

$$\beta = \beta' - \alpha\beta + \gamma = 0 \rightarrow \beta' = \alpha\beta - \gamma$$

$$\beta'' = \beta' \times \beta' = (\alpha\beta - \gamma)(\gamma\beta - 10)$$

$$= 11\alpha\beta' - 44\beta + 10 \xrightarrow{\beta' = \alpha\beta - \gamma} 11\alpha\beta - 10$$

$$\frac{4\alpha + \beta''}{\alpha\beta'} = \frac{4(\alpha - \beta) + \beta''}{\alpha\beta'} = \frac{11\alpha\beta - 10}{\alpha\beta - 10} = \frac{11(\alpha\beta - \gamma)}{\alpha(\alpha\beta - \gamma)} = \boxed{11}$$

$$S = -\frac{b}{a} = \alpha \Rightarrow \alpha + \beta$$

$$\alpha = \alpha - \beta$$

$$\beta'' = \beta' \times \beta'$$

$$\beta = \alpha\beta' - \gamma\beta$$

$$= 11\alpha\beta - 10 - \gamma\beta$$

$$= 11\alpha\beta - 10$$

چون دو نقطه ی برابر دارند خط تقارن سری

$$\frac{13 + (-11d)}{2} = 10 \rightarrow 13 - 11d = 20 \rightarrow -11d = 7 \rightarrow d = -\frac{7}{11}$$

$$\frac{u_1 + u_2}{2} = 10 \rightarrow u_1 + u_2 = 20$$

$$u_1 + u_2 = 10 \rightarrow \boxed{10}$$

$$|\alpha - \beta| = \frac{\sqrt{\Delta}}{|a|} = \sqrt{\Delta} \Rightarrow \Delta = (k)^2 - 4(1)(\alpha) = k^2 - 40 \Rightarrow \frac{k}{2} = \sqrt{k^2 - 40}$$

$$\frac{14}{9}k^2 = k^2 - 40 \xrightarrow{\times 9} 14k^2 - 360 = 9k^2 \rightarrow 5k^2 = 360 \rightarrow k^2 = 72 \rightarrow k = \sqrt{72}$$

$$\frac{k^2}{2} = \frac{72}{2} = 36 \rightarrow \boxed{36}$$

$$u = \frac{13 + (-11d)}{2} = -1 \Rightarrow \frac{\alpha + \beta}{2} = -1 \Rightarrow \alpha + \beta = -2$$

$$\alpha^2 + \beta^2 = (\alpha + \beta)^2 - 2\alpha\beta \Rightarrow 4 = 4 - 2\alpha\beta \Rightarrow \alpha\beta = 0$$

$$y = (x - u)(x - \beta) \xrightarrow{\text{عرض}} u = \frac{\alpha + \beta}{2} = -1$$

$$y = (-1 - k)(x - \beta) \rightarrow k = -\frac{1}{\beta} \times k = 1 \rightarrow k = -\frac{1}{\beta}$$

$$y = 0 \rightarrow (x - \alpha)(x - \beta) = y = k\alpha\beta = \left(-\frac{1}{\beta}\right)\left(-\frac{1}{\beta}\right) = \frac{1}{\beta^2}$$

$$-u^2 + \alpha u + m = 0 \xrightarrow{\times -1} u^2 - \alpha u - m = 0$$

$$\Delta = \alpha^2 + 4m \geq 0 \rightarrow 4m \geq -\alpha^2 \rightarrow m \geq -\frac{\alpha^2}{4}$$

$$\frac{\sqrt{\alpha^2 + 4m} \pm \alpha}{2}$$

آن ریشه ی بزرگ تر از $\frac{\alpha}{2}$ نباشد
و از آن نتیجه باشد صد درصد
آن یکی ریشه هم نتیجه از $\frac{\alpha}{2}$ است.

$$\frac{\sqrt{\alpha^2 + 4m} + \alpha}{2} < \frac{\alpha}{2}$$

$$\sqrt{\alpha^2 + 4m} + \alpha < \alpha \Rightarrow \sqrt{\alpha^2 + 4m} < 0 \rightarrow \alpha^2 + 4m < 0$$

$$4m < -\alpha^2 \rightarrow m < -\frac{\alpha^2}{4} \approx -4 \rightarrow -4 < m \leq -4$$

این مقدار تابع در واقع در همان آس سری و ی آن است

$$u_0 = \frac{4}{m}$$

$$y_0 = m \left(\frac{4}{m} \right)^2 - 12 \left(\frac{4}{m} \right) + 5m - 1$$

$$= -\frac{44}{m} + 5m - 1 = 2$$

$$m = \frac{44 \pm 4}{10}$$

$$m = 3$$

$$m = -\frac{12}{5} \times$$

$$\left(-\frac{44}{m} + 5m = 3 \right) \times m$$

$$u_0 = \frac{4}{m} = \frac{4}{3} = \boxed{2}$$

باید متوجه
باشید

$$5m^2 - 3m - 4 = 0$$

$$\Delta = \sqrt{49} = 7$$

$$\alpha + \beta = -2(\alpha + 1) \quad \alpha \beta = 2\alpha - 1$$

$$\alpha \beta = \alpha^2 \rightarrow \alpha^2 = 2\alpha - 1$$

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

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

$$u^2 = t \quad t^2 - Ut - 5 = 0$$

$$t = \frac{U \pm \sqrt{U^2 + 4 \times 5}}{2} = \frac{U \pm \sqrt{49}}{2}$$

$$u^2 = \frac{U - \sqrt{49}}{2} \rightarrow \begin{cases} u = + \frac{U - \sqrt{49}}{2} \\ u = - \frac{U - \sqrt{49}}{2} \end{cases}$$

$$u^2 = \frac{U + \sqrt{49}}{2} \rightarrow \begin{cases} u = + \frac{U + \sqrt{49}}{2} \\ u = - \frac{U + \sqrt{49}}{2} \end{cases}$$

$$S = 0 \rightarrow \text{ریشه ها دوتایی اند}$$

$$\frac{C}{a} = \frac{-5}{1} = -5$$

$$2P^2 - 3SP + 2S = 2(-5)^2 - 3(0)(-5) + 2(0)$$

$$= \boxed{50}$$

$$u_0 = -\frac{b}{2a} = -\frac{-4}{2k} = \frac{4}{2k} = \frac{2}{k}$$

$$y = k \left(\frac{2}{k} \right)^2 - 4 \left(\frac{2}{k} \right) - 4 = \frac{4k}{k^2} - \frac{8}{k} - 4 = \frac{4}{k} - \frac{8}{k} - 4 = -\frac{4}{k} - 4$$

$$y = -4x - 4$$

$$-\frac{4}{k} - 4 = -4 \left(\frac{2}{k} \right) - 4 = \frac{4}{k} = 2 \Rightarrow k = 2 \quad y = -\frac{4}{2} - 4 = \boxed{-6}$$

$$-mu^2 + mu + 1 = -m - u$$

$$-mu^2 + mu + 1 + m + u = 0 \Rightarrow -\frac{m}{a}u^2 + \frac{(m+1)}{b}u + \frac{(m+1)}{c} = 0$$

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

$$m = -1$$

$$m = -\frac{1}{5}$$

$$-1 < m < -\frac{1}{5} \rightarrow$$

هیچ عدد صحیحی وجود ندارد

برای اینکه جواب داشته باشد

$$\Delta < 0$$