

۱۹,۵ آفدین!

نام و نام خانوادگی سید علی پاسخنامه تشریحی تکلیف شماره ۱۷... کلاس

اولین $1^2 + 1 = 65$

آخرین $9^2 = 81$

$\frac{81 + 65}{2} = 73$ ✓

(۲)

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$[1, 52] [4, \dots, 12] [13, \dots, 39] [4, \dots, 12, \dots] [121, \dots, 393]$

$\frac{393 + 121}{2} = \frac{414}{2} = 207$ ✓

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$a_1 + a_2 + \dots + a_{10} = 2^0 + 2^1 + 1 + a + 2 + 2 + 1 + a + 2 + 0 + 2 + a + 1 = 19 \Rightarrow$
 $20 + 3a = 19 \Rightarrow a = -1$ ✓

$a_2 + a_0 + \dots + a_{29} = \underbrace{2(1+a)}_{a_2+a_0} + \underbrace{1(2+a)}_{a_1+a_{11}+\dots+a_{29}} = 2(-1) + 1(0) = -2$ ✓

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$a_1 - a_2 = 4d$

$b_1 - b_2 = 5d' = 4d \Rightarrow$

چهار برابر قدر مطلق دنباله حسابی است. ✓

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$b_{15} = b_{10} + 5d' = 0 + 5d' = 5d' = 4d$

$\frac{1}{\sqrt{e}} \times (-14) = -\frac{1}{\sqrt{e}}$ ✓

$-\frac{1}{\sqrt{e}} \times 5^2 + 50 + c = 14 \Rightarrow 5b + c = 19$

$a_1 = -\frac{1}{\sqrt{e}} \times 1^2 + 5 \times 1 + (-1) = 2\frac{4}{\sqrt{e}}$

$-\frac{1}{\sqrt{e}} \times 7^2 + 5b + c = 17\frac{1}{\sqrt{e}} \Rightarrow 7b + c = 17\frac{1}{\sqrt{e}} + \frac{1}{\sqrt{e}}$

$a_{15} = -\frac{1}{\sqrt{e}} \times 15^2 + 5 \times 15 + (-1) = -\frac{14}{\sqrt{e}}$

$-\frac{1}{\sqrt{e}} \times 5^2 + 5 \times 5 + c = 14$

$2b = \frac{9}{\sqrt{e}} + \frac{1}{\sqrt{e}}$

$2b = 1 \Rightarrow b = \frac{1}{2}$ ✓

$c = -1$ ✓

(۱,۷,۵)

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$\frac{a_{15}}{a_1} = \frac{-14\frac{1}{\sqrt{e}}}{2\frac{4}{\sqrt{e}}} = -\frac{7}{2} = -3.5$ ✓

$$y(a+d)^r = o(a+u)a + r(a+d)a$$

$$ya^r + rad + yd^r = oa^r + oad + ra^r + rda$$

$$ya^r + ad - yd^r = 0 \quad (a+rd)(ya-rd) = 0$$

$$\rightarrow a = -rd \Rightarrow \frac{a+rd}{d} = \frac{-rd+rd}{d} = 1 \checkmark$$

$$\rightarrow ya = rd \Rightarrow a = \frac{r}{y}d \Rightarrow \frac{a+rd}{d} = \frac{\frac{r}{y}d+rd}{d} = \frac{r}{y} + r = r \left(\frac{1}{y} + 1 \right) \checkmark$$

$$b = \frac{a+c}{r}, \quad \frac{c}{r} = \frac{\frac{a}{r}}{\frac{r}{y}} \Rightarrow c = \frac{ya}{r}, \quad b = \frac{a}{r}q$$

$$\frac{a}{r}q = \frac{a + \frac{ya}{r}}{r} \Rightarrow aq = a + \frac{ya}{q}, \quad q^r = q + r \Rightarrow q^r - q - r = 0$$

$$(q-r)(q+1) = 0 \Rightarrow q = -1 \checkmark \quad yq = -r \checkmark$$

$$\rightarrow q = r \times \quad yq = r \times$$

داخل صفر بعد و جد کن!

$$\frac{c+rd}{r} = ya$$

$$rb = raq$$

$$ya = raq^r$$

$$\frac{c+rcq}{r} = yaq^r$$

$$\Rightarrow \frac{1+rcq}{r} = raq^r \Rightarrow r q^r - r q - 1 = 0$$

$$\Delta = 1 + 16 = 17$$

$$q = \frac{r \pm \sqrt{17}}{1} \Rightarrow \begin{cases} q = 1 \times \text{قبول} \\ q = -\frac{1}{r} \end{cases} \quad \frac{a_1}{a_2} = q^r = -\frac{1}{yr} \checkmark$$

$$\frac{aq^0}{(aq)^r} + \frac{aq}{a^r} = r \Rightarrow \frac{q^r}{a^r} + \frac{q}{a} = r \Rightarrow \left(\frac{q}{a}\right)^r + \frac{q}{a} - r = 0$$

$$\left(\frac{q}{a} + r\right)\left(\frac{q}{a} - 1\right) = 0 \Rightarrow \begin{cases} \frac{q}{a} = -r \Rightarrow \frac{1}{\frac{q}{a}} = -\frac{1}{r} \checkmark \\ \frac{q}{a} = 1 \Rightarrow \frac{1}{\frac{q}{a}} = 1 \checkmark \end{cases}$$

$$\frac{a^r}{a^r} = \frac{a^r}{aq} = \frac{a}{q} = \frac{1}{\frac{q}{a}}$$

$$a_r^r = a_r = a_r q \Rightarrow q = a_r \quad a_0 = a_r \times q^r = q^r = rv$$

$$q = r$$

$$a_1 = \frac{a_0}{q^r} = \frac{rv}{11} = \frac{1}{r} \checkmark \quad \frac{1}{r} - \frac{1}{r} = \frac{r}{9} - \frac{r}{9} = \frac{1}{9} \checkmark$$

$$\text{واسطه حسابی: } b = \frac{a+c}{2} \rightarrow a = 2b - c$$

✓

$$\rightarrow (2b - c)^2 = bc$$

$$\text{واسطه هندسی: } \frac{a^2}{4} = \frac{bc}{4} \rightarrow a^2 = bc$$

سوال گفته

$$4b^2 - 4bc + c^2 = 0 \rightarrow (b - c)(4b - c) = 0 \rightarrow \begin{cases} b = c \\ 4b = c \end{cases}$$

متمایز نیست!

$$\text{واسطه حسابی: } \frac{a + 4b}{4} = b \rightarrow a = -4b$$

$$\text{دنباله هندسی: } b, -b, b \rightarrow q_r = -1 \rightarrow 4q_r = -4$$