

$$\alpha + \beta = S = Q$$

$$\frac{f(\alpha^* + \beta^*)}{\gamma_2} = \frac{f(96)}{\gamma_2} = 19$$

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$$b_{\text{reg}} = -\frac{b}{a} = \frac{1.04}{1.0} = 1.04$$

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فرض: α, β, γ های مجاوره اند $\Leftarrow$

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$$c = 1 + a$$

$$\Rightarrow b = -\frac{c}{k}, c = \frac{1}{k} \Rightarrow y = -\frac{x}{k} - \frac{c}{k}x + \frac{1}{k}$$

$$\frac{1}{3} = \text{میزان مبدأ سهمی}$$

مرفق: α, β , سیکڑے کا معادلہ, $\beta > \alpha$

$$\Rightarrow \frac{1}{3\sqrt{-9}}$$

$$\Delta > 0 \Rightarrow r_D + r_M > 0 \Rightarrow r_M - r_D = \frac{r_D + r_M}{2} > 0$$

$$\textcircled{1} \cap \textcircled{5} \rightarrow -\frac{1}{2} \leq m < -\frac{1}{4} \Rightarrow -\frac{1}{2} \leq m < -\frac{1}{4}$$

تابع دارای ی‌شیم است که مقدار آن $\Delta < 0$ و $m > 0$ است پس:

$$\Delta = 144 - 4m(m-1) = -4m^2 + 4m + 144$$

$$y_3 = 2 \Rightarrow \frac{-\Delta}{4m} = 2 \Rightarrow \frac{4m^2 - 4m - 144}{4m} = 2 \Rightarrow 4m^2 - 12m - 144 = 0$$

$$\xrightarrow{+4} 4m^2 - 12m - 144 = 0 \Rightarrow$$

$$m = \frac{3 \pm \sqrt{129}}{4}$$

$$\xrightarrow{m > 0} m = \frac{3 + \sqrt{129}}{4}$$

$$\Rightarrow y = 4m^2 - 12m + 144 \Rightarrow \alpha_3 = -\frac{b}{4a} = 2 \Rightarrow \text{مقدار } \alpha: \boxed{\alpha = 2}$$

$$y = x^2 - 5x + p$$

$$s = -2a - 2 \Rightarrow \alpha + \beta = -2a - 2$$

$$p = 2a - 1 \Rightarrow \alpha\beta = 2a - 1$$

$$\Rightarrow \alpha^2 = \alpha\beta \Rightarrow \alpha^2 - 2a - 1 = 2a - 1 \Rightarrow \alpha^2 - 4a = 0 \Rightarrow$$

$$(\alpha - 1)^2 = 0 \Rightarrow \boxed{\alpha = 1}$$

$$x^2 = t \Rightarrow t^2 - vt - a = 0 \Rightarrow \Delta = 49 - (4)(-5) = 49 \Rightarrow$$

$$t = \frac{v \pm \sqrt{49}}{2} \rightarrow t_1 = \frac{v + \sqrt{49}}{2} \checkmark$$

$$t_2 = \frac{v - \sqrt{49}}{2} \times \text{غ} \rightarrow$$

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$$x^2 = \frac{v + \sqrt{49}}{2} \rightarrow \alpha_{1,2} = \pm \sqrt{\frac{v + \sqrt{49}}{2}} \Rightarrow s = 0, p = \frac{v + \sqrt{49}}{2} \Rightarrow$$

$$x p^2 - x p s + x s = x p^2 = x \left(\frac{v + \sqrt{49}}{2} \right)^2 = \frac{11v + 14\sqrt{49}}{2} = \frac{59 + v\sqrt{49}}{2}$$

$$\alpha_3 = -\frac{b}{4a} = \frac{f}{4k} \Rightarrow y_3 = k \times \frac{14}{4k} - \frac{14}{4k} - 4 = \frac{-4k - 14}{k}$$

$$y_3 = -4 \times \frac{f}{4k} - 4 = -\frac{f}{k} - 4 = \frac{-4k - f}{k} \Rightarrow$$

$$-4k - f = -4k - 14 \Rightarrow 2k = 14 \Rightarrow k = 7 \Rightarrow y = 4x^2 - 4x - 4 \Rightarrow$$

$$\alpha_3 = -\frac{b}{4a} = \frac{f}{4} = 1 \Rightarrow y_3 = 4 - 4 - 4 = -4$$

باید Δ و α و β را با هم

$$-m\alpha^2 + m\alpha + 1 = -m - \alpha \Rightarrow -m\alpha^2 + (m+1)\alpha + m+1 = 0 \xrightarrow{\Delta < 0}$$

$$(m+1)^2 + 4m(m+1) < 0 \Rightarrow (m+1)(4m+5) < 0$$

$$\frac{m}{-1} \quad \frac{-1}{4m+5}$$

$$\Rightarrow m \in (-1, -\frac{1}{5}) \Rightarrow \text{مقدار } m \text{ سالب و منفی است}$$