

Subject:

Year:

Month:

Date:

۱۰، ۱۱، ۱۲

با توجه به  $n$   $a_n = 10 + \frac{n(n+1)}{2} - n$

$a_{10} = 10 + \frac{10 \times 11}{2} - 10 = 100 + 55 - 10 = 145$

۱۰، ۱۱، ۱۲، ...

$\frac{n \times (n+1)}{2}$   $\frac{1 \times 2}{2} = 1$   $\frac{(n-1)}{2} \rightarrow \frac{(n-1)(n+1-1)}{2}$

$a_n = \frac{n(n-1)}{2}$

$a_n = 55 = \frac{n(n-1)}{2} \rightarrow 110 = n(n-1) \rightarrow n = 11$

$1 + \varepsilon n$   $\varepsilon(n-1)$   $1 + \varepsilon(11) = \varepsilon 12$   $\varepsilon(11-1) = \varepsilon 10$   $\varepsilon 10 + \varepsilon 12 = 15$   $10\varepsilon + \varepsilon 12 = 13$

دنباله را بنویسیم

$0 \rightarrow -1 \rightarrow -\frac{1}{2} \rightarrow -\frac{1}{3} \rightarrow -\frac{1}{4} \rightarrow -\frac{1}{5} \rightarrow -\frac{1}{6} \rightarrow -\frac{1}{7} \rightarrow -\frac{1}{8} \rightarrow -\frac{1}{9} \rightarrow -\frac{1}{10}$

درستی ها هر چه جلوتر می رویم به صفر نزدیک می شود پس بزرگ می شود

درستی ها هر چه جلوتر می رویم درجه صفر نزدیک تر می شود پس کوچک می شود

$b_3 = (-3)^3 - 7(+3) = -27 - 21 = -48$

$a_n = -5n + 22 = -48 \rightarrow -5n = -70 \rightarrow n = 14$

$a_1 - a_v = 12 \rightarrow a_1 + 9d - a_1 = 12 \rightarrow 9d = 12 \rightarrow d = \frac{4}{3}$

$t_4 - t_1 = 3d = 4 \rightarrow 3d = 4 \rightarrow d = \frac{4}{3}$

$a_2 = a + d = 7$   $a_5 = a + 4d = 15$   $d = \frac{8}{3}$   $a = 1$   $a_1 = 1$   $a_2 = 7$   $a_3 = 13$   $a_4 = 19$   $a_5 = 25$

$b_1 = 3$

$b_2 = b_1 + d = 4 \rightarrow d = 1$

$3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100$

SARTI

Subject:

Year:

Month:

Date:

$$\frac{5n-1}{n+1} < \frac{1}{1}$$

$$5n-1 < n+1$$

$$4n < 2 \rightarrow n < \frac{1}{2}$$

$$a+b+c=4$$

$$2a+3b+c=9$$

$$4a+3b+c=9$$

$$\left. \begin{array}{l} a+b+c=4 \\ 2a+3b+c=9 \\ 4a+3b+c=9 \end{array} \right\} \rightarrow \begin{array}{l} 3a+b=5 \\ 2a+b=5 \end{array}$$

$$\rightarrow 3a-b=0 \rightarrow a=\frac{5}{2} \rightarrow b=\frac{1}{2} \rightarrow c=0$$

$$4a+b = 3A + 2B = \left(3 \times \frac{5}{2}\right) + \left(2 \times \frac{1}{2}\right) = \frac{15}{2} + \frac{2}{2} = \frac{17}{2}$$

$$a+b+c=-4$$

$$2a+3b+c=9$$

$$4a+3b+c=0$$

$$\left. \begin{array}{l} a+b+c=-4 \\ 2a+3b+c=9 \\ 4a+3b+c=0 \end{array} \right\} \rightarrow \begin{array}{l} 3a+b=13 \\ 2a+b=9 \end{array} \rightarrow \begin{array}{l} 3a-b=4 \\ 2a-b=9 \end{array} \rightarrow \begin{array}{l} a=1 \\ b=-1 \\ c=-4 \end{array}$$

$$f_n \text{ or } a_n = n^2 - n - 4$$

$$a_1 = a_1 + d = 1$$

$$a_5 = a_1 + 4d = 1 \rightarrow 4d = 0 \rightarrow d = 0 \rightarrow a_1 = 1$$

$$a_n = 1 + (n-1) \cdot 0$$

or

$$n^2 - n - 4 = 1 + (n-1) \cdot 0$$

$$n^2 - n - 4 = 1 \rightarrow n^2 - n - 5 = 0 \rightarrow n = 4$$

SARTI