

نام و نام خانوادگی امیرعلی مقبوری پاسخنامه تشریحی تکلیف شماره ۱۹ کلاس ایندهم سر A

۱۸, ۲۵

$$\alpha\beta = 3\alpha^2 - \frac{4}{3} \rightarrow \alpha^2 = \frac{4}{9} \quad \begin{cases} \alpha = \frac{2}{3} \rightarrow \beta = 2 \Rightarrow S = \frac{1}{3}, \frac{2}{3} = 1 = a \\ \alpha = -\frac{2}{3} \rightarrow \beta = -2 \Rightarrow S = -\frac{1}{3}, \frac{2}{3} = -1 = a \end{cases}$$

$3\alpha^2 - 2\alpha + 4$
 $\alpha + \beta = 3\alpha$

$1 + 1 = 14$ ✓

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$$34\alpha^2 - (m+14)\alpha + 1 = 0 \quad \sqrt{\frac{1}{\alpha}} + \sqrt{\frac{1}{\beta}} = 5 \rightarrow \frac{1}{\alpha} + \frac{1}{\beta} + 2\sqrt{\frac{1}{\alpha\beta}} = 25$$

• $\begin{cases} \frac{-b}{a} = S \\ \frac{c}{a} = P \end{cases} \Rightarrow \frac{m+14}{34} + 2\sqrt{\frac{1}{34}} = 25 \Rightarrow m+14+12 = 25 \Rightarrow m = -1$

$P' \Rightarrow -\alpha^2 + 3\alpha + 2 = 0 = -2$ ✓

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$\alpha + \beta = 1 \quad \beta = 1 - \alpha \rightarrow \alpha(1 - \alpha) = -2$

$\Rightarrow -\alpha^2 + \alpha + 2 = 0 \Rightarrow \alpha^2 - \alpha - 2 = 0$

$(\alpha - 2)(\alpha + 1)$

$\downarrow \quad \downarrow$

$2 \quad -1$

$\Rightarrow \alpha = -1 \rightarrow -4 + 12 + 2 = 0$

$\beta = -1 \quad \beta = 2$

$K = -3$ ✓

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✓ $\begin{cases} S = -4 \\ P = a \end{cases} \Rightarrow \beta = -4 - \alpha \Rightarrow 3\alpha^2 + 2(-4 - \alpha)^2 = 12\sqrt{2} + 15 \Rightarrow 5\alpha^2 + 24\alpha + 12 = 12\sqrt{2} + 15$

$5\alpha^2 + 24\alpha - 13 = 12\sqrt{2}$

$\rightarrow \frac{-24 \pm \sqrt{1296 + 740\sqrt{2}}}{10}$

سوال ۵ رو من خواهم نه ۵!

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صفحه آخر...

$t = \alpha^2 \Rightarrow t^2 - 7t - 5 = 0 \quad \begin{cases} \alpha^2 = \frac{7 + \sqrt{69}}{2} \rightarrow P = -\frac{7 + \sqrt{69}}{2}, S = 0 \\ \alpha^2 = \frac{7 - \sqrt{69}}{2} \end{cases}$

$2P^2 - 36P + 25 \Rightarrow 2P^2 \Rightarrow 2\left(-\frac{7 + \sqrt{69}}{2}\right)^2 \Rightarrow \frac{118 + 14\sqrt{69}}{2} = 59 + 7\sqrt{69}$ ✓

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$$y = \frac{1}{2}an^2 + an - 4 \rightarrow S = \frac{-1}{2}$$

$$y' = \frac{1}{2}an^2 - an + b \Rightarrow S' = S + 1 \Rightarrow \frac{a}{2} = -\frac{1}{2} + 1 \Rightarrow a = 1$$

$$\frac{1}{2}an^2 + an - 4 = 0 \Rightarrow \alpha = \frac{-1 \pm \sqrt{1-4}}{1} = -1 \pm i$$

$$\frac{1}{2}an^2 - an + b = 0 \Rightarrow \alpha' = -1, \beta' = 1$$

$$P' = -\frac{b}{a} = \frac{4}{1} = 4$$

$$\left[\frac{ab}{\epsilon} \right] = \left[\frac{-4}{1} \right] = [-4] \Rightarrow -4 \checkmark$$

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$$S = 1$$

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

$$\beta^2 = 1 - 2\alpha + \alpha^2 \Rightarrow \beta^2 = 1 - 2\alpha + \alpha^2$$

$$E_0(1 - 2\alpha + \alpha^2) = 2\alpha^2 - 2\alpha(1 - \alpha) = 2\alpha^2 - 2\alpha + 2\alpha^2 = 4\alpha^2 - 2\alpha$$

$$4\alpha^2 - 2\alpha = 1 \Rightarrow 4\alpha^2 - 2\alpha - 1 = 0$$

$$\alpha = \frac{2 \pm \sqrt{4 + 16}}{8} = \frac{2 \pm \sqrt{20}}{8} = \frac{1 \pm \sqrt{5}}{4}$$

$$\frac{1 \pm \sqrt{5}}{4} \leftarrow \frac{1 \pm \sqrt{5}}{4} \leftarrow |\alpha - \beta| \leftarrow \frac{1 \pm \sqrt{5}}{4}$$

$$4\alpha^2 - 2\alpha - 1 = 0 \Rightarrow 4\alpha^2 - 2\alpha + 1 = 0$$

$$S = a + 1 \Rightarrow a + (\alpha + \beta) = a + 1$$

$$P = a \Rightarrow \alpha^2 + \beta^2 = a$$

$$\alpha^2 - \beta^2 = -1$$

$$\alpha^2 = 1 \rightarrow 1 \checkmark, \beta = 1 \Rightarrow S = 1, P = 1 \Rightarrow a = 1$$

$$2\alpha^2 - (2\alpha + 1) + b = 0$$

$$\begin{cases} S' = 2\alpha + 1 \\ P' = b \end{cases}$$

$$2\alpha^2 = 1 \Rightarrow \alpha' = 1, \beta' = 1$$

$$b = 2\alpha$$

$$2\alpha - 1 = 1 \Rightarrow \alpha = 1 \checkmark$$

$$2\alpha^2 + \alpha - 1 - m^2 = 0$$

$$S' - 2P = 1 + 2 + 2m^2 \xrightarrow{min \Rightarrow if m=0} 2(1)^2 + 2 = 4 \checkmark$$

$$A(x, y) \text{ ext } \begin{vmatrix} -1 \\ 1 \end{vmatrix} \rightarrow y = a(x - (-1))^2 + 1 = ax^2 + 2ax + (1 + a)$$

$$B(-a, y)$$

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

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

$$y = \frac{1}{2}x^2 - \frac{1}{2}x + \frac{1}{2} \xrightarrow{if x=0} y = \frac{1}{2} \checkmark$$

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$$S = -4 \quad p = a$$

✓

$$\alpha, \beta = \frac{-4 \pm \sqrt{16 - 4a}}{2} \quad \alpha < \beta \rightarrow \alpha = -2 - \sqrt{4 - a}$$

$$\alpha^r + r(\alpha^r + \beta^r) = \alpha^r + r(S^r - rp)$$

$$(-2 - \sqrt{4 - a})^r + r(16 - 4a) = 12\sqrt{r} + 12 \rightarrow a = 1$$