

Subject:

تقیف شماره ۱۹

Date:

Sa Su Mo Tu We Th Fr

ابن ابی

α و $\mu\alpha$

$$\mu\alpha - \alpha = \mu$$

①

$$\alpha + \mu\alpha = \frac{\mu}{\mu}$$

$$\alpha \times \mu\alpha = \mu\alpha^2 = \frac{\mu}{\mu} \rightarrow \alpha^2 = \frac{\mu}{\mu} \Rightarrow \alpha = \pm \frac{\mu}{\mu}$$

$$\textcircled{1} \quad \frac{\mu}{\mu} + \mu = \frac{\mu}{\mu} = \frac{\mu}{\mu} \Rightarrow \boxed{\alpha = 1}$$

$$\textcircled{2} \quad \frac{-\mu}{\mu} - \mu = \frac{-\mu}{\mu} = \frac{\mu}{\mu} \Rightarrow \boxed{\alpha = -1}$$

$$\Rightarrow |1 - (-1)| = \underline{\underline{2}}$$

$$\frac{1}{\sqrt{\alpha}} + \frac{1}{\sqrt{\beta}} = \omega \Rightarrow \frac{\sqrt{\alpha} + \sqrt{\beta}}{\sqrt{\alpha\beta}} = \omega \quad (2)$$

$$4x^2(m+1)x+1=0$$

$$(\sqrt{\alpha} + \sqrt{\beta})^2 = \frac{\alpha + \beta}{\delta} + 2\sqrt{\frac{\alpha\beta}{\frac{1}{4}}} = \frac{\delta + \frac{1}{\mu}}{\frac{1}{4}} = \omega$$

$$\frac{\delta}{4} = \sqrt{\delta + \frac{1}{\mu}} \xrightarrow{\text{①} \times \frac{1}{\sqrt{\delta}}} \frac{\sqrt{\delta}}{4} = \delta + \frac{1}{\mu} \Rightarrow \delta = \frac{1\mu}{\mu^2 + 4}$$

$$\delta = \frac{m+1\mu}{\mu^2 + 4} = \frac{1\mu}{\mu^2 + 4} \Rightarrow \underline{m = -1}$$

$$mx^2 + \mu x + 1 \Rightarrow p = \frac{c}{a} = \frac{1}{-1} = \underline{-1} \rightarrow \text{جواب حاصله}$$

$$kx^2 + kx^2 - 4x - 1 = 0 \quad \alpha\beta = -1 \quad \alpha + \beta = 1 \quad (3)$$

$$\beta = 1 - \alpha \Rightarrow (1 - \alpha)\alpha = -1 \Rightarrow \alpha - \alpha^2 = -1$$

$$\Rightarrow \alpha^2 - \alpha - 1 = 0 \rightarrow (\alpha - 2)(\alpha + 1) = 0 \rightarrow \left. \begin{matrix} -1 \\ 2 \end{matrix} \right\} \text{جواب}$$

$$\rightarrow -k + k + 4 - 1 = 0$$

$$\Rightarrow k + \mu = 0 \rightarrow k = -\mu$$

$$\alpha = -1$$

$$\alpha + \beta = -4 \quad \alpha\beta = a$$

(F)

$$3\alpha^2 + 1\beta^2 = 12\sqrt{4} + 10 \rightarrow \frac{12+10}{4} = \frac{a}{4}$$

$$\Rightarrow \frac{3}{4}(\alpha^2 + \beta^2) + \frac{1}{4}(\alpha^2 - \beta^2)$$

$$\frac{3}{4}(S^2 - 4P) + \frac{1}{4}(\underbrace{\alpha + \beta}_S)(\underbrace{\alpha - \beta}_{\sqrt{S^2 - 4P}})$$

$$\Rightarrow \frac{3}{4}(16 - 4a) + \frac{1}{4}(-4) \times \sqrt{16 - 4a}$$

$$\rightarrow 9 - a - \sqrt{16 - 4a} = 10$$

$$12\sqrt{4} + 3\sqrt{16 - 4a} + a - a = 0$$

$$\boxed{a=1} \Rightarrow 12\sqrt{4} + \underbrace{3\sqrt{16-4a}}_{12\sqrt{4}} + a - a = 0$$

$\beta > \alpha$ چون $\Rightarrow (a=1) \rightarrow$ جواب منفی بود

$$x^N - Vx^P - \delta = 0 \quad r_P^P - w_{SP} + r_{SS}?$$

(a)

$$t^P - Vt - \delta = 0 \Rightarrow t_{1,2} = \frac{V \pm \sqrt{4A}}{r}$$

$$\frac{V - \sqrt{4A}}{r} \rightarrow \text{نقد قبل} \Rightarrow (x_1) \Rightarrow x_{1,2} = \pm \sqrt{\frac{V + \sqrt{4A}}{r}}$$

$\downarrow$
 $\delta = 28$

~~$$r_P^P + r_{SS} - w_{SP} = ? \Rightarrow r_P^P = r \times \left[\sqrt{\frac{V + \sqrt{4A}}{r}} \times \sqrt{\frac{V + \sqrt{4A}}{r}} \right]$$~~

$$r_P^P + r_{SS} - w_{SP} = ? \Rightarrow r_P^P = r \times \left[\sqrt{\frac{V + \sqrt{4A}}{r}} \times \sqrt{\frac{V + \sqrt{4A}}{r}} \right]$$

$$= \dots = r \times \left(\frac{-\sqrt{4A} - V}{r} \right)^2 - \frac{28 + 4A + 12\sqrt{4A}}{r}$$

$$= \boxed{8A + V\sqrt{4A}}$$

IRISL
GROUP

Subject:

Date:

$$rx^2 - ax + b = 0$$

$$\left[\frac{ab}{r} \right] = ?$$

$$\frac{rx^2 + ax - 45}{8} = \frac{-1}{p} \quad p = \frac{-r}{a}$$

$$8 = \frac{-1}{p} \quad \alpha + \beta$$

$$p = \frac{-r}{a} \quad \alpha \beta$$

(7)

$$\Rightarrow \frac{a}{r} = \alpha + \beta + \frac{1}{p} + \frac{1}{p} = -\frac{1}{p} + 1 = \frac{1}{p} = \frac{a}{r} \Rightarrow \boxed{as 1}$$



$$\Rightarrow \alpha \beta = -r$$

$$\left(\alpha + \frac{1}{p}\right)\left(\beta + \frac{1}{p}\right) = \alpha\beta + \frac{1}{p}(\alpha + \beta) + \frac{1}{p^2}$$

$$\rightarrow -r + \frac{1}{p} \times -\frac{1}{p} + \frac{1}{p^2} = \frac{b}{r}$$

$$\Rightarrow -r = \frac{b}{r} \Rightarrow \underline{\underline{b = -r}}$$

$$\frac{ab}{r} = \left[\frac{-4 \times 17}{r} \right] = \boxed{-r}$$

(V)

$$r_1 \beta^2 + r_2 \alpha^2 - r_3 \beta \leq IV$$

$$a\alpha^2 - a\alpha - b \leq 0 \Rightarrow a\alpha^2 = a\alpha + b \Rightarrow \alpha \leq \frac{a\alpha + b}{a}$$

$$a\beta^2 - a\beta - b \leq 0 \Rightarrow a\beta^2 = a\beta + b \Rightarrow \beta \leq \frac{a\beta + b}{a}$$

$$\Rightarrow r_1 \times \frac{a\beta + b}{a} + r_2 \times \frac{a\alpha + b}{a} - r_3 \beta \leq IV$$

$$\rightarrow r_1 \alpha \beta + r_1 b + r_2 a \alpha + r_2 b - r_3 \beta \leq IV$$

IRISL GROUP

Subject:

Date:

Sa Su Mo Tu We Th Fr

$$\Rightarrow \epsilon_0 a \beta + \epsilon_0 a + \epsilon_0 b - \epsilon_0 \beta a = 1 \nu a$$

$$\Rightarrow \epsilon_0 b = -\mu a \Rightarrow b = -\frac{\mu}{\epsilon_0} a$$

افتداف $\frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{a^2 + \epsilon_0 a b}}{|a|} = \sqrt{\frac{\frac{\nu}{\epsilon_0} a^2}{|a|}} = \sqrt{\frac{\nu}{\epsilon_0}}$

جواب

$$n^p - (a+1)n + a = 0 \quad \begin{matrix} r_{k+1} \\ r_{k+p} \end{matrix} \quad (1)$$

$$\underbrace{r_{k+p}} = \underbrace{a+1} \rightarrow \cancel{r_{k+p}} = a$$

$$(r_{k+1})(r_{k+p}) = r_{k+p} + \cancel{r_{k+1}} = a$$

$$r_{k+p} + \cancel{r_{k+1}} = \cancel{r_{k+p}}$$

$$n^p - r_{k+p} = 0 \quad r_{k+p} + r_k \leq 0 \rightarrow r_k(k+1) \leq 0$$

$$\boxed{a \leq p}$$

$$\rightarrow \underbrace{k = 0}_{-1} - 1 \Rightarrow r_{k+1} = \boxed{1, p}$$

صديقي

$$(a+1)^p - ra \geq 0 \Rightarrow a^{p+1} - ra \geq 0 \Rightarrow (a-1) \geq 0$$

$$n^p - (pa+1)n + b \leq 0 \rightarrow r_k > r_{k+p}$$

$$n^p - 1 \cdot n + b \leq 0 \Rightarrow r_k + r_{k+p} \leq 1 \Rightarrow r_k + r_p \leq 1$$

$$\rightarrow k \leq p$$

$$\Rightarrow 4 \times k = \underline{\underline{p}}$$

$$\textcircled{p} \leftarrow \textcircled{4}$$

$$\Rightarrow r_{k+p} - p = \boxed{p-1}$$

$$x^2 + x - 1 - m^2 = 0$$

$$\alpha^2 + \beta^2 = ?$$

(9)

$$S^2 - 2P = \alpha^2 + \beta^2 = \left(\frac{-b}{a}\right)^2 - 2\left(\frac{c}{a}\right)$$

$$= (1)^2 - 2(-1 - m^2) = 0$$

$$\Rightarrow 1 + 2 + 2m^2 = 0 \Rightarrow 2m^2 + 3 = 0$$

$$\min = \frac{-b}{2a} = 0 \Rightarrow 0x^2 + 3 = (3)$$

$$A(3, y)$$

$$B(-8, y)$$

(10)

$$y_s = 1$$

ریشه ها $\rightarrow \alpha, \beta$

$$\alpha^2 + \beta^2 = 5$$

★ دو نقطه A و B چون عرض ها برابر است میانشین آن ها برابر مثل رأس
یعنی مربع آن ها برابر با جمع ریشه ها یعنی $\alpha + \beta$ است.

$$\alpha + \beta = 3 - 8 = -5$$

$$S^2 - 2P = 5$$

$$\Rightarrow 25 - 2P = 5 \Rightarrow -2P = -20 \Rightarrow P = 10$$

Subject:

Date:

Sa Su Mo Tu We Th Fr

$$\alpha + \beta = -1$$

$$\gamma\beta = -\frac{1}{\gamma} \Rightarrow \beta = -\frac{1}{\gamma\alpha}$$

$$\alpha - \frac{1}{\gamma\alpha} = -1 \Rightarrow \gamma\alpha^2 - 1 = -\gamma\alpha \Rightarrow \gamma\alpha^2 + \gamma\alpha - 1 = 0$$

$$\frac{-b}{\gamma\alpha} = \frac{-\gamma}{\gamma} = -1 \rightarrow \gamma - \gamma = 0 \Rightarrow \gamma \times \gamma = 1 \Rightarrow \gamma = \frac{1}{\gamma}$$

$$-\frac{\gamma}{\gamma}\alpha^2 - \frac{\gamma}{\gamma}\alpha + \frac{1}{\gamma} = 0 \xrightarrow{\text{ضرب در } \gamma} -\frac{b}{\gamma\alpha} = \frac{\gamma}{\gamma} = 1$$

$$\rightarrow -\frac{\gamma}{\gamma} + \frac{\gamma}{\gamma} + \frac{1}{\gamma} = \frac{\gamma}{\gamma} - \frac{1}{\gamma} = 1 \rightarrow \text{درست } \checkmark \checkmark$$

$$\boxed{\frac{1}{\gamma}} = \text{نقطه به صورت } \gamma = \frac{1}{\gamma}$$