

10, 15

19 قسط
یا: (م) سیر

1 سیر محدود

پاسیانه رو بادت بخور!

$$3n^2 - an + 2 = 0$$

$$3a \quad , \quad a$$

$$\frac{2}{3} = 3a^2 \rightarrow 9a^2 = 2 \rightarrow a = \pm \sqrt{\frac{2}{9}}$$

$$S = r a = \frac{a}{r} \rightarrow \begin{cases} a = 1 \\ a = -1 \end{cases} \rightarrow \text{اختلاف} = \boxed{14}$$

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$$4n^2 - (m+1)n + 1 = 0$$

$$m^2 + 13m + 12 = 0$$

$$\frac{1}{a} + \frac{1}{b} = d \rightarrow \frac{a+b}{ab} = d$$

0

$$\frac{\frac{m+1}{4}}{\frac{1}{4}} \Rightarrow d \rightarrow m = 1$$

$$\frac{1}{a} = \frac{1}{m} \rightarrow \frac{1}{a} = 1$$

$$En^3 + kn^2 - an + r = 0 \quad ab = -2 \quad a+b=1 \rightarrow n^3 - n - 2 = 0 = (n-a)(n-b)$$

$$n^3 - (a+b)n + ab = 0 \quad (n^3 - n - 2)(A+B) \rightarrow An^3 + (B-A)n^2 + (-B-2A)n - 2B$$

$$A = 2$$

$$B = 1$$

$$k = -1$$

✓

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$$n^2 + 4n + a = 0 \quad a \in \mathbb{R} \quad 3a^2 + 25a = 12\sqrt{2} + 18 \quad a = ?$$

$$-\frac{b}{a} \Rightarrow -\frac{4}{1} = -4 \Rightarrow a = -4 - b \quad 3a^2 + 2(-4-b) = 12\sqrt{2} + 18 \rightarrow 3a^2 + 1(3a + 6^2 + 12b)$$

$$\rightarrow 3b^2 + 24b - (12 + 12\sqrt{2}) = 0 \quad \Delta \rightarrow b = \frac{-24 \pm \sqrt{(24)^2 - 4(3)(-12 - 12\sqrt{2})}}{2(3)} \rightarrow \frac{-24 \pm (24 + 12\sqrt{2})}{6} = 6$$

$$b \rightarrow \frac{24 + 12\sqrt{2}}{6} \rightarrow 4 + 2\sqrt{2}$$

$$\rightarrow -\frac{-40 - 12\sqrt{2}}{1} = -40 - 12\sqrt{2}$$

$$p = \frac{c}{a} \rightarrow a = \frac{c}{p} \rightarrow a(-4-b) \rightarrow -(-4 - \frac{12\sqrt{2}}{6})(1 - \frac{12\sqrt{2}}{6})$$

$$a = 14 + 12\sqrt{2}$$

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$$n^2 - 7n + 8 = 0 \quad 5 > p \quad p^2 - 13p + 12 = ?$$

$$t = n^2 \rightarrow t^2 - 7t + 8 = 0 \rightarrow \Delta \Rightarrow t = \frac{7 \pm \sqrt{49 - 32}}{2} \quad t > 0 \quad 5 = 0 \rightarrow -\frac{b}{a} = 0$$

$$p = \frac{(7 + \sqrt{17})}{2} \left(\frac{7 - \sqrt{17}}{2} \right) \rightarrow \text{crossed out}$$

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$$20 = 2(-1)(0) + 1(0) = 0 \quad \text{crossed out}$$

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$$a, b \quad \tan^{-1} a - \tan^{-1} b = 0$$

$$n^2 - an + b = 0$$

$$\left\{ \frac{ab}{2} \right\} = ?$$

$$a + \frac{1}{r} \quad b + \frac{1}{r}$$

(2)

$$-\frac{b}{a} \rightarrow -\frac{1}{r} = a + b \quad a + \frac{1}{r} + b + \frac{1}{r} = a + b + \frac{2}{r} = \frac{a}{r} \rightarrow a = 1$$

$$ab = \frac{c}{a} = -\frac{r}{a} \rightarrow -r$$

$$(a + \frac{1}{r})(b + \frac{1}{r}) = ab + \frac{1}{r}(a+b) + \frac{1}{r^2} \rightarrow -r$$

$$\frac{b}{r} = r \rightarrow b = -r \quad \left\{ \frac{ab}{2} \right\} \rightarrow \left\{ \frac{-r}{2} \right\} \Rightarrow \left\{ -\frac{r}{2} \right\}$$

$$-r \quad \text{check}$$

اسیر فریبان

$$a \neq b \quad ax^2 - ax - b = 0 \quad \text{علاوه } x^2 + 2ax^2 - x \cdot b = 1x \rightarrow x^2 + a^2x - b = \frac{1x}{x^2}$$

$$\Delta = a^2 + 4ab \quad \text{اگر } \frac{\sqrt{\Delta}}{2a} \rightarrow \frac{\sqrt{a^2 + 4ab}}{a} = \sqrt{1 + \frac{4b}{a}}$$

0

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

$$k \neq k+x \quad p \neq p+x$$

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$$L) x^2 - (a+1)x + a = 0 \quad (k+x)^2 - (a+1)(k+x) + a = 0 \rightarrow k^2 + 2kx - xa + x = 0$$

$$\text{تفکیک} \rightarrow x^2 + (a+1)x - xa + x - a = 0 \rightarrow (x+a)x - (a+x) = \frac{xa-x}{x+a}$$

$$k+x+x = x = \sqrt{ax - xa + 1} \rightarrow \sqrt{(a-1)x} = |a-1| = x \rightarrow a = 1 \text{ و } a \neq 1$$

$$x^2 - 10x + b = 0$$

$$p+x-p = x$$

$$x_1 = x = a$$

$$x_2 = b = 2x$$

$$\rightarrow \sqrt{(a+1)^2 - 4b} = 2 \rightarrow 100 - 4b = 4 \rightarrow b = 24$$

$$x_2 - x = (21) \checkmark$$

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

$$a^2 + b^2 = ?$$

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$$-\frac{b}{a} = -1 \quad \frac{c}{a} = -1 - m$$

$$x^2 - x \rightarrow 1 - x(-1 - m) \rightarrow x + xmx \quad m^2 \geq 0 \rightarrow m = 0$$

$$1 + x(1 + m^2) \rightarrow m = 0 \rightarrow (3) \checkmark$$

$$A|y \quad B|d \quad i \quad a \neq b \rightarrow \frac{a}{b} \quad a^2 + b^2 = d$$

0

$$y = k(n-1)^2 \rightarrow k(n-1)^2 \rightarrow y = k(1-1)^2 = \frac{1}{k}$$

$$y = k(-1)^2 = \frac{1}{k} \quad (k = 1 \text{ و } k = -1) \rightarrow k = 0 \text{ bis}$$

$$\text{نسبت } n_s = \frac{x-\Delta}{r} = -1 \quad \text{ext}(-1, 1)$$

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$$y = a(1+n)^r + 1 = an^r + 2an + a + 1 \rightarrow \begin{cases} p = \frac{a+1}{a} \\ s = -r \end{cases}$$

$$\alpha^r + \beta^r = s^r - 2p = (-r)^r - 2\left(\frac{a+1}{a}\right) \rightarrow \boxed{\alpha = \frac{r}{p}}$$

$$\text{نسبت از میان } = a+1 = \left(\frac{1}{r}\right)$$

$$\frac{1}{\sqrt{\alpha}} + \frac{1}{\sqrt{\beta}} = \frac{\sqrt{\alpha} + \sqrt{\beta}}{\sqrt{\alpha\beta}} = 2 \xrightarrow{\text{تقارب}} \frac{S^r + 2\sqrt{p}}{p} = 2a \quad (r)$$

$$S = \frac{m+1t}{r_4} \xrightarrow{p = \frac{1}{r_4}} m = -1 \rightarrow -n^r + r_n + r = 0 \rightarrow \frac{c}{a} = \boxed{-2}$$

$$S = -4 \quad p = a \quad (r)$$

$$\alpha, \beta = \frac{-4 \pm \sqrt{16 - 4a}}{r} \xrightarrow{\alpha < \beta} \alpha = -3 - \sqrt{9 - a}$$

$$\alpha^r + r(\alpha^r + \beta^r) = \alpha^r + r(S^r - 2p)$$

$$(-3 - \sqrt{9 - a})^r + r(16 - 2a) = 12\sqrt{r} + 1a \rightarrow a = 1$$

$$n^r = t \rightarrow t^r - vt - a = 0 \rightarrow t = \frac{v \pm \sqrt{49}}{r} \quad t > 0 \quad (a)$$

$$n_1 = \sqrt{\frac{v + \sqrt{49}}{r}} \quad n_2 = -\sqrt{\frac{v + \sqrt{49}}{r}} \Rightarrow S = 0, p = -\left(\frac{v + \sqrt{49}}{r}\right)$$

$$rp^r - r\cancel{p} + r\cancel{S} = rp^r = 29 + v\sqrt{49}$$

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

✓

$$f \cdot \beta^r + \gamma \cdot (1 - \beta)^r - \gamma \cdot \beta = 1 \quad \rightarrow \quad \gamma \cdot \beta^r - \gamma \cdot \beta + 1 = 0$$

$$\gamma \cdot \beta(\beta \underset{-\alpha}{-} 1) = -1 \rightarrow -\gamma \cdot \alpha \beta = -1 \rightarrow \alpha \beta = \frac{1}{\gamma} = -\frac{b}{a} \rightarrow a = -\gamma \cdot b$$

$$-\gamma \cdot \beta \alpha^r + \gamma \cdot \beta \alpha - \beta = 0 \rightarrow |\alpha - \beta| = \frac{\sqrt{\Delta}}{|a|} = \boxed{\frac{\gamma}{\sqrt{\Delta}}}$$