

نام و نام خانوادگی گروه پاسخنامه تشریحی تکلیف شماره ۵۰ کلاس دهم دختر B

الف) $t_n = 3n^2 - 1$ t_1, t_2, t_3, t_4, t_5
 $2, 11, 28, 47, 74$

ب) $t_n = \frac{2n+1}{n+2}$ $t_1 = \frac{3}{4}, t_2 = \frac{5}{6}, t_3 = \frac{7}{8}, t_4 = \frac{9}{10}, t_5 = \frac{11}{12}$

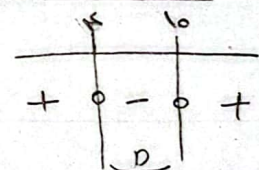
الف) $t_n = \frac{(-1)^n}{\sqrt{n+3}}$ $\rightarrow t_{13} = \frac{(-1)^{13}}{\sqrt{13+3}} = \frac{-1}{4} = t_{13}$

ب) $t_n = 2n - \left\lfloor \frac{n}{2} \right\rfloor \rightarrow t_{13} = 2(13) - \left\lfloor \frac{13}{2} \right\rfloor = 24 - 6 = 18 = t_{13}$
 $\left\lfloor \frac{13}{2} \right\rfloor = 6$

الف) $t_n = 2n - 10 \rightarrow 2n - 10 < 0 \rightarrow \frac{2n}{2} < \frac{10}{2} \rightarrow n < 5 \rightarrow n = 1, 2, 3, 4$
 دقت کن!!

ب) $t_n = n^2 - 14n + 40 \rightarrow (n-10)(n-4)$

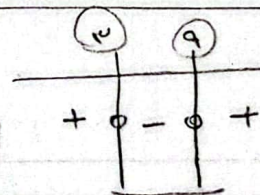
$D_f: (t, 10) \rightarrow 4, 6, 7, 8, 9$



الف) $t_n = 2n - 14$ $2n - 14 \leq 0 \rightarrow \frac{2n}{2} \leq \frac{14}{2} \rightarrow n \leq 7 \rightarrow \bar{C} = \{8, 9, \dots\}$

ب) $t_n = n^2 - 12n + 27 \rightarrow (n-9)(n-3)$

$D = [3, 9] \rightarrow 3, 4, 5, 6, 7, 8, 9$



-d, $t_r = ?$
 $t_f = 7$
 $t_9 = 22$
 $ad = 15 \rightarrow d = 3$ $7 - 3 = 4 = t_r$

الف) $t_n = n^2 - 9n + 2 \rightarrow n_{\min} \begin{cases} n: \frac{b}{2a} = \frac{9}{2} = 4.5 \\ t_n: 9 - 18 + 2 = -7 \end{cases}$ ~~مربع~~ ~~مربع~~

ب) $t_n = n^2 + 4n + 1 \xrightarrow{a>0} n_{\min} \left\{ \begin{array}{l} \frac{-b}{2a} = \frac{-4}{2} = -2 \\ t_n: \cancel{(-2)} + 1 = \boxed{-3} \rightarrow \text{میزین جمل} \end{array} \right.$
 n جز اعداد اربعی است نمی تواند
 متقی باب
 $t_1 = 4$
 $t_2 = 13$
 $t_3 = 22 \rightarrow t_1 = 4$

دنبالی درجه ۲: $an^2 + bn + c$
 $-9 - 1 - 1 - 9 - 9 \dots t_{10} = 100 - 100 + 1 = -99 = t_{10}$
 $a + b = -1 \rightarrow a + b = -1$
 $a - b = 3 \rightarrow b = -4$
 دقت کن!! جواب

$$\begin{array}{rcl} f_a + r b + c & = & -v \\ -a - b - c & = & r \\ \hline r a + b & = & -r \end{array} \qquad \begin{array}{rcl} g_a + r b + c & = & -\wedge \\ -f_a - r b - c & = & v \\ \hline \omega a + b & = & -1 \end{array}$$

$$Ya = Y \rightarrow a = 1$$

$$a+b+c=-f$$

$$\hookrightarrow 1 - 4 + C = -1 \rightarrow \boxed{C = 1}$$

$$t_n = n^2 - 4n + 1$$

$$t_{1.} = 1.2 - 4. + 1 = 1.1 - 4. = \textcircled{F1}$$

$$\textcircled{-V} = C \quad 9 - 9 - 1, \wedge, 21, \dots$$

$$\begin{array}{r} f a + 2 b + c = -1 \\ -a - b - c = 4 \\ \hline 3 a + b = 3 \end{array}$$

$$\begin{array}{r} 9a + 4b + c = 1 \\ -6a - 4b - c = 1 \\ \hline 15a + b = 0 \end{array}$$

$$\begin{aligned} 2a + b &= 9 \rightarrow b = -1 \\ -2a - b &= -2 \\ \hline 4a &= 7 \rightarrow a = \frac{7}{4} \end{aligned}$$

$t_n = r n^r - n - V$ ✓ →

$$(-\infty, a+\epsilon] \cap [2a+1, +\infty) = \emptyset \quad \text{بما أن } a+\epsilon < 2a+1$$

$$a + 1 \leq a + 1 \rightarrow a \geq a$$

$$a_n = a + (n-1)d \rightarrow 99 = \cancel{x} + \underbrace{(n-1)r}_{\substack{= n - \cancel{x} \\ = n - 100}} \rightarrow \boxed{n = 100}$$

الف) بخش پذیر ۳۰

$$90 = \cancel{a} + \underbrace{(n-1)a}_{a_{n-1}} \rightarrow \boxed{n = \frac{90}{a} = 19}$$

(ب) نفسِ دیر بر ۵

$$a_0 = 10 + (n-1)10 \rightarrow n = \frac{a_0}{10} = 9$$

(7) غش پذیر ۵۳ و ۵۴

$$n(A \cup B) = n(A) + n(B) - n(A \cap B) \rightarrow 33 + 19 - 4 = \boxed{48}$$

563 ~ " " (5)