

$$\beta^{\omega} = \beta^{\omega} \times \beta^{\omega} \quad \alpha + \beta = -\frac{b}{a} = 0 \quad \alpha = \omega - \beta \quad \alpha = \omega - \beta \quad \alpha = \omega - \beta \quad \alpha = \omega - \beta$$

$$\beta(\omega\beta - 2) = \omega\beta - 2\beta \Rightarrow \omega(\omega\beta - 2) = 2\omega\beta - 10$$

$$\beta^{\omega} (2\omega\beta - 10) = 11\omega\beta - 50\beta - 6\beta + 20 \Rightarrow \boxed{\omega\beta - 210}$$

$$f(\alpha) = f(\omega - \beta) = 20 - 6\beta$$

$$\alpha = \frac{20 - 6\beta + \omega\beta - 210}{\omega(\omega\beta - 2)} = \frac{47\omega\beta - 190}{\omega\beta - 10} = 19 \left(\frac{2\omega\beta - 10}{\omega\beta - 10} \right) = 19$$

$$\alpha_5 = \frac{-11\omega + 20}{2} = \frac{20}{2} \Rightarrow \frac{\alpha + \beta}{2} = \frac{20}{2} \Rightarrow \alpha + \beta = 20$$

$$ax^2 + bx + c = 0 \quad -\frac{b}{2a} = -1 \Rightarrow b = 2a$$

$$\alpha_5 = \frac{-a + 2}{2} = -1 \quad \frac{c}{a} = -\frac{1}{2} \Rightarrow c = -\frac{a}{2}$$

$$\frac{\alpha + \beta}{2} = -1 \Rightarrow \alpha + \beta = -2$$

$$a - 2a - \frac{a}{2} = 1$$

$$-\frac{3}{2}a = 1 \Rightarrow a = -\frac{2}{3}$$

$$b = -\frac{4}{3} \quad c = \frac{1}{3}$$

$$(\alpha + \beta) - (\alpha + \beta) = 2\alpha\beta \Rightarrow \alpha\beta = -\frac{1}{2}$$

$$-\frac{2}{3}x^2 - \frac{4}{3}x + \frac{1}{3} = 0 \Rightarrow x = \frac{1}{2}$$

جواب سوال ۴ و ۳ و ۲ و ۱

$$x^2 + 2Kx + \omega$$

$$\alpha - \beta = \frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{4K^2 - 4\omega}}{1} = \frac{2}{K}K$$

↓

$$4K^2 - 4\omega = \frac{9}{K}K^2 \Rightarrow \frac{4}{K}K^2 = 20 \quad K^2 = \frac{10}{K}$$

$$\left[\frac{K^2}{2} \frac{20}{K} \right] \in \{9\}$$

هنگام به ازای ۹ هزاره مثبت است

$$-x^2 + \omega x + m > 0 \Rightarrow -\frac{11}{2} + \frac{6\omega}{2} + m > 0 \Rightarrow m > \frac{9}{2}$$

که به سادگی

$$m^2 x^2 - 12x + 2m - 1 = 0 \quad m^2 - 4m - 12 = 0$$

$$y_s = -\frac{\Delta}{\epsilon_m} = \frac{-(12\epsilon - 4m^2 + 2m)}{\epsilon_m} = 0 \Rightarrow 12m^2 - 4m - 12 = 0$$

$$\Delta = \frac{2 \pm 2\sqrt{1}}{1} = 2 \Rightarrow 12m^2 - 4m - 12 = 0 \Rightarrow 3m^2 - m - 3 = 0$$

$$a^2 = \alpha \beta = \frac{c}{a} = 2a - 1$$

$$\hookrightarrow a^2 - 2a + 1 = 0 \Rightarrow (a-1)^2 = 0 \Rightarrow a = 1$$

$$x^2 - vx - 2 = 0$$

$$t^2 - vt - 2 = 0$$

$$\Delta = 4 + 8 = 12$$

$$x = \frac{v \pm \sqrt{12}}{2} = \frac{v \pm 2\sqrt{3}}{2}$$

$$x = \pm \sqrt{\frac{v + \sqrt{12}}{2}} \quad \begin{matrix} \nearrow s=0 \\ \rightarrow p = -\frac{v + \sqrt{12}}{2} \end{matrix}$$

$$2p^2 - 2sp + 2 = 0 \Rightarrow p = \frac{2 \pm \sqrt{4 - 4}}{4} = \frac{2}{4} = \frac{1}{2}$$

$$y = Kx^2 - \epsilon x - 9 \quad \begin{cases} y = -\epsilon x - 9 \\ -\epsilon x \frac{\epsilon}{K} - 9 = -\frac{\Lambda}{K} - 9 \end{cases}$$

$$x_s = \frac{\epsilon}{K} = \frac{\epsilon}{K} \quad \begin{cases} 1 \text{ if } K=2 \\ 2x^2 - \epsilon x - 9 \end{cases}$$

$$y = Kx \frac{\epsilon}{K} - \epsilon x \frac{\epsilon}{K} - 9 \quad (x_s = 1 \Rightarrow y_s = 2 - \epsilon - 9 = -7)$$

$$\frac{\epsilon}{K} - \frac{\Lambda}{K} - 9 = -\frac{\epsilon}{K} - 9 = -\frac{\Lambda}{K} - 9 \Rightarrow \frac{\epsilon}{K} = 2 \Rightarrow K = 2$$

$$-m^2 x^2 + m^2 x + 1 = -m - x$$

$$m^2 x^2 (-m-1) x - 1 - m$$

$$\Delta < 0 \Rightarrow m^2 + 1 - 2m + \epsilon m + \epsilon m^2$$

$$2m^2 + 2m + 1 < 0 \Rightarrow \Delta < 0$$

لذا برای به دست آوردن