

$$\rightarrow n = 10 \rightarrow \frac{r}{r} \times 10^4 = \frac{1}{r} \times 10 \sim 140 - 4 = \underline{144}$$

$$11 \times 10 = 11n \rightarrow n = 11$$

مجموع اقسامه = ۴۵ + ۱۵ = ۱۳۰

$a_n = \frac{(-1)^n}{n} \rightarrow a_1 = \frac{(-1)^1}{1} = -1$
 $a_2 = -\frac{1}{2}$
 $a_3 = \frac{1}{3}$
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$$k = \frac{V_0}{\phi} = 1f$$

$$a_{10} - a_v = 1r \quad \underline{a_{10} = a_v + 10r} \quad \cancel{a_v} + 10r - \cancel{a_v} = 1r \rightarrow d = r$$

$$a_4 - a_1 = ? \quad \underline{a_4 = a_1 + 3d} \quad \cancel{a_1} + 3d - \cancel{a_1} = \boxed{3r}$$

$$\textcircled{10} \quad \begin{array}{c} v \\ a_r \end{array} \quad \begin{array}{c} \textcircled{11} \\ a_r \end{array} \quad \begin{array}{c} 10 \\ a_r \end{array} \quad \rightsquigarrow d = \frac{10 - v}{r} = r$$

$$\text{فرض کنیم} \rightarrow \begin{array}{c} r \\ a_r \end{array} \quad \begin{array}{c} 11 \\ a_r \end{array} \quad \rightsquigarrow b_n = 11n - 5$$

$$t_n = \frac{r}{\Delta}, \frac{4}{v}, \frac{10}{1}, \frac{16}{11}, \dots \rightsquigarrow t_n = \frac{4n - 1}{11n + 10}$$

$$\frac{4n - 1}{11n + 10} = \frac{r}{1} \rightarrow 4n + 4 = 11n - 1 \rightarrow \cancel{4n} + 4 = \cancel{11n} - 1 \rightarrow n = \frac{1r}{5} = 4, 5 \rightarrow n \leq 4$$

بنابراین $1 \leq n \leq 4$

$$t_n \textcircled{4} = 4, 9, 9, 4, 0, \dots \rightsquigarrow t_n = an^2 + bn + c \rightsquigarrow \frac{-r}{r}n^2 + \frac{v}{1}\Delta n \rightsquigarrow 3A + 5B$$

$$4 = -4 + rb + c \quad \underline{b = v/\Delta} \quad 4 = -4 + (r \cdot v/\Delta) + c \rightarrow c = 0$$

$$4 = \frac{-r}{1} + b + c$$

$$r = \frac{-4}{1} + b \rightsquigarrow b = v/\Delta$$

$$\left(\frac{r}{1} - \frac{r}{1} \right) + \left(\frac{5v}{1} - \frac{5v}{1} \right) = 3r$$

$$t_n \textcircled{4} = -4, -4, 0, \dots \rightsquigarrow t_n = an^2 + bn + c \left\{ \begin{array}{l} 1 + b - 4 = -4 \rightarrow b = -1 \\ t_n = n^2 - n - 4 \end{array} \right.$$

$$\begin{array}{c} r_1 \\ a_1 \end{array} \quad \begin{array}{c} r_1 \\ a_r \end{array} \quad \begin{array}{c} r_1 \\ a_r \end{array} \quad \begin{array}{c} r_1 \\ a_r \end{array} \quad \rightarrow d = \frac{r_1 - r_1}{r} = 0$$

$$t_n = 0n + 11$$

$$\Rightarrow n^2 - n - 4 = 0n + 11$$

$$n^2 - 4n = 11$$

$$n(n - 4) = 11 \rightarrow 4 \times 3 = 11 \rightarrow n = 4$$

... برای مسئله