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$$y_3 = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-12 \pm \sqrt{144 - 4 \cdot 1 \cdot 1}}{2 \cdot 1} = V \Rightarrow \frac{12 \pm b^2}{2} < V \Rightarrow b^2 < 4 \Rightarrow b < \pm 2 \quad (1) \quad (2)$$

نکته: جواب ندارد $\Delta < 0 \Rightarrow t^2 + 2t - 1 < 0 \Rightarrow t^2 + 2t + 1 < 2 \Rightarrow (t+1)^2 < 2 \Rightarrow t+1 < \sqrt{2} \Rightarrow t < \sqrt{2} - 1$ (3)

ب) $(t-n^2) < t \Rightarrow t^2 - 2t - 1 < 0 \Rightarrow (t-1)^2 < 2 \Rightarrow t-1 < \sqrt{2} \Rightarrow t < 1 + \sqrt{2}$

$\sqrt{t-3} < t-n^2-3 \Rightarrow n^2 < V \Rightarrow n < \sqrt{V}$
 $t=0 \Rightarrow n^2 < -1 \Rightarrow$ غلط

$s = t \Rightarrow \alpha, \beta \Rightarrow \alpha < 2 \Rightarrow \beta < 2 \Rightarrow \alpha < 2, \beta < 2$ (3)

$p < \frac{m}{\varepsilon} = 12 \Rightarrow m < 12$ (4)

$s < p \Rightarrow \begin{cases} \alpha + \beta < 2 \\ \alpha - \beta < \varepsilon \\ \beta < 0, \alpha < 2 \end{cases} \Rightarrow \frac{m-1}{2} < 1 \Rightarrow m < 3$ (5)

$\frac{m^2 - 1}{-m} < 1 \Rightarrow m^2 + m - 1 < 0 \Rightarrow m < 1$ (6)

نکته: جواب ندارد

$d\beta < \frac{\varepsilon}{\beta} \Rightarrow \frac{\varepsilon}{\beta} < 2 \Rightarrow \beta < \frac{\varepsilon}{2} \Rightarrow d < \frac{q}{\varepsilon}$
 $\alpha\beta < 2 \Rightarrow \frac{\varepsilon}{2} + \frac{q}{\varepsilon} < m \Rightarrow \frac{\varepsilon^2 + 4q}{2\varepsilon} < m$ (7)

