

$$\alpha + B = \omega, \quad \alpha B = \gamma \quad B^Y = \omega B - \gamma, \quad B^W = \gamma B - \omega, \quad F\alpha = \gamma - FB$$

$$B^{\omega} = \gamma \gamma B - \gamma \omega$$

$$\frac{F\alpha + B^{\omega}}{\omega B^Y} = \frac{\gamma - FB + \gamma \gamma B - \gamma \omega}{\gamma \omega B - \omega} = \boxed{19} \checkmark$$

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$$S \rightarrow \text{رأس سهمی} \quad \gamma(x_S) = S_{\text{رأس}} = -\frac{b}{a} \Rightarrow S_{\text{رأس}} = \gamma\left(\frac{\gamma - \omega}{\gamma}\right) = \boxed{1, \omega} \checkmark$$

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$$x_1 = m, \quad x_Y = m + \frac{F}{\gamma} K$$

$$S = -K = m + m + \frac{F}{\gamma} K \Rightarrow m = -\frac{\omega}{\gamma} K \rightarrow x_1 = -\frac{1}{\gamma} K, \quad x_Y = -\frac{\omega}{\gamma} K$$

$$P = \frac{\omega}{9} K^Y = \omega \Rightarrow K^Y = 9$$

$$\left[\frac{K^Y}{Y}\right] = [K, \omega] = \boxed{F} \checkmark$$

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$$x_S = -\frac{b}{\gamma a} = \frac{\gamma - \omega}{\gamma} = -1 \Rightarrow \gamma a = b$$

$$y_S = -\frac{\Delta}{\gamma a} = -\frac{\gamma a^Y - \gamma a C}{\gamma a} \Rightarrow 1 = C - a \Rightarrow \gamma C = 1 \Rightarrow \boxed{C = \frac{1}{\gamma}} \checkmark$$

$$\alpha^Y + B^Y = S^Y - \gamma P = \omega \Rightarrow (\gamma)^Y - \gamma \frac{C}{a} = \omega \Rightarrow \frac{C}{a} = -\frac{1}{\gamma} \Rightarrow -a = \gamma C$$

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$$m < \frac{9}{\gamma} \quad (1) \quad f\left(\frac{9}{\gamma}\right) = \left(\frac{9}{\gamma}\right)^Y - \omega\left(\frac{9}{\gamma}\right) - m \rightarrow m < -\frac{9}{\gamma} \quad (2)$$

$$\Delta \geq 0 \Rightarrow m \geq -\frac{\gamma \omega}{F} \quad (3)$$

$$(1) \cap (2) \cap (3) \Rightarrow -\frac{\gamma \omega}{F} < m < -\frac{9}{\gamma} \checkmark$$

$$m = \{-3, -4, -5, -4\} \quad \underline{\text{دکتر}}$$

(۱، ۷۵)

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$$x_5 = -\frac{b}{a} = \frac{11}{m} \Rightarrow x_5 = \boxed{\frac{11}{m}}$$

$$1 = \frac{11}{m} - \frac{11}{m} + \omega m - 1 \Rightarrow m = \frac{11}{\omega}$$

$$y_{\min} = -\frac{\Delta}{f_m} = 2 \rightarrow \frac{-(11^2 - f_m(\omega m - 1))}{f_m} = 2 \xrightarrow{\text{رو بس}} \begin{cases} m = 3 \checkmark \\ m = -\frac{11}{\omega} \times \end{cases}$$

$$x_5 = -\frac{b}{f_m} = \boxed{2}$$

$$\alpha \cdot B = a^2 \checkmark$$

$$b^2 - 4ac > 0 \Rightarrow 4a^2 + 1a + 4 - 1a + 4 > 0 \Rightarrow a^2 + 2 > 0 \Rightarrow \alpha \cdot B > -2$$

$$4a - 1 > -2 \Rightarrow a > \boxed{\frac{1}{4}}$$

فقدار دقیق
مراخوانیم!

$$t^2 - Vt - \omega = 0 \rightarrow t = \frac{V \pm \sqrt{49}}{2}$$

$$x^2 = \frac{V + \sqrt{49}}{2} \Rightarrow \begin{cases} x_1 = -\sqrt{\frac{V + \sqrt{49}}{2}} \\ x_2 = +\sqrt{\frac{V + \sqrt{49}}{2}} \end{cases} \Rightarrow S = 0, P = -\frac{V + \sqrt{49}}{2}$$

$$4p^2 - 4SP + 4S^2 = \frac{49 + 49 + 14\sqrt{49} \times 4}{4} = \boxed{49 + V\sqrt{49}} \checkmark$$

$$y_5 = -Fz - F = -\frac{14 + 4FK}{FK} \Rightarrow -F\left(\frac{1}{K}\right) - F = -\frac{F + 4K}{K} \Rightarrow \frac{F - 4K}{K} = -F$$

$$-FK = F - 4K \Rightarrow 2K = F \Rightarrow K = \frac{F}{2}$$

$$y_5 = -\frac{\Delta}{f_m} = -\frac{14 + 4F}{4} = \boxed{-\frac{7}{2}} \checkmark$$

$$-mx^2 + mx + 1 = -m - x \quad \leftarrow \text{سایه محاذی تقاطع}$$

$$mx^2 - (m+1)x - (m+1) = 0$$

$$\Delta < 0 \rightarrow [-(m+1)]^2 - 4m[-(m+1)] < 0 \rightarrow (m+1)(\omega m + 1) < 0$$

$$-1 < m < -\frac{1}{\omega} \checkmark$$

صیغه در همین در این بازه وجود ندارد

$$P = \alpha\beta = 2a - 1$$

✓

$$a \rightarrow a^2 = \alpha\beta = 2a - 1 \rightarrow a^2 - 2a + 1 = 0 \rightarrow a = 1$$

Δ معادله رو با $a = 1$ بررسی میکنیم که از وجود دوریه مطمئن شویم ✓ $\Delta > 0$