

$$\begin{aligned}
 x^y - \delta x + \gamma a &= 0 \quad S = +\delta \quad P = \gamma \\
 \beta^y &= \omega \beta - \gamma \Rightarrow \beta^y = \omega \beta^y - \gamma \beta \\
 \Rightarrow \beta^y &= \omega (\omega \beta - \gamma) - \gamma \beta = \gamma \omega \beta - 10 \Rightarrow \beta^y = 2.59 \beta - 10 \\
 \Rightarrow \frac{2.59 + \beta^y}{\omega \beta^y} &= \frac{19(\gamma \omega \beta - 10)}{\gamma \omega \beta - 10} = 19 \quad \checkmark
 \end{aligned}$$

$$x_{ext} = \frac{-b}{\gamma a} = \frac{\gamma}{2} \Rightarrow \frac{-b}{a} = \frac{\gamma}{\gamma}$$

$$\Rightarrow S = \frac{-b}{a} = \frac{\gamma}{\gamma} = 1,8 \quad \checkmark$$

$$\begin{aligned}
 \omega a &= \frac{\sqrt{A}}{|a|} \Rightarrow \sqrt{2K^y - \gamma} = \frac{\gamma}{\omega} K \Rightarrow \sqrt{2K^y - \gamma} = \gamma K \\
 \Rightarrow \sqrt{2K^y - \gamma} &= \frac{\gamma}{\omega} K \Rightarrow 1/K^y - \gamma \delta = \gamma K^y \Rightarrow 1/K^y - \gamma \delta = 0 \\
 \Rightarrow 1/K^y &= \gamma \delta \Rightarrow K^y = \frac{\gamma \delta}{1} = \frac{10}{2} \Rightarrow \frac{K^y}{\gamma} = \frac{10}{2} \\
 4(K^y - \omega) &= \gamma K^y \rightarrow \omega K^y = \gamma \delta \rightarrow K^y = 4 \rightarrow \left[\frac{K^y}{\gamma} \right] = \left[\frac{4}{\gamma} \right] = \gamma
 \end{aligned}$$

$$\begin{aligned}
 x_{ext} &= 1 \quad K_{ext} = \frac{0+K}{\gamma} = -1 \quad P = \frac{a+1}{a} \text{ ext } \left| \begin{matrix} -1 \\ 1 \end{matrix} \right| \\
 \gamma + \beta^y &= \gamma - \gamma P \Rightarrow \gamma - \gamma \left(\frac{a+1}{a} \right) = \delta \rightarrow \gamma - \frac{\gamma(a+1)}{a} = \delta \rightarrow \frac{-\gamma - \gamma}{a} = \delta \rightarrow a = \frac{-\gamma}{\gamma} \\
 \Rightarrow -\gamma P &= 1 \Rightarrow P = -\frac{1}{\gamma} \Rightarrow \omega x^y + 12x + \frac{a}{\gamma} = 0 \Rightarrow 1 = a + \gamma a \frac{-a}{\gamma} \\
 \frac{0a}{\gamma} &= 1 \Rightarrow a = \frac{\gamma}{0} \Rightarrow \frac{\gamma}{a} = -\frac{1}{\gamma} \Rightarrow C = a+1 = \frac{-\gamma}{\gamma} + 1 = \frac{1}{\gamma}
 \end{aligned}$$

$$\begin{aligned}
 A &= \gamma \delta + \varepsilon m \Rightarrow A \geq 0 \Rightarrow m > -4,40 \\
 x_s &= \frac{-b}{\gamma a} = \gamma \delta \Rightarrow f(2,10) = -2(2,10) + 0(2,10 + m) \\
 \Rightarrow m &< -2,10 \quad \cup \quad [-4,40, -2,10] = \text{مجموعه}
 \end{aligned}$$

$$y = mx^y - 14x + 10m - 1 \quad \frac{-4}{2a} = -2 \Rightarrow \frac{-12x + 40m^y - 2m}{2m} = -2$$

$$\Rightarrow 40m^y - 2m - 12x = 12m \Rightarrow 40m^y - 14x - 12x = 0 \Rightarrow 40m^y - 26x = 0$$

$$\Rightarrow m^y - 14x = 0 \Rightarrow (m-13)(m+14) = 0 \Rightarrow m = \frac{-14}{0} \text{ غير ممكن } \Rightarrow m = 13$$

$$\Rightarrow 40x^y - 14x + 12 \Rightarrow \Delta = \frac{b^2}{4a} = \frac{14^2}{4} = 49 \Rightarrow m = 13$$

$$\beta \cdot \alpha = \alpha^y \Rightarrow \frac{\beta}{\alpha} = \alpha^y \Rightarrow 4\alpha - 1 = \alpha^y \Rightarrow \alpha^y - 4\alpha + 1 = 0$$

$$\Rightarrow (\alpha - 1)^y = 0 \Rightarrow \alpha = 1$$

$$x^y - vx^y - 8 = 0 \quad z^y - vz^y - 8 = 0 \Rightarrow z = \frac{v \pm \sqrt{4a}}{2}$$

$$x = \pm \sqrt{z_1} \Rightarrow z = \sqrt{z_1} + (-\sqrt{z_1}) = 0$$

$$P = \sqrt{z_1}x - \sqrt{z_1} = -z = -\frac{v + \sqrt{4a}}{2} \Rightarrow 4P^y - 45P + 45 = 0$$

$$\Rightarrow 4P^y = 45P - 45$$

$$\text{ext} \left| \begin{array}{l} -\frac{b}{2a} \\ -\frac{\Delta}{2a} \end{array} \right| \Rightarrow \text{ext} \left| \begin{array}{l} \frac{f}{2k} \\ -\frac{f}{2k} \end{array} \right| \Rightarrow y = -x - z$$

$$\text{معامل } x: a_1 = -\frac{b}{2a} = \frac{f}{2k} = \frac{f}{k} \quad (\text{II})$$

$$\Rightarrow \frac{-1}{k} = \frac{-1}{k} - z \Rightarrow k = \frac{1}{f} \Rightarrow \frac{1}{f}x^y - fx - 4$$

$$\Rightarrow \text{ext} \left| \begin{array}{l} y_1 = k(u_1)^y - f(u_1) - 4 \xrightarrow{\text{II}} -f = k(u_1)^y - 4 \xrightarrow{\text{III}} \end{array} \right|$$

$$r = k\left(\frac{y}{k}\right)^y \rightarrow k = r \rightarrow \begin{cases} u_1 = 1 \\ y_1 = 1 \end{cases}$$

$$-m - 9x = -m \cdot x^y + m \cdot x + 1 \Rightarrow -m \cdot x^y + (m+1)x + 1 - m = 0$$

$$\Delta < 0 \Rightarrow \Delta = m^y - 4m + 1 + 4m - 4m^y \Rightarrow 4m^y - 4m + 1 < 0 \Rightarrow m = -1$$

$$\frac{-1}{4} - \frac{1}{4} = \frac{-1}{4} \quad (-1, 3) \Rightarrow \frac{14x}{4}$$

$$-m \cdot x^y + m \cdot x + 1 = -m - 9x \rightarrow m \cdot x^y - (m+1)x - (m+1) = 0$$

$$\Delta < 0 \rightarrow (m+1)^y + f(m)(m+1) < 0 \rightarrow 2m^y + 9m + 1 < 0$$

$$a+c=b \rightarrow (m+1)(2m+1) < 0 \xrightarrow{\text{عكس الإشارة}} \frac{-1}{+1} - \frac{1}{-1} \rightarrow -1 < m < -\frac{1}{2} \rightarrow \text{مطلوب}$$