

عارة سفي - دس دطير

$$1, 9, 12, \dots \rightarrow n^2 + \frac{n(n-1)}{2} \rightarrow t_1 = (1.0)^2 + \frac{1^2(1)}{2} = 1.5 \quad (1)$$

$$\frac{n(n-1)}{2} = 0.5 \rightarrow \boxed{n=1} \leftarrow \frac{n(n-1)}{2} \text{ مصلحت ماري ريكه ستره} \quad (2)$$

(3)

$$\text{واحد اختلاف} \leftarrow 1 \geq a_n \geq -1 \quad (4)$$

(5)

$$d = \frac{1}{10} \leftarrow a_1 + d - a_1 + d = 2 \leftarrow a_0 - a_1 = 2 \quad (6)$$

$$\cancel{a_1 + (d \times \frac{1}{10})} \leftarrow a_1 = 1 \leftarrow a_4 - a_1 = ?$$

$$a_n = 2(n-1) + 1$$

$$a_1 = 1 \leftarrow a_1 + d = 2$$

$$\begin{cases} d=1 \leftarrow a_1 + d = 2 \leftarrow a_2 = 2 \\ d=2 \leftarrow a_1 + 2d = 3 \leftarrow a_3 = 3 \end{cases} \quad (7)$$

$$\left(\begin{matrix} b_1 = 1 \\ b_2 = 2 \end{matrix} \right) + 1 \rightarrow \boxed{b_n = 2(n-1) + 1}$$

(8)

$$-\frac{\omega}{r}n^r + Bn^r = t_n \quad \leftarrow \begin{matrix} ra = -n \\ a = -\frac{\omega}{r} \end{matrix} \quad \leftarrow \begin{matrix} 4,999,990 \\ \underbrace{4,999,990}_{+0.000001} \\ \underbrace{-1}_{-1} \end{matrix} \quad (9)$$

$$-\frac{\omega}{r} + B = 9 \rightarrow B = \frac{19}{r} \rightarrow -\frac{\omega}{r}n^r + \frac{19}{r}n^r = t_n$$

$$\downarrow$$

$$-\frac{9}{r} + \frac{19}{r} = \frac{10}{r} = \textcircled{10}$$

$$-49 - 1,999 \quad \leftarrow \begin{matrix} a_1 = r_1 d_1 \\ a_n = r_1 + (n-1)d_1 \end{matrix} \left\{ \begin{matrix} d_1 + d_1 = 4 \\ a_1 + r_1 d_1 = 4 \end{matrix} \right\} \left\{ \begin{matrix} a_1 = 4 \\ a_1 = 4 \end{matrix} \right. \quad (10)$$

$$\underbrace{-49 - 1,999}_{+2000} \rightarrow ra = r \rightarrow a = 1$$

$$t_n = an^r + bn^r + c \rightarrow -9 = 1 + b + c \rightarrow -10 = b + c$$

$$\rightarrow -10 = 10b + c \quad \left\{ \begin{matrix} -9 = 1 + b + c \\ -10 = 10b + c \end{matrix} \right\} \rightarrow \underline{1 = b, c = -1}$$

$$\underline{t_n = n^2 + n - 1}$$