

نام و نام خانوادگی: فرناز صالحی پاسخنامه تشریحی تکلیف شماره ۲۲ کلاس دوم (روز جمعه)

$$\alpha \times \beta = r \quad / \quad \alpha + \beta = \omega \rightarrow \alpha = \omega - \beta \rightarrow \omega_{\perp} = \frac{\omega \pm \sqrt{\omega^2 - r^2}}{r} \quad / \quad r^2 = -r + \omega n \rightarrow \underline{r^2 = -r + \omega \beta}$$

$$\frac{\xi\alpha + \beta^\omega}{d\beta^r} \rightarrow \xi\alpha + (\varepsilon\eta\beta - \gamma_{10}) = \xi\alpha + \varepsilon\eta\beta - \gamma_{10}$$

$$\beta = \gamma(1 - 2\beta - \epsilon_4) \quad \gamma \beta \rightarrow \epsilon v_9 \beta - \epsilon_4$$

$\alpha = \beta - 19$
 $\Rightarrow \frac{\Sigma \alpha \beta - 19}{\Delta p^2} = \frac{\Sigma \alpha \beta}{\Delta p^2} - \frac{19}{\Delta p^2} \rightarrow \frac{\alpha \beta - 51}{\Delta p - 2} = 19$

$$x \rightarrow \frac{x + (-1,8)}{1} = -1,8 \quad / \quad \frac{-b}{a} = -1,8 \rightarrow \frac{-b}{a} = \boxed{1,8}$$

$\sqrt{\epsilon^2 - \epsilon(1+\Delta)} \rightarrow \frac{\sqrt{\epsilon^2 - \epsilon_0}}{1} = \frac{\Delta}{|a|} \Rightarrow \sqrt{\epsilon^2 - \epsilon_0} = \frac{\epsilon}{F} K \xrightarrow{|a|^2} \epsilon^2 - \epsilon_0 = \frac{14}{9} \epsilon^2 \xrightarrow{\times 9} 9\epsilon^2 - 9\epsilon_0 = 14\epsilon^2$

$|c|^2 = 14$

$|c| = \pm \sqrt{14}$

$|c| = 3$

$|c|^2 = 9$

$\left[\frac{9}{F}\right] = [\epsilon, \Delta] = \begin{pmatrix} \epsilon \\ \Delta \end{pmatrix}$

$$A = \begin{bmatrix} x & y \\ y & x \end{bmatrix} / n = \begin{bmatrix} -2 & 1 \\ 1 & -2 \end{bmatrix} \rightarrow \lambda = \frac{-x + (-2)}{2} = -1 \rightarrow \boxed{\lambda = -1} \rightarrow \frac{\alpha + \beta}{2} = -1 \rightarrow \begin{cases} \alpha + \beta = -2 \\ \alpha^2 + \beta^2 = 2 \end{cases}$$

$$y = a(n - \alpha)(x - \beta)$$

$\hookrightarrow 1 = a(-1-\alpha)(-1-\beta) \rightarrow 1 + (\alpha + \beta) + \alpha\beta \rightarrow 1 - \frac{1}{\gamma} - \frac{1}{\gamma} = -\frac{2}{\gamma}$

$$-n^r + \Delta n + m = \cdot \xrightarrow{x(-1)} n^r - r n - m = \cdot \xrightarrow{\Delta \gamma} \gamma + m \cdot$$

$$\frac{\lambda + \sqrt{\lambda^2 + 4\epsilon m}}{2} \left(\frac{q}{r} \rightarrow \boxed{m < -\frac{q}{\epsilon}} \right)$$

$m > -\frac{20}{3}$
 $-\frac{20}{3} < m < -\frac{9}{2} \rightarrow -3, -2, -1, 0$
 $\boxed{-3, -2, -1, 0}$

$$y = mx^2 = 12x + 8m - 1 \rightarrow \boxed{\min \rightarrow m \geq 0} \quad / \quad y = m \left(x^2 - \frac{12}{m}x \right) + 8m - 1$$

$$\left(x - \frac{6}{m} \right)^2 - \frac{36}{m^2} \rightarrow y = m \left(x - \frac{6}{m} \right)^2 - \frac{36}{m} + 8m - 1$$

$$mx^2 - 12x - 8m + 1 = 0 \rightarrow \Delta m - \frac{36}{m} = 0 \quad \leftarrow y = -\frac{36}{m} + 8m - 1$$

$$m^2 - 36 = 0 \rightarrow m = 6 \quad \leftarrow \text{میزان کمینه}$$

$$x = \frac{6}{m} = \frac{6}{6} = 1 \rightarrow \boxed{m=6}$$

$$x^2 + 2(a+1)x + 2a - 1 = 0$$

$$\alpha + \beta = -2(a+1) \quad | \quad \text{شرط وجود ریشه برای } a = 1 \text{ بدین منتهی}$$

$$\alpha \times \beta = 2a - 1$$

$$a^2 = \alpha \times \beta \rightarrow a^2 = 2a - 1 \rightarrow a^2 - 2a + 1 = 0 \rightarrow (a-1)^2 = 0$$

$$\boxed{a=1}$$

$$x^2 + 4x + 1 = 0 \rightarrow \Delta = 16 - 4 = 12 > 0 \quad \checkmark$$

$$x^2 - \sqrt{2}x - 8 = 0 \quad / \quad 2p^2 - 2p + 5 = ? \rightarrow \boxed{x^2 = 2} \rightarrow z^2 - \sqrt{2}z - 8 = 0 \rightarrow z = \frac{\sqrt{2} \pm \sqrt{49}}{2}$$

$$S = 0 \quad / \quad p = \frac{-\sqrt{2} \pm \sqrt{49}}{2} \rightarrow 2 \left(\frac{-\sqrt{2} \pm \sqrt{49}}{2} \right)^2 \rightarrow \frac{2 + 49}{2} = \frac{51}{2}$$

$$\frac{(2 + \sqrt{49})^2}{2} \rightarrow \frac{51 + 2\sqrt{49}}{2}$$

$$y = kx^2 = 8x - 4 \quad / \quad y = -8x - 2$$

$$x = \frac{-b}{2a} = \frac{-8}{2k} = \left(\frac{4}{k} \right) \rightarrow y = k \left(\frac{4}{k} \right)^2 - 8 \times \frac{4}{k} - 4 \rightarrow y = \frac{16}{k} - 4$$

$$\frac{-8}{k} - 4 = -8 \left(\frac{4}{k} \right) - 2 \rightarrow \frac{-8}{k} - 4 = -\frac{32}{k} - 2 \rightarrow \boxed{k=2} \rightarrow y = \frac{8}{2} - 4 = 0$$

$$-mn^2 + mn + 1 + (m+1)n = 0 \rightarrow -mn^2 + (m+m+1)n + 1 = 0$$

$$-mn^2 + (2m+1)n + 1 = 0 \rightarrow \frac{x(-1)}{mn^2 - (2m+1)n - 1} = 0$$

$$(m+1)^2 - 4(m)(m-1) < 0$$

$$m^2 + 4m - 1 < 0$$

$$m^2 + 2m + 1 < 0 \rightarrow (m+1)^2 < 0$$

$$\frac{\sqrt{2}}{2} < m+1 < \frac{\sqrt{2}}{2}$$

$$m+1 = 1 \rightarrow m = 0$$