

$$\frac{\alpha^2 + \beta^2}{\delta \beta^2} = \frac{\alpha^2 \beta^2 + \beta^4}{\delta \beta^4} = \frac{\beta^2 (\alpha^2 + \beta^2)}{\delta \beta^4} = \frac{\alpha^2 + \beta^2}{\delta \beta^2}$$

$$= \frac{5^2 - 2 \cdot 1 \cdot 5}{8} \quad 5 = 0, 1 \cdot 2 = 2 \Rightarrow \frac{120 - 20}{8} = 14$$

$$-2 \quad \frac{-b}{a} = \text{جمع ریشه} = \text{مضرب ای تابع}$$

$$110 = -1 \cdot 8 + 5 \Rightarrow \text{جمع نقاط هم عرض ثابت است}$$

$$-3 \quad \frac{\sqrt{\Delta}}{1a1} = \frac{\sqrt{4K^2 - 4 \cdot 1 \cdot 19}}{1a1} = \frac{2}{1} K$$

$$\Rightarrow 4K^2 - 20 = 19 \Rightarrow \frac{4K^2}{4} = \frac{39}{4} \Rightarrow K^2 = 9.75 \Rightarrow K = 3.12$$

$$\Rightarrow \left[\frac{K^2}{4} \right] = [9.75] = 9$$

$$5 = \frac{-b}{a} = -\frac{8}{5} = -1.6 \Rightarrow b = 8, a = 5$$

$$\alpha^2 + \beta^2 = 8 = 5^2 - 2 \cdot 1 \cdot 5 \Rightarrow 5 - 2 \cdot 1 \cdot 5 = 0, 1 \cdot 2 = \frac{1}{5} \Rightarrow a = -2, c = 1$$

$$y = \frac{-\Delta}{4a} = \frac{-(b^2 - 4ac)}{4a} = \frac{-(8^2 - 4 \cdot 1 \cdot 19)}{4 \cdot 1} = \frac{-64 + 76}{4} = \frac{12}{4} = 3$$

$$\left| \frac{1}{\omega} \right| \rightarrow \text{جواب}$$

$$x^2 - 8x - m = 0 \quad \Delta > 0 \Rightarrow 4 \cdot 8 + 4m > 0 \Rightarrow m > -\frac{32}{4}$$

$$\frac{-b \pm \sqrt{\Delta}}{2a} < \frac{a}{r} \Rightarrow \frac{8 \pm \sqrt{64 + 4m}}{2} < \frac{a}{r}$$

$$\Rightarrow 8 \pm \sqrt{64 + 4m} < \frac{a}{r} \Rightarrow \pm \sqrt{64 + 4m} < \frac{a}{r} - 8 \Rightarrow \sqrt{64 + 4m} < \frac{a}{r} - 8 \Rightarrow m < \frac{-a}{r}$$

$$m > -\frac{32}{4} \wedge m < \frac{-a}{r} = \frac{-28}{4} < m < \frac{-9}{4} \Rightarrow \{-4, -8, -12, -16\}$$

صحيح

$$1) \min \Rightarrow a > 0 \Rightarrow m > 0 \quad \frac{-b}{2a} = \frac{12}{2m} = \frac{6}{m} \quad -4$$

$$\frac{c4}{m} - \frac{v2}{m} + 8m - 12 = 0 \Rightarrow 8m - 5 - \frac{c4}{m} = 0 \quad \times m \rightarrow 8m^2 - 5m - c4 = 0$$

$$m = \begin{cases} 5 \\ -2,5 \end{cases} \rightarrow \text{بفرض قابل قبول } a > 0 \Rightarrow m > 0 \quad \frac{-b}{2a} = \frac{6}{m} = 2$$

$$a^2 \geq a\beta \Rightarrow \beta \geq \frac{c}{a} = \frac{2a-1}{1} \quad a^2 - 1a + 1 \geq 0 \Rightarrow a \geq 1 \quad -5$$

$$t_2 \geq \kappa^2 \Rightarrow t^2 - vt - 8 = 0 \quad t_1 + t_2 = \frac{-b}{a} = v \quad -1$$

$$t_1 \geq \pm \kappa_1, t_2 \geq \pm \kappa_2 \Rightarrow \kappa_1 - \kappa_2 = \kappa_1 + \kappa_2 = 0$$

$$t^2 - vt - 8 = 0 \Rightarrow t = \begin{cases} \frac{v + \sqrt{v^2 + 32}}{2} \\ \frac{v - \sqrt{v^2 + 32}}{2} \end{cases} \Rightarrow \kappa^2 \geq \frac{v + \sqrt{v^2 + 32}}{2} \Rightarrow \kappa \geq \sqrt{\frac{v + \sqrt{v^2 + 32}}{2}}$$

حالا چون κ^2 غیر قابل قبول است

$$2p^2 - 5sp - 2s^2 + 2p^2 = 0 \Rightarrow 4 \left(-\frac{\sqrt{v^2 + 32}}{2} \cdot \sqrt{\frac{v + \sqrt{v^2 + 32}}{2}} \right)^2 = 4 \cdot \frac{11\sqrt{v^2 + 32} + 16\sqrt{v^2 + 32}}{2} = 8\sqrt{v^2 + 32}$$

$$y_2 \kappa^2 - (x - 9) \geq \text{ext} \quad \left| \frac{v}{\kappa} \right| \quad -9$$

$$y_2 \kappa \left(\frac{v}{\kappa} \right)^2 - 9 \cdot \frac{v}{\kappa} - 9 \geq \frac{v}{\kappa} - \frac{1}{\kappa} - 9 \geq \frac{-v}{\kappa} - 9$$

$$y_2 - (x - 9) \geq \frac{-v}{\kappa} - 9 \geq -9 \left(\frac{v}{\kappa} \right) - 9 \geq \frac{v}{\kappa} - 2 \geq 0 \Rightarrow \kappa \geq 2$$

$$\frac{-v}{\kappa} - 9 \geq \frac{-v}{\kappa} - 9 \geq -5 - 9 \geq -14$$

$$-m\kappa^2 + m\kappa + 1 \geq -m - \kappa \geq -m\kappa^2 + (m+1)\kappa + 1 + m \geq 0 \quad -1$$

$$\Delta < 0 \Rightarrow (m+1)^2 + 4m + 4m^2 + 1 + 2m + 2m + 4m + 4m^2 \geq 8m^2 + 9m + 1 < 0$$

$$\Rightarrow \left(m + \frac{1}{2} \right) (m+1) < 0 \quad \frac{-1}{2} < m < \left(-1 - \frac{1}{2} \right)$$

ناتمام (مربع عدد صحیح) نیست ✓