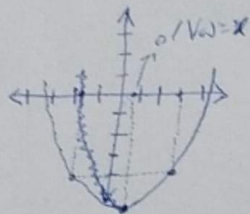


$$x^2 - \omega x + 1 = 0 \Rightarrow S = \frac{-b}{a} = \frac{\omega}{1} = \omega, P = \frac{c}{a} = \frac{1}{1} = 1$$

$$\frac{1\alpha + 1\beta}{\omega\beta^2} = \frac{\alpha^2\beta + \beta^2\alpha}{\omega\beta^2} = \frac{\beta^2(\alpha^2 + \beta^2)}{\omega\beta^2} = \frac{S^2 - 2PS}{\omega} = \frac{1\omega^2 - 2\omega}{\omega} = \boxed{19}$$

۱



$$1 + (-1/\omega) = 1/\omega$$

$$\frac{1/\omega}{1} = 0/1\omega \Rightarrow \text{میزان یابی می‌کنیم}$$

$$0/1\omega \times 1 = \boxed{1/\omega}$$

۲

$$x^2 + 2Kx + \omega = 0 \Rightarrow \begin{cases} S = \alpha + \beta = -\frac{b}{a} = -2K \\ P = \alpha\beta = \frac{c}{a} = \omega \end{cases}$$

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

$$\Rightarrow P = \alpha\beta = \omega \Rightarrow (-\frac{\omega}{K}K)(-\frac{1}{K}K) = \omega \Rightarrow \frac{\omega}{K}K = \omega \Rightarrow K^2 = 9$$

$$\Rightarrow \left[\frac{K^2}{1}\right] = \left[\frac{9}{1}\right] = \boxed{9}$$

۳

$$\frac{-\omega + 1}{1} = -1 = \text{میزان یابی می‌کنیم}$$

$$\alpha^2 + \beta^2 = \omega \Rightarrow S^2 - 2P = \omega \Rightarrow 1 - 2P = \omega \Rightarrow -2P = \omega \Rightarrow P = -\frac{\omega}{2} = \frac{c}{a} \Rightarrow -a = 2C \Rightarrow C = -\frac{a}{2}$$

$$S = -\frac{b}{a} = \frac{1}{a} \Rightarrow -2a = -b \Rightarrow 2a = b$$

$$\Rightarrow y = ax^2 + 2ax - \frac{a}{2} \xrightarrow{x=-1} 1 = a - 2a - \frac{a}{2} \Rightarrow 1 = -a - \frac{a}{2} \Rightarrow 1 = -\frac{3a}{2} \Rightarrow a = -\frac{2}{3}$$

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

۴

$$\Delta > 0 \Rightarrow 4\omega + 4m > 0 \Rightarrow m > -\omega$$

$$f\left(\frac{9}{1}\right) < 0 \Rightarrow \frac{-11}{1} + \frac{4\omega}{1} + m < 0 \Rightarrow \frac{-11 + 4\omega}{1} + m < 0 \Rightarrow m < \frac{11 - 4\omega}{1}$$

$$\Rightarrow m < \frac{11 - 4\omega}{1}$$

$$\Rightarrow \frac{-2\omega}{1} < m < \frac{11 - 4\omega}{1} \Rightarrow m \in \{-5, -4, -3, -2, -1\}$$

۵

$$m\ddot{x} - 11\dot{x} + 2m - 1 - \gamma = m\ddot{x} - 11\dot{x} + 2m - \gamma = y_2$$

$\Delta = 144 - 4(m^2 - 3m) = 0 \Rightarrow 144 - 4m^2 + 12m = 0$

$$\Rightarrow -\gamma_{0m}^r + \gamma_{1m}^r + \gamma_{2m}^r = 0 \rightarrow \Delta^r = \gamma_{1m}^r - \gamma_{2m}^r (-\gamma_{1m}^r / \gamma_{0m}^r) = \gamma_{1m}^r + \gamma_{1m}^r \gamma_{0m}^r / \gamma_{2m}^r = 11.999 \Rightarrow \sqrt{\Delta^r} = 10.999$$

$$\rightarrow \frac{-12 \pm 10A}{-f_0} = \begin{cases} + \rightarrow \frac{99}{-f_0} = -12/f_0 \\ - \rightarrow \frac{-120}{-f_0} = 12/f_0 \end{cases}$$

$$\Rightarrow \frac{-1 \pm \sqrt{1 - 4 \cdot (-1) \cdot (-1)}}{-2} = \frac{-1 \pm \sqrt{1 - 4}}{-2} = \frac{-1 \pm \sqrt{-3}}{-2} = \frac{-1 \pm i\sqrt{3}}{-2} = \frac{1 \mp i\sqrt{3}}{2} \Rightarrow m = \frac{1 \mp i\sqrt{3}}{2} \Rightarrow x^2 - 1x + 1 = 0 \Rightarrow x = \frac{1 \pm i\sqrt{3}}{2} \Rightarrow \boxed{x \neq y}$$

$$\alpha \in \alpha \in \beta \Rightarrow \alpha' \alpha' q' \alpha' q' \Rightarrow \alpha' q' = \sqrt{\alpha' \alpha' q'} \Rightarrow \alpha = \sqrt{\alpha \beta} = \sqrt{P} = \sqrt{\frac{C}{\alpha}} = \sqrt{\gamma \alpha - 1} \Rightarrow \alpha^2 - \gamma \alpha + 1 = 0$$

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

$$V = K \cdot \Delta T$$

$$y = Kx^r - p_x - \zeta \rightarrow \begin{cases} x = \frac{-b}{r_a} = \frac{r}{rK} = \frac{r}{K} \\ y = \frac{-\Delta}{r_a} = \frac{-r - \zeta K}{K} = -\zeta - \frac{r}{K} = -\Lambda \end{cases}$$

$$y = -\frac{r}{k}x - \frac{r}{k} \Rightarrow -\frac{r}{k} = -\frac{\Delta}{k} \Rightarrow -r = -\frac{\Delta}{k} \Rightarrow \frac{r}{k} = \frac{\Delta}{k} \Rightarrow r = \Delta$$

$$\Delta = 19 - 2(-9K) = 19 + 18K$$

$m > 0 \rightarrow \curvearrowright \Rightarrow \frac{m}{r} + 1 \leq -m \Rightarrow \frac{1}{r} m \leq -1 \Rightarrow m \leq \frac{-r}{\omega}$
 $\frac{-\Delta}{f_{\omega}} = \frac{m}{r} + 1$
 $m < 0 \rightarrow \curvearrowleft \Rightarrow \frac{m}{r} - 1 \geq m \Rightarrow \frac{1}{r} m \geq 1 \Rightarrow m \geq \frac{r}{\omega}$
 $\frac{-\Delta}{f_{\omega}} = \frac{m}{r} - 1$

$\Rightarrow \frac{r}{\omega} \leq m \leq \frac{-r}{\omega} \Rightarrow$

$\frac{r}{\omega} \leq m \leq \frac{-r}{\omega}$
 در این صورت
 می توانیم