

سلا میزبانی سری ۲۲

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

5

$$\beta^2 = 4\beta - 2 \rightarrow \beta^4 = 4\beta^2 - 2\beta = 4(4\beta - 2) - 2\beta = 14\beta - 8 \rightarrow \beta^5 = 2\beta^2 - 1, \beta =$$

$$4(4\beta - 2) - 1 = 16\beta - 8 - 1 = 16\beta - 9 \rightarrow \beta^6 = 10\beta^2 - 4\beta = 10\beta(4\beta - 2) - 4\beta =$$

$$\Rightarrow \beta^6 = 40\beta - 4\beta = 36\beta \rightarrow \frac{\epsilon\alpha + \beta^6}{4\beta^2} = \frac{\epsilon\alpha + 36\beta}{4(4\beta - 2)} = \frac{9(4\beta - 2)}{4(4\beta - 2)} = \boxed{9}$$

$$n = \frac{n_1 + n_2}{r} = \frac{r - 1/a}{r} = \frac{r-1}{r} \cdot \frac{1}{a} = \frac{-b}{ra}, \quad \frac{b}{ra} = \frac{-b}{a}$$

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$$\frac{-b}{ra} = \frac{b}{a} \rightarrow \frac{-b}{a} = \boxed{\frac{r}{r}} \checkmark$$

10

$$k \perp \text{دایره} = \frac{\sqrt{\Delta}}{|a|} = \frac{\sqrt{4k^2 - 4}}{1} = \sqrt{4k^2 - 4} = \frac{r}{a}k \rightarrow k^2 - 1 = \frac{r}{a}k$$

۳

$$\frac{r}{a}k^2 = 1 \rightarrow k^2 = \frac{a}{r} \rightarrow \left[\frac{k^2}{r} \right] = \left[\frac{a}{r} \right] = \left[\frac{r}{a} \right] = \boxed{r} \checkmark$$

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$$y = 2a - 3b + c$$

$$y = 9a + 2b + c \quad \left\{ \begin{array}{l} 19a - 11b = 0 \rightarrow 19a = 11b \end{array} \right.$$

$$\text{Ext} \left| \frac{-b}{ra} = \frac{-b}{b} = -1 \right.$$

۴

15

$$\alpha^2 + \beta^2 = \frac{r}{a} - 2\beta = 1 \rightarrow 2\beta = 1 \rightarrow \beta = \frac{1}{2}$$

$$\alpha + \beta = \frac{-b}{a} = -1 \rightarrow \alpha^2 = 1 \rightarrow y = \alpha^2 - 5\alpha + \beta = \alpha^2 + 2\alpha - \frac{1}{2}$$

$$\rightarrow y = a\left(\alpha^2 + 2\alpha - \frac{1}{2}\right) \rightarrow 1 = a\left(1 + 2 - \frac{1}{2}\right) \rightarrow a = \frac{2}{3} \rightarrow y = \frac{2}{3}\left(\alpha^2 + 2\alpha - \frac{1}{2}\right)$$

$$\rightarrow y = \frac{1}{3} \quad \checkmark$$

Ruzzle

20

$$x^2 + 4x + m = 0 \rightarrow \Delta = 16 + 4m \quad \bullet \quad x = \frac{-4 \pm \sqrt{16+4m}}{-2} \quad (2) 1$$

$$\rightarrow \frac{-4 + \sqrt{16+4m}}{-2} < \frac{9}{2} \rightarrow -\sqrt{16+4m} < 17 \rightarrow \sqrt{16+4m} > -17 \rightarrow 16 < 16+4m$$

$$\rightarrow -9 < 4m \rightarrow -\frac{9}{4} < m$$

$$\rightarrow \frac{-4 - \sqrt{16+4m}}{-2} < \frac{9}{2} \rightarrow 16 + 4m < 97 \rightarrow 4m < 81 \rightarrow m < \frac{81}{4}$$

$$\rightarrow -\frac{9}{4} < m < \frac{81}{4} \rightarrow -2.25, -1, 0, 1, 2, \dots, 20 \rightarrow \sim 44$$

5

$$\frac{-\Delta}{2a} = \frac{16 - 4m(\Delta m - 1)}{4} = 2 \rightarrow \Delta m^2 - 4m - 29 = 2m \rightarrow \Delta m^2 - 6m - 29 = 0 \quad (4)$$

$$\rightarrow \frac{1}{2} m^2 - 3m - 14.5 = 0 \rightarrow (m - \frac{12}{2})(m + 12) = (m - 6)(\Delta m + 12) = 0$$

$$\rightarrow m - 6 \rightarrow m = 6 \checkmark \rightarrow y = 2x^2 - 12x + 14$$

$$\rightarrow \Delta m + 12 = 0 \rightarrow \Delta m = -12 \rightarrow m = \frac{-12}{\Delta} \rightarrow a > 0 \rightarrow \times$$

10

$$\rightarrow \text{نقطه} = x = \frac{-b}{2a} = \frac{+12}{4} = 3 \quad (5) \checkmark$$

$$\text{نقطه} \rightarrow a^2 = 4\beta = \frac{4a-1}{1} \rightarrow a^2 - 4a + 1 = 0 \rightarrow (a-1)^2 = 0 \rightarrow a = 1 \quad (6) \checkmark$$

شرط وجود درجه برای $a=1$ بزرگ است $\rightarrow 5 \checkmark$

$$x^2 - 4x + 1 = 0 \rightarrow t^2 - 4t - 5 = 0 \rightarrow \Delta = 16 - 4(-5) = 36 \quad (7) 15$$

$$\rightarrow t = \frac{4 \pm \sqrt{36}}{2} \rightarrow x_1, x_2 = \sqrt{\frac{4 \pm \sqrt{36}}{2}}, -\sqrt{\frac{4 \pm \sqrt{36}}{2}}$$

$$\rightarrow x_1 + x_2 = 0, p = x_1 x_2 = -\frac{4 \pm \sqrt{36}}{2}$$

$$\rightarrow \frac{2p^2 - 4sp + 2s}{2} = 2p^2 = 2\left(-\frac{4 \pm \sqrt{36}}{2}\right)^2 = 54 \pm 4\sqrt{36}$$

Subject:

Date:

$$n = -\frac{2}{k} = -\frac{1}{k}$$

$$y = k\left(\frac{1}{k}\right)^{-1} = k\left(\frac{1}{k}\right) = 1$$

$$y = -\frac{2}{k} = 1$$

(1)

$$y = -\frac{2}{k} = 1 \Rightarrow k = -2$$

(2)

$$y = -\frac{2}{k} = 1$$

5

$$m^2 + m + 1 = m^2 - m \Rightarrow m^2 + (m+1)m + 1 + m = 0$$

(1)

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

$$(m+1)(1+m) = 0 \Rightarrow \frac{-1 \pm \sqrt{1-4}}{2} \Rightarrow \frac{-1 \pm \sqrt{-3}}{2} \Rightarrow \frac{-1 \pm i\sqrt{3}}{2}$$

(2)

(2)