

1) $t_n = 2n^2 - 1$ $n=1 \rightarrow 1$ $n=2 \rightarrow 11$ $n=3 \rightarrow 27$ $n=4 \rightarrow 47$ $n=5 \rightarrow 74$

$\rightarrow 1, 11, 27, 47, 74$

2) $t_n = \frac{n+1}{n+4}$ $n=1 \rightarrow \frac{2}{5}$ $n=2 \rightarrow \frac{3}{6}$ $n=3 \rightarrow \frac{4}{7}$ $n=4 \rightarrow \frac{5}{8}$ $n=5 \rightarrow \frac{6}{9}$

$\rightarrow \frac{2}{5}, \frac{3}{6}, \frac{4}{7}, \frac{5}{8}, \frac{6}{9}$

3) $t_n = \frac{(-1)^n}{\sqrt{n+2}}$ $n=1 \rightarrow \frac{(-1)^1}{\sqrt{1+2}} = \frac{-1}{\sqrt{3}}$

4) $t_n = 2n \left[\frac{n}{4} \right]$ $n=1 \rightarrow 2 \cdot 1 \cdot \left[\frac{1}{4} \right] = 2 \cdot 1 \cdot 0 = 0$

5) $t_n = 2n - 10$ $\rightarrow 2n - 10 < 0 \rightarrow 2n < 10 \rightarrow n < 5 \rightarrow \boxed{4}$ (4-1)

6) $t_n = n^2 - 4n + 6$ $\rightarrow n^2 - 4n + 6 < 0 \rightarrow (n-2)(n-4) < 0 \rightarrow \frac{2}{1} < n < \frac{4}{1} \rightarrow (2, 4) \rightarrow \boxed{3}$

7) $t_n = 2n - 12$ $\rightarrow 2n - 12 \leq 0 \rightarrow 2n \leq 12 \rightarrow n \leq 6 \rightarrow 6 - 1 + 1 = \boxed{6}$

8) $t_n = n^2 - 4n + 12$ $\rightarrow n^2 - 4n + 12 \leq 0 \rightarrow (n-2)(n-6) \leq 0 \rightarrow \frac{2}{1} \leq n \leq \frac{6}{1} \rightarrow [2, 6] \rightarrow 6 - 2 + 1 = \boxed{5}$

9) $t_1 = 1$ $t_2 = 4$ $d = \frac{4-1}{2-1} = \frac{3}{1} = 3$ $\rightarrow t_3 = 1 + 3 = 4$ $t_4 = 4 + 3 = 7$

10) $t_n = n^2 - 9n + 12$ $\left| \begin{array}{l} \frac{d}{dt} = 2n - 9 = 0 \\ 2n - 9 = 0 \end{array} \right. \rightarrow n = \frac{9}{2} = 4.5$

11) $t_n = n^2 + 4n + 1$ $\rightarrow \frac{d}{dt} = 2n + 4 = 0 \rightarrow 2n = -4 \rightarrow n = -2$

که نزدیکترین عدد طبیعی به ۰ را میگیریم $n=1$
 $\rightarrow 1 - 4 + 1 = \boxed{2}$

12) $t_n = 2n^2 - 12n + 1$ $\rightarrow t_1 = 2(1)^2 - 12(1) + 1 = -9$

13) $t_n = 2n^2 - 12n + 1$ $\rightarrow t_1 = 2(1)^2 - 12(1) + 1 = -9$ $t_2 = 2(2)^2 - 12(2) + 1 = -13$ $t_3 = 2(3)^2 - 12(3) + 1 = -13$ $t_4 = 2(4)^2 - 12(4) + 1 = -9$ $t_5 = 2(5)^2 - 12(5) + 1 = 1$

Year:

Month:

Day:

| |

Subject:

(V)

$$t_n = -1, -1, 1, 1, \dots$$

$$\begin{matrix} \rightarrow & \rightarrow & \rightarrow & \rightarrow \\ +1 & +1 & +1 & +1 \end{matrix}$$

$$t_n = r_n t_{n-1} - v$$

(A)

$$r_2, r_3, \dots \rightarrow +f \rightarrow a = \frac{f}{r} = r \quad (c = -v)$$

$$b \rightarrow t_1 = r + b \cdot v \rightarrow t_1 = b - a = -1$$

$$t_n = a r^n + b n + c$$

$$t_n = r n t_{n-1} - v$$

$$b = -1$$

$$(-\infty, a + \epsilon] \cap [r a + 1, +\infty) \rightarrow \text{الترافيق} \rightarrow \text{sec} \rightarrow a + \epsilon < r a + 1$$

$$\rightarrow \text{اخر} \rightarrow a + \epsilon = r a + 1$$

(D)

$$\rightarrow a + \epsilon < r a + 1 \rightarrow r < a \rightarrow [r, +\infty)$$

$$\left[\frac{100}{2} \right] = [r_0] = [r_0]$$

(F)

$$\left[\frac{100}{r} \right] = [r_1/r_0] = [r_1] \quad (\text{ب})$$

(A)

$$\begin{matrix} \uparrow & \uparrow & \uparrow \\ r & a & 10 \\ r_1 + r_0 - 4 = \end{matrix} [r_1]$$

(D)

$$\left[\frac{100}{10} \right] = [r_1/r_0] = [r_1]$$

(D)