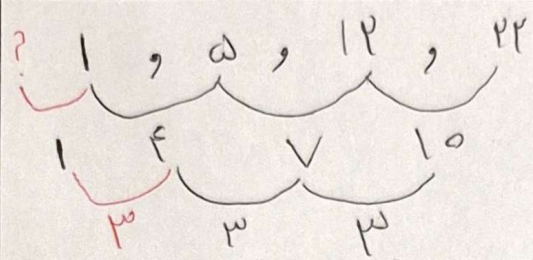


۱۹,۲۵

نام و نام خانوادگی پاسخنامه تشریحی تکلیف شماره کلاس (همراهی)



تعداد گوی ها ←

$$t_n = an^2 + bn + c \Rightarrow 2a = 3 \Rightarrow a = \frac{3}{2}$$

$$c = 0 \Rightarrow \frac{3 \cdot 100}{2} - \frac{1}{2} = 150 - 0.5 = 149.5$$

$$t_n = \frac{3}{2}n^2 - \frac{1}{2}n + 0 \Rightarrow t_{10} = \frac{3}{2}(10)^2 - \frac{1}{2} = 150 - 0.5 = 149.5$$

$$\frac{3}{2}n^2 + (b)n + 0 = 150 \Rightarrow b = -\frac{1}{2} \quad \checkmark \quad t_{10} = 149.5$$

0, 1, 3, 6, 10, 15, 21, 28, 36, 45, 55, 66, 78, 91, 105, 120, 136, 153, 171, 190, 210, 231, 252, 274, 297, 321, 346, 372, 399, 427, 456, 486, 517, 549, 582, 616, 651, 687, 724, 762, 801, 841, 882, 924, 967, 1011, 1056, 1102, 1149, 1197, 1246, 1296, 1347, 1399, 1452, 1506, 1561, 1617, 1674, 1732, 1791, 1851, 1912, 1974, 2037, 2101, 2166, 2232, 2299, 2367, 2436, 2506, 2577, 2649, 2722, 2796, 2871, 2947, 3024, 3102, 3181, 3261, 3342, 3424, 3507, 3591, 3676, 3762, 3849, 3937, 4026, 4116, 4207, 4299, 4392, 4486, 4581, 4677, 4774, 4872, 4971, 5071, 5172, 5274, 5377, 5481, 5586, 5692, 5799, 5907, 6016, 6126, 6237, 6349, 6462, 6576, 6691, 6807, 6924, 7042, 7161, 7281, 7402, 7524, 7647, 7771, 7896, 8022, 8149, 8277, 8406, 8536, 8667, 8799, 8932, 9066, 9201, 9337, 9474, 9612, 9751, 9891, 10032, 10174, 10317, 10461, 10606, 10752, 10899, 11047, 11196, 11346, 11497, 11649, 11802, 11956, 12111, 12267, 12424, 12582, 12741, 12901, 13062, 13224, 13387, 13551, 13716, 13882, 14049, 14217, 14386, 14556, 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$$12 \Rightarrow \frac{12}{10-7} = \frac{12}{3} = 4 \Rightarrow f_n$$

$$f(0)=f_0, f(7)=21 \Rightarrow f_0-21=12 \checkmark$$

$$f(7)=24, f(1)=4 \Rightarrow 24-4=20 \checkmark$$

$$\left. \begin{array}{l} t_p = 7 \\ t_f = 10 \end{array} \right\} \Rightarrow \frac{10-7}{f-2} = \frac{1}{2} = f_n \Rightarrow a_n = f_{n-1} \Rightarrow 12, 7, 11, 10$$

$$\left. \begin{array}{l} a_1 = 12 \\ a_2 = 7 \end{array} \right\} \Rightarrow \frac{11-12}{2-1} = \frac{1}{1} = 1 \Rightarrow a_n = 1 \Rightarrow a_n = 1 \Rightarrow 12, 7, 11, 10$$

$$b_n = 10 - a_n \checkmark$$

$$\text{جمله } n\text{ام} = \frac{f_{n-2}}{2n+3} \Rightarrow \frac{12}{2n+3} = \frac{f_{n-2}}{2n+3} \Rightarrow 2n+3 = 12 \Rightarrow 2n = 9 \Rightarrow n = 4.5$$

$$n = 4.5 \Rightarrow n = 5 \text{ تقریب}$$

جمله اول این دنباله از $\frac{12}{5}$ کوچکتر هستند

$$\begin{array}{c} 12, 7, 11, 10 \\ 12, 7, 11, 10 \\ 12, 7, 11, 10 \\ 12, 7, 11, 10 \end{array} \quad \begin{array}{l} c=0 \\ A=-\frac{12}{5} \end{array} \Rightarrow -\frac{12}{5}n^2 + bn = 12 \Rightarrow b = \frac{10}{5}$$

$$\frac{12}{5} = 12 \checkmark$$

$$+n = -\frac{12}{5}n^2 + \frac{10}{5}n \Rightarrow A = -\frac{12}{5}, B = \frac{10}{5} \Rightarrow 12(-\frac{12}{5}) + 10(\frac{10}{5}) = -\frac{144}{5} + \frac{100}{5} = -\frac{44}{5} = -8.8$$

$$+n = n^2 - n - 2$$

$$n^2 - n - 2 = 0 \Rightarrow (n-2)(n+1) = 0$$

$$\frac{f_1 - 1}{f - 2} = 0 \Rightarrow 0n + 1$$

$$n^2 - n - 2 = 0 \Rightarrow (n-2)(n+1) = 0$$

$$n=2, n=-1$$

$$\begin{array}{ll} 9 + 12 - 2 = 19 & 11 - 7 - 2 = 2 \\ 10(-1) + 21 = 11 & 12 + 21 = 33 \end{array}$$

(nENI) 500