \left\{ \begin{aligned} x = 1 \\ x = -\frac{1}{\omega} \end{aligned} \right.$$

رأس در ناحیه اول

$ab = a + b - 1$

$$a + b = a^r + b^r - 1r \Rightarrow a + b = (a+b)^r - rab - 1r \xrightarrow{a+b=A} A = A^r - r(A-1) - 1r$$

$$\Rightarrow A^r - rA - 1 = 0 \Rightarrow A = \begin{cases} A = -r \text{ (غیر طبیعی)} \\ A = \omega \end{cases}$$

$$A = a + b = \omega$$