

تکلیف شماره ۱۱ گروه دهم دفتر

« به نظرا »

برای حل محتوی

$$1, 5, 12, \dots \quad t_n = n^2 + \frac{n(n-1)}{2} \rightarrow t_1 = 1 + \frac{0}{2} = 1 \quad (1)$$

$$0, 1, 3, \dots \quad t_n = \frac{n(n-1)}{2} \rightarrow \Delta \Delta = \frac{n(n-1)}{2} \rightarrow n = 11 \quad (2)$$

$$\begin{aligned} & \text{نصفه: } 0, 4, 8, 12, \dots \quad t_n = 4n - 4 \rightarrow t_{11} = 44 - 4 = 40 \\ & \text{زنبی: } 5, 9, 13, \dots \quad a_n = 4n + 1 \rightarrow a_{11} = 44 + 1 = 45 \end{aligned} \quad \left. \begin{array}{l} \text{نصفه} \\ \text{زنبی} \end{array} \right\} \rightarrow 180$$

$$\begin{aligned} & 5, 13, 21, \dots \quad t_n = 8n - 3 \rightarrow t_{11} = 8 \times 11 - 3 = 85 \\ & \text{روش دوم: کلی حساب کردن} \quad 5 + 8 = 13 \end{aligned}$$

$$-1, \frac{1}{2}, \frac{-1}{3}, \frac{1}{4}, \dots \quad \left. \begin{array}{l} \text{بزرگترین جمله} = \frac{1}{2} \\ \text{کوچکترین} = -1 \end{array} \right\} \rightarrow \frac{1}{2} - (-1) = 1,5 \quad (3)$$

$$\begin{aligned} b_n &= (-3)^n - V \times 3 = -27 - 21 = -48 \quad -5n + 22 = -48 \rightarrow -5n = -70 \\ &\rightarrow n = \frac{70}{5} = 14 \rightarrow k = 14 \end{aligned} \quad (4)$$

$$1.a + b - V.a + b = 12 \rightarrow a = 4 \quad 9.a + b - a + b = 5a = 20 \quad (5)$$

$$\begin{aligned} & 9.a + b - 2a + b = 15 - V \rightarrow 7a = 1 \rightarrow a = \frac{1}{7} \rightarrow 2a + b = V \\ & a_n = 4n - 1 \rightarrow a_1 = 4 - 1 = 3 \quad \rightarrow 1 + b = V \rightarrow b = -1 \\ & \quad \quad \quad \rightarrow a_3 = 4 \times 3 - 1 = 11 \\ & b_n : 3, 11, 19, \dots \rightarrow b_n = 8n - 5 \end{aligned} \quad (6)$$

$$t_n = \frac{4n-2}{2n+3} \rightarrow \frac{4n-2}{2n+3} < \frac{3}{2} \rightarrow 4n-2 < 3n+9 \rightarrow n < 11 \rightarrow [11] = 10 \quad (7)$$

$$\begin{aligned} & 4, 9, 9, 9, \dots \quad -\frac{3}{2} + b = 9 \rightarrow b = 10,5 \\ & t_n = -\frac{3}{2}n^2 + 10,5n \rightarrow \frac{3}{2} \times \frac{-3}{2} + 10,5 \times \frac{10,5}{2} = \frac{-9 + 110,25}{2} = \frac{101,25}{2} = 50,625 \end{aligned} \quad (8)$$

$$|a+b| - |a-b| = |1-3| = 1 \rightarrow \underline{a=0} \quad |a+b| = 1+b=3 \rightarrow \underline{b=2} \quad (1.)$$

$$\underline{a_n = 0n + 2}$$

$$\textcircled{4} \quad 9, -4, \dots \quad 1-4+b=-4 \rightarrow b=-1 \quad 1-9-9 = \textcircled{44} \quad \text{for } 12 \rightarrow$$

$$\begin{array}{c} \dots \\ + \quad + \quad + \\ \dots \end{array} \quad c = -9 \quad t_n = \underline{n^2 - n - 4}$$

$$\begin{array}{c} \dots \\ + \quad + \\ \dots \end{array} \rightarrow a = 1$$

$$n^2 - n - 4 = 0n + 2 \rightarrow n^2 - 9n - 2V = 0 \rightarrow (n-9)(n+3) = 0 \rightarrow \boxed{n=9} \rightarrow n = 3x$$

Paya Golmohammadi :)