

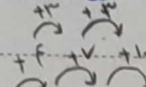
Subject :

Date :

تالیف ۱۱

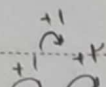
(هم دفتر)

ایستادگی



$$1, 2, 3, 4, 5 \Rightarrow a_n = 1/5 n^2 - 0/5 n \Rightarrow n_{10} = 15 - 0 = 15$$

(۱)



$$1, 2, 3 \Rightarrow a_n = \frac{1}{2} n^2 - \frac{1}{2} n = 55 \Rightarrow n^2 - n = 110 \Rightarrow n(n-1) = 110 \Rightarrow n = 11$$

(۲)

$$1, 2, 3, 4, 5 \Rightarrow a_n = 1/5 n^2 - 3/5 n \xrightarrow{n=11} 11 - 3 = 8$$

$$8 + 5 = 13$$

(۳)

$$1, 2, 3, 4, 5 \Rightarrow a_n = f(n+1) \xrightarrow{n=1} f(2) = 4$$

$$a_n = \frac{(-1)^n}{n} \rightarrow \text{در صورتی} \rightarrow 1 = -1 \quad / \quad \text{برای} \quad \frac{1}{2} / 3 = -\frac{1}{3} \dots \Rightarrow \text{افشان} \quad \frac{3}{2}$$

(۴)

$$n^3 = (-3)^3 - 1 = -28 \rightarrow -28 = -5n + 12 \Rightarrow 5n = 40, n = 8$$

(۵)

$$n_{10} - n_5 = 3d = 12 \Rightarrow d = 4 \quad n_4 - n_1 = 5d \Rightarrow 5 \times 4 = 20$$

(۶)

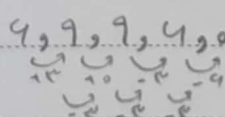
$$n_{10} - n_5 = 3d = 12 \Rightarrow d = 4, a = 3 \quad a_1 = 3 \quad a_3 = 11$$

(۷)

$$n_{10} = 3, 11, \dots \Rightarrow 11n - 5$$

$$n_1 = \frac{2}{5}, n_2 = \frac{4}{5}, n_3 = \frac{1}{9}, n_4 = \frac{14}{11}, n_5 = \frac{11}{10}, n_6 = \frac{22}{15} \Rightarrow 54$$

(۸)



$$a_n = -1/5 n^2 + 1/5 n \Rightarrow A = -1/5, B = 1/5$$

$$3A + 5B = -3/5 + 5/5 = 2/5$$

(۹)

$$n_{10} = 4, 2, 4, 0 \Rightarrow a_n = n^2 - n - 4 \quad \text{و} \quad a_1 - a_2 = 2d = 1 \Rightarrow d = 1/2, a = 24$$

(۱۰)

$$5n + 21 = n^2 - n - 4$$

$$a_n - a_{n+1} = 4$$

$$n^2 - 6n - 25 = 0 \Rightarrow n = 9 \quad \text{و} \quad 5n + 21 = 66$$

