

$$n^r + \frac{n(n-1)}{r} \Rightarrow 1 \cdot \frac{1 \cdot (1-1)}{r} = 1 \dots + \sum \Delta = \underline{\underline{12\Delta}}$$

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$$0, 1, 2, \dots \Rightarrow \frac{n(n-1)}{2}$$

$$\frac{n(n-1)}{r} = 22 \quad n(n-1) = 11. \Rightarrow \underline{\underline{n=11}}$$

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$$\left. \begin{array}{l} \Delta_{\text{off}} = \Sigma(n-1) \\ \Delta_{\text{off}} = \Delta + \Sigma(n-1) \end{array} \right\} \Delta + \Lambda(n-1) \Rightarrow \Delta + \Lambda(11-1) = \underline{\underline{\Delta\Delta}}$$

$$G_{i,j,p} = \Delta + \Sigma(n-1)$$

تعداد اولها $= a_n = 5, 11, 17, \dots \rightarrow a_n = 1n - 3 \rightarrow a_{11} = 1(11) - 3 = 8$
تعداد اولها $= b_n = 7, 13, 19, \dots \rightarrow b_n = 6n + 1 \rightarrow b_1 = 6(1) + 1 = 7$

تعدله معادله $b_n = 1, 9, 13, \dots \rightarrow b_n = f_{n+1} \rightarrow b_n, f_{(n)+1} = f_n$

$$a_{11} + b_{11} = 1\Delta + 2\delta = 1\psi.$$

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$$\left. \begin{aligned} \text{میزانترین جمله} &\Rightarrow n=2 \Rightarrow \frac{1}{2} \\ \text{کوچکترین جمله} &\Rightarrow n=1 \Rightarrow -1 \end{aligned} \right\} \frac{1}{2} - (-1) = \frac{3}{2}$$

$-1 \Rightarrow u = 1 \Rightarrow$ کو چارترن جملہ

$$\left\{ \frac{1}{x} - (-1) = \frac{x}{x} \right.$$

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$$n=3 \Rightarrow (-3)^3 - (V \times 3) = -27 - 21 = -48$$

$$-E_1 = -\Delta u + 22 \quad \Delta u, V_0 \quad n=12 \Rightarrow \underline{\underline{k=12}}$$

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$$t_n = a_n + b \quad 1 \cdot a + b - (v \cdot a + b) = 12 \Rightarrow 3a = 12 \Rightarrow a = 4$$

$$4a + b - a - b = \Delta a \Rightarrow \Delta \times 4 = 12$$

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$$a_n = f_{n-1} \rightarrow a_1 = 3, a_2 = 11$$

$$t_n = a_n + b \quad b_n = c_n + d \rightarrow \begin{cases} b_1 = c_1 + d = 3 \\ b_2 = c_2 + d = 11 \end{cases} \rightarrow c = 1, d = 2 \rightarrow b_n = n \cdot 2$$

$$3a + b = 11 \Rightarrow 3a + 2 = 11 \Rightarrow 3a = 9 \Rightarrow a = 3$$

$$2a + b = 11$$

$$2 \times 3 + b = 11 \Rightarrow b = 5$$

$$t_1 = 3 - 1 = 2$$

$$t_2 = 3 \times 2 - 1 = 5 \Rightarrow 2, 5, \dots (t_n \Rightarrow a = 3, b = 2 \Rightarrow 3n + 2 = t_n)$$

$$b_n = n \cdot 2$$

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$$t_n = \frac{3n-1}{2n+3}$$

$$\frac{3n-1}{2n+3} < \frac{3}{4}$$

$$3n-1 < 3(2n+3) \Rightarrow 3n-1 < 6n+9 \Rightarrow 3n < 10 \Rightarrow n < \frac{10}{3} = 3.33 \Rightarrow n = 1, 2, 3 \Rightarrow \underline{3}$$

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$$n=1 \Rightarrow A+B=4 \Rightarrow 3A+B=3$$

$$n=2 \Rightarrow 2A+3B=9$$

$$- A+B=4$$

$$2A = -3 \Rightarrow A = -1.5 \Rightarrow B = 5.5$$

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$$3A + \Delta B = 3(-1.5) + \Delta(5.5) = -4.5 + 5.5\Delta = 33$$

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$$\frac{31-31}{2} = \Delta = 0 \Rightarrow b = 31 - \Delta = 31 = b$$

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$$t_n = a_n + b \Rightarrow \underline{3n + 31 = t_n}$$

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$$-4, -2, 0, \dots$$

$$\begin{array}{cc} \curvearrowright & \curvearrowright \\ +2 & +2 \end{array}$$

$$\begin{array}{c} \curvearrowright \\ +2 \end{array} \rightarrow 2a < 2 \rightarrow a < 1$$

$$t_n = an^2 + bn + c \rightarrow \begin{cases} t_1 = a + b + c = -4 \\ t_2 = 4a + 2b + c = -2 \end{cases} \rightarrow \begin{array}{l} b = -1 \\ c = -3 \end{array} \rightarrow b_n = n^2 - n - 4$$

$$b_n = An + B \quad \begin{cases} b_1 = 2A + B = 1 \\ b_2 = 3A + B = 1 \end{cases} \rightarrow \begin{array}{l} A = 0 \\ B = 1 \end{array} \rightarrow b_n = 0n + 1$$

$$2n^2 - n - 9 < 0n + 1 \rightarrow n^2 - 4n - 4 < 0 \rightarrow n < 9 \checkmark$$

$$\hookrightarrow n = -5 \quad x$$