

نام و نام خانوادگی: کیمیا بیگلری پاسخنامه تشریحی تکلیف شماره ۱۵۰... کلاس: (۴۰۰) دبیرستان.....

الف) $t_1 = 3 - 1 = 2$ $t_2 = 3(2)^2 - 1 = 11$ $t_3 = 3(11) - 1 = 32$ $t_4 = 3(32) - 1 = 95$
 $t_5 = 3(95) - 1 = 284$

ب) $t_1 = \frac{2}{5}$ $t_2 = \frac{5}{6}$ $t_3 = \frac{6}{7} = 1$ $t_4 = \frac{9}{1}$
 $t_5 = \frac{11}{9}$

الف) $t_{13} = \frac{(-1)^{13}}{\sqrt{14}} = -\frac{1}{\sqrt{14}}$

ب) $t_{13} = 24 - \left[\frac{13}{4}\right] = 24 - 3 = 21$

الف) $2n - 10 < 0 \Rightarrow 2n < 10 \Rightarrow n < 5 \Rightarrow$ t_1, t_2, t_3, t_4

ب) $n^2 - 14n + 40 < 0 \Rightarrow (n - 4)(n - 10) < 0 \Rightarrow$

n	4	10
t_n	+	-

$t_1, t_2, t_3, t_4, t_5, t_6, t_7, t_8, t_9$

الف) $2n - 14 \leq 0 \Rightarrow 2n \leq 14 \Rightarrow n \leq 7 \Rightarrow$

ب) $n^2 - 14n + 27 \leq 0 \Rightarrow (n - 3)(n - 11) \leq 0 \Rightarrow$

n	3	11
t_n	+	-

$t_1, t_2, t_3, t_4, t_5, t_6, t_7, t_8, t_9, t_{10}, t_{11}, t_{12}, t_{13}, t_{14}, t_{15}, t_{16}, t_{17}, t_{18}, t_{19}, t_{20}, t_{21}, t_{22}, t_{23}, t_{24}, t_{25}, t_{26}, t_{27}, t_{28}, t_{29}, t_{30}, t_{31}, t_{32}, t_{33}, t_{34}, t_{35}, t_{36}, t_{37}, t_{38}, t_{39}, t_{40}, t_{41}, t_{42}, t_{43}, t_{44}, t_{45}, t_{46}, t_{47}, t_{48}, t_{49}, t_{50}, t_{51}, t_{52}, t_{53}, t_{54}, t_{55}, t_{56}, t_{57}, t_{58}, t_{59}, t_{60}, t_{61}, t_{62}, t_{63}, t_{64}, t_{65}, t_{66}, t_{67}, t_{68}, t_{69}, t_{70}, t_{71}, t_{72}, t_{73}, t_{74}, t_{75}, t_{76}, t_{77}, t_{78}, t_{79}, t_{80}, t_{81}, t_{82}, t_{83}, t_{84}, t_{85}, t_{86}, t_{87}, t_{88}, t_{89}, t_{90}, t_{91}, t_{92}, t_{93}, t_{94}, t_{95}, t_{96}, t_{97}, t_{98}, t_{99}, t_{100}$

$t_n = an + b \Rightarrow \begin{cases} t_4 = 4a + b = 7 \\ t_9 = 9a + b = 22 \end{cases} \Rightarrow \begin{cases} 5a = 15 \Rightarrow a = 3 \\ b = -5 \end{cases}$

$\Rightarrow t_n = 3n - 5 \Rightarrow t_{17} = 3 \times 17 - 5 = 46$

$$\Rightarrow \text{طول رأس سهمی} = \frac{-b}{2a} = \frac{4}{2} = 2 \Rightarrow \text{تابع می بینم دار است} \Rightarrow a > 0 \text{ (الف)}$$

(y) $\Delta t_{\text{proper}} = t_{\text{p}} = 9 - 1 + 2 = -6$ ✓

ب) $a_6 = \dots \Rightarrow$ تابع می‌شود، راست $\frac{-b}{2a} = \frac{-4}{2} = -2$

امکان نیز نیست چون در یک دنباله n عضو اعداد طبیعی است $\Rightarrow$ جمله ی پنجم به ازای $n=1$ درست می آید $\Rightarrow$

$$n=1 \Rightarrow t_1 = 1 + \alpha_{+1} = 4$$

$$-k, -V, -\Lambda, -V, -k, \dots \Rightarrow r_a = r_{\infty}, a=1)$$

Diagram illustrating the addition of 12 to 12 using number lines:

- Top row: $12 + 12 = 24$. The first number line shows a jump of 10 from 12 to 22, and two jumps of 2 from 22 to 24. The second number line shows a jump of 6 from 12 to 18, and another jump of 6 from 18 to 24.

$$\left. \begin{aligned} t_1 = -r &\Rightarrow 1x1^r + b + c = -r \\ t_4 = -v &\Rightarrow 1x4^r + rb + c = -v \end{aligned} \right\} \Rightarrow$$

$$\left. \begin{array}{l} b+c=-a \\ r b+c=-11 \end{array} \right\} \Rightarrow \boxed{b=-4} \Rightarrow \boxed{c=1} \Rightarrow t_n = n^2 - 4n + 1 \Rightarrow t_{100} = 100^2 - 4 \cdot 100 + 1 \Rightarrow \boxed{t_{100} = 9601}$$

$$-4, -1, 1, 4, \dots \Rightarrow \psi a = f \Rightarrow a = \psi$$

$+0$ $+9$ $+14$
 $+7$ $+7$

$$\left. \begin{aligned} t_1 = -4 &\Rightarrow r_1 r_1^T + b + c = -4 \\ t_2 = -1 &\Rightarrow r_2 r_2^T + r b + c = -1 \end{aligned} \right\} \Rightarrow$$

$$\left. \begin{array}{l} b+c=-1 \\ x b+c=-9 \end{array} \right\} \Rightarrow b=-1 \Rightarrow c=-9 \Rightarrow t_n = \cancel{r_n} - n - 9$$

$$\Rightarrow \text{اس کا منافی اسے} \quad a + r < r a + 1 \Rightarrow a > r \Rightarrow$$

a) γ : $[3, +\infty)$

الف) 3, 6, 9, ..., 99 $\rightarrow$ تعداد = $\frac{99-3}{3} + 1 = 33$ ۱۴

ب) 5, 10, 15, ..., 95 $\rightarrow$ تعداد = $\frac{95 - 5}{5} + 1 = 19$ تا

2.) $10, 20, 30, \dots, 90 \rightarrow \text{last} = \frac{90 - 10}{10} + 1 = 9$

$33 + 19 - 6 = 46$; $33 - 6 = 27$; $33 - 6 = 27$