

(چون طول و عرض صفر بود از این راحت تره بسم)

$$y = (x-h)^2 a + k \rightarrow a(n+1)^2 + 9 = y$$

$$a(\varepsilon)^2 + 9 = 1 \rightarrow 14a = -8 \rightarrow a = -\frac{4}{7}$$

$$\boxed{-\frac{4}{7}(n+1)^2 + 9 = y} \xrightarrow{\text{فرد دیر}} \boxed{-\frac{4}{7}n^2 - n + \frac{14}{7} = y}$$

(2) دورینه مثبت  $\Delta > 0$   $\leftarrow b^2 - 4ac > 0$   
 که شرط دورینه  $\Delta > 0$  است  
 قضا دورینه مثبت  $p = \frac{c}{a} + \dots$   
 $\frac{c}{a} > 0$   
 $m^2 - am - \varepsilon \lambda > 0 \leftarrow m^2 - \frac{1}{2}(m+4) > 0$   
 $(m+2)(m+4) > 0$   
 $(-4, -2) \cup (12, \infty)$

$$m(-4 \cup m) \vee m > -6 \cup m < 0 \xrightarrow{\frac{m+4}{2} > 0} \underline{m > -6}$$

$$\hookrightarrow \boxed{-4(m-4)}$$

(3) صیغه ریشه ها  $-\frac{b}{a}$   
 قدر ریشه ها  $\frac{c}{a}$   
 دورینه  $\Delta > 0$   
 $\frac{x+m+1}{2} \leftarrow -\frac{b}{a} = \frac{a}{c} \leftarrow -\frac{b}{a} = \frac{1}{\frac{c}{a}}$   
 $= \frac{2}{2-m} \hookrightarrow (-x+m+1)(2-m) = 9$   
 $(-x+m+1)(2-m) = 9 \rightarrow 2m^2 - am + 2 = 9$   
 $2m^2 - am - 7 = 0$   
 $(2m+1)(m-\frac{7}{2}) = 0$   
 $\underline{m = -\frac{1}{2}} \quad \underline{m = \frac{7}{2}}$

$$\Delta > 0 \rightarrow b^2 - 4ac > 0$$

$$(2m-1) - 12(2+m) > 0$$

$$\hookrightarrow (2-1)^2 - 12\left(\frac{1}{2} - \frac{1}{2}\right) > 0 \quad \checkmark \quad \boxed{m = -\frac{1}{2}} \quad \checkmark$$

$$\hookrightarrow (-\frac{1}{2} + 1) - 12\left(\frac{1}{2} + \frac{1}{2}\right) > 0 \quad \times \quad \underline{m \neq -1}$$



$$\frac{-b}{a} = \omega \text{ غير صحيح}$$

$$\frac{c}{a} = \omega \text{ غير صحيح}$$

$$\lambda_1 + \omega \neq 0, \lambda_2 + \omega \neq 0$$

$$\cancel{\lambda_1 + \omega \neq 0} \quad \lambda_1^2 - a\lambda_1 + b = 0 \quad (9)$$

$$\cancel{\lambda_2 + \omega \neq 0} \quad \lambda_2^2 + a\lambda_2 - 4 = 0$$

$$n_1, n_2$$

$$\lambda_1^2 - a\lambda_1 + b = 0 \rightarrow \lambda_1 + n_1 + 1 = \frac{a}{\omega} \rightarrow -\frac{1}{\omega} + \frac{1}{\omega} = \frac{a}{\omega} \Rightarrow \frac{1}{\omega} = \frac{a}{\omega} \quad a=1$$

$$\lambda_2^2 + a\lambda_2 - 4 = 0 \rightarrow n_1 + n_2 = \frac{-a}{\omega} = -\frac{1}{\omega}$$

$$\lambda_1^2 - a\lambda_1 + b = 0 \rightarrow (n_1 + \omega)(n_2 + \omega) = \frac{b}{\omega}$$

$$\lambda_2^2 + a\lambda_2 - 4 = 0 \rightarrow n_1 \times n_2 = \frac{-4}{\omega} = -\omega$$

$$\left[ \frac{a}{\omega} \right] \rightarrow \left[ \frac{1 \times -1}{\omega} \right] = \boxed{-\frac{\omega}{\omega}}$$

$$\begin{aligned} & \rightarrow n_1 n_2 + \omega \lambda_1 + \omega \lambda_2 + \omega^2 = \frac{b}{\omega} \\ & -\omega + \frac{\omega}{\omega} + \frac{\omega}{\omega} + \frac{\omega}{\omega} = \frac{b}{\omega} \\ & -\omega - \frac{1}{\omega} + \frac{1}{\omega} = \frac{b}{\omega} \rightarrow b = -\omega^2 \end{aligned}$$

$$\lambda^2 + 4\lambda + m = 0 \rightarrow m = \lambda^2 + 4\lambda$$

$$\lambda^2 + 4\lambda - \omega m = 0 \rightarrow \lambda^2 + 4\lambda = \omega m$$

$$\lambda^2 + 4\lambda - \omega m = 0$$

$$4 - 1 - \omega m = 0$$

$$- \omega m = -3 \Rightarrow m = \omega$$

$$\lambda^2 + \omega \lambda = 0$$

$$\lambda(\lambda + \omega) = 0$$

$$\lambda = 0 \text{ or } \lambda = -\omega$$

سؤال قصه غير صحيح

$$\omega - (-1) = \boxed{1}$$

$$\lambda = \omega$$

$$\lambda = -1$$

$$\lambda^2 - 1\lambda = \lambda^2 + 4\lambda$$

$$4\lambda - \omega \lambda = 0$$

$$\lambda(\lambda + \omega) = 0$$

$$\lambda^2 - 4\lambda - 1 = 0$$

$$(\lambda - 2)(\lambda + 1) = 0$$

$$\lambda^2 + 4\lambda + \omega = 0$$

$$(\lambda + 1)(\lambda + \omega) = 0$$

(10)