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$$\text{مدول راسی} = 2 = \frac{-b}{2a} = \frac{-1}{2(a-1)} \Rightarrow (a-1) = -1 \Rightarrow a = 2 \Rightarrow a = \frac{4}{2}$$

$$\Rightarrow \left(\frac{4}{2} - 1\right)x^2 + x + 3 \Rightarrow \Delta = 1 - 4(2)\left(-\frac{1}{2}\right) = 4 \Rightarrow x = \frac{-1 \pm 2}{-\frac{1}{2}} \Rightarrow \begin{matrix} -2 \\ 1 \end{matrix}$$

مدول جواب

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از جدول تعیین علامت نتیجه میگیریم که $m < 0$ باید باشد و نیز Δ است

$$\Delta = 16 - 4m^2 \Rightarrow \Delta = -4(-4)(25) = 20 \rightarrow m \rightarrow \begin{matrix} \frac{2}{5} \\ -\frac{2}{5} \end{matrix}$$

۱) $m < 0$

۱) $\cap$ ۲) $= \left(-\frac{2}{5}, 0\right)$

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$$S = \frac{3 - \sqrt{\Delta}}{3} + \frac{3 + \sqrt{\Delta}}{3} = \frac{6}{3} = 2$$

$$P = \left(\frac{3 - \sqrt{\Delta}}{3}\right)\left(\frac{3 + \sqrt{\Delta}}{3}\right) = \frac{9 - \Delta}{9} = \frac{7}{9}$$

$$\rightarrow y = x^2 - Sx + P = x^2 - 2x + \frac{7}{9} \Rightarrow 9x^2 - 18x + 7$$

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$$2x^2 + x^2 + 13^2 = 12 \text{ و } S = 4, P = \frac{m+2}{2} \Rightarrow 2x^2 + \frac{(5-2P)}{19-m-2} = 12 = 2x^2 - m = -2$$

$$\rightarrow 18x - m - 2 - m = -2 \rightarrow 18x - 2m = 0 \Rightarrow 9x - m = 0 \rightarrow 9x = m$$

$$\Delta = 4f - f(2)(m+2) = 4f - 18m - 14 = 61 - 18m \rightarrow x = \frac{1 \pm \sqrt{61 - 18m}}{9}$$

$$\rightarrow 9x = 1 - \sqrt{61 - 18m} \Rightarrow 1 - \sqrt{61 - 18m} = m \Rightarrow \sqrt{61 - 18m} = 1 - m$$

$$\rightarrow 61 - 18m = 1 + m^2 - 14m \rightarrow m^2 - 18m + 14 = 0 \rightarrow \Delta = 0 \rightarrow m = \frac{1}{2} = 0.5$$

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$$S/a = \frac{-b}{2a} = \frac{-\Delta}{2a} \Rightarrow C = \Delta \rightarrow y = ax^2 + bx + c \Rightarrow a = 6a + 2b + \Delta \Rightarrow 6a + 2b = -\Delta$$

$$6a + \frac{1+\Delta}{12} = 9 \Rightarrow (a = -1) \Rightarrow y = -x^2 + 5x + 5$$

۱) $\langle x \rangle \langle \Delta \rangle$ و ...

$$\frac{1}{\alpha} + \frac{1}{\beta} = \frac{\beta + \alpha}{\alpha\beta} \Rightarrow S = \frac{\sqrt{}}{\alpha} \quad p = \frac{q\beta}{\alpha} \Rightarrow \frac{\sqrt{}}{q\beta} = \frac{\sqrt{}}{q\beta} / \alpha = \alpha$$

$$\rightarrow \alpha^2 - \sqrt{\alpha} + q\beta = 0 \rightarrow q\beta = \sqrt{\alpha} - \alpha^2 \Rightarrow \beta = \frac{\sqrt{\alpha} - \alpha^2}{q}$$

$$\alpha = \beta \rightarrow \alpha\beta - \sqrt{\alpha} + q\beta = 0$$

$$\rightarrow \alpha\beta + \sqrt{\alpha} = 0 \Rightarrow \beta(\alpha + \sqrt{\alpha}) = 0 \rightarrow \alpha\beta = -\sqrt{\alpha} \rightarrow \beta = \frac{-\sqrt{\alpha}}{\alpha} = \frac{-1}{\sqrt{\alpha}} \Rightarrow \sqrt{\alpha}^2 - \alpha^2 = -1$$

$$\rightarrow (\sqrt{\alpha})^2 - \sqrt{\alpha} - 1 = 0 \rightarrow \Delta = 1 \pm 1, \alpha = \frac{\sqrt{1 \pm 1}}{1} \rightarrow \alpha < \sqrt{1} \Rightarrow \frac{1}{\alpha} > 0 \Rightarrow \alpha = \frac{-1 \pm \sqrt{5}}{2}$$

$$\alpha^2 - m\beta = 1 \quad S = \frac{-m}{1}, p = \frac{-1}{m}$$

$$\frac{\beta^2 - 1}{m} = 1$$

$$\alpha^2 + \beta^2 - 1 = 1 \Rightarrow (m^2 + 1)m = 1 \rightarrow m^2 + 1m - 1 = 0 \rightarrow \Delta = 1 \pm \sqrt{5} = 1 \pm \sqrt{5}$$

$$S = \frac{-m}{1} \rightarrow m = \frac{-1 \pm \sqrt{5}}{2} \Rightarrow S = -m = \frac{1 \mp \sqrt{5}}{2}$$

$$\frac{-b}{1a} = \frac{-1}{1m} = \frac{-1}{m} \Rightarrow 1 = \frac{1}{m} \Rightarrow m = 1 \Rightarrow m^2 + 1m - 1 = 1$$

$$\Rightarrow m^2 - 1m - 1 = 0 \rightarrow \Delta = 1 \pm \sqrt{5} \Rightarrow m = \frac{1 \pm \sqrt{5}}{2} \Rightarrow S = -m = \frac{1 \mp \sqrt{5}}{2}$$

$$\rightarrow \Delta = 14 - 1 \pm \sqrt{5} = 14 \Rightarrow x = \frac{-1 \pm \sqrt{5}}{2} \Rightarrow k = 2$$

$$\frac{1}{\alpha} + \frac{1}{\beta} = \frac{c}{f} \quad \frac{-b}{1a} = \frac{1}{f} \Rightarrow \Delta a = -b \quad / \frac{1}{4} \Rightarrow 4 = \frac{f_a}{-b} + \frac{1}{f} \Rightarrow \frac{1}{f} = \frac{b}{f_a} + \frac{1}{f}$$

$$\Rightarrow y = -\frac{1}{f}x^2 + \frac{1}{f}x + \frac{1}{f} \Rightarrow S = \frac{1}{f} \quad p = -\frac{1}{f} \Rightarrow \frac{1}{\alpha} + \frac{1}{\beta} = \frac{\alpha + \beta}{\alpha\beta} = \frac{1}{-1} = -1$$

$$2 = 2 \Rightarrow f - 1a - 1 + \frac{1}{a} + 4a + 1 = 0 \Rightarrow \frac{1}{a} - 1a - 1 = 0 \Rightarrow \Delta = 1 \pm \sqrt{5} = 1 \pm \sqrt{5}$$

$$\rightarrow a = \frac{1 \pm \sqrt{5}}{2} \Rightarrow a = 1 \Rightarrow a^2 - 1a + 1 = 0 \Rightarrow \Delta = 1 \pm \sqrt{5} = 1 \pm \sqrt{5}$$

$$\Rightarrow a = \frac{1 \pm \sqrt{5}}{2} \Rightarrow a = 1 \Rightarrow a^2 - 1a + 1 = 0 \Rightarrow \Delta = 1 \pm \sqrt{5} = 1 \pm \sqrt{5}$$