

نشان بده

$$t_n = 3n^2 - 1 = \begin{cases} 1 \rightarrow 3 \times 1^2 - 1 = 2 & f \rightarrow 3 \times (f)^2 - 1 = 8 \\ 2 \rightarrow 3 \times 2^2 - 1 = 11 & \omega \rightarrow 3 \times (\omega)^2 - 1 = 20 \\ 3 \rightarrow 3 \times 3^2 - 1 = 24 & \end{cases} \Rightarrow 2, 11, 24, 49, 76, \dots$$

۱- پنج جمله اول:

$$t_n = \frac{3n+1}{n+2} = \begin{cases} 1 \rightarrow \frac{3}{2} & f \rightarrow \frac{9}{4} \\ 2 \rightarrow \frac{5}{4} & \omega \rightarrow \frac{11}{6} \\ 3 \rightarrow \frac{7}{5} & \end{cases} \Rightarrow \frac{3}{2}, \frac{5}{4}, 1, \frac{9}{8}, \frac{11}{6}$$

$$t_n = \frac{(-1)^{n+1}}{\sqrt{n+1}} = \frac{-1}{\sqrt{14}} = -\frac{1}{\sqrt{14}}$$

۲- جمله سیزدهم:

$$t_n = 2n - \left[\frac{n}{2} \right] = 24 - \left[\frac{14}{2} \right] = 23$$

۳- چند جمله منفی؟

$$t_n = 2n - 10 \Rightarrow 2n - 10 < 0$$

$$2n < 10$$

$$\boxed{n < 5}$$

۴ جمله

$$t_n = n^2 - 11n + 10$$

$$\underbrace{(n-10)}_{n=10} \times \underbrace{(n-1)}_{n=1} < 0 \quad \begin{cases} n=10 \\ n=1 \end{cases}$$

$$\frac{10}{+} \frac{1}{-} \frac{1}{+} \rightarrow 1 < n < 10 \rightarrow 5 \leq n \leq 9$$

۵ جمله $\Rightarrow (9-5)+1=5$

$$t_n = 2n - 14 \Rightarrow 2n - 14 \leq 0$$

$$2n \leq 14$$

$$n \leq 7$$

جواب 1

ف - نامشیت

$$t_n = n^2 - 12n + 27$$

$$(n-9)(n-3) \leq 0$$

$$\begin{matrix} n=9 & n=3 \end{matrix}$$

$$\begin{matrix} 3 & 9 \\ + & - \\ - & + \end{matrix} \Rightarrow 3 \leq n \leq 9$$

جواب 2

- 5

$$\begin{matrix} t_r = ? \\ t_r = r \end{matrix} \Rightarrow r = f$$

$$\begin{matrix} t_f = r \\ t_f = 10 \end{matrix} \Rightarrow 10 = r$$

$$t_9 = 27$$

6 - کترین جلد

$$t_n = n^2 - 4n + 2 \Rightarrow n = -\frac{b}{2a} = -\frac{-4}{2} = 2$$

$$(2)^2 - 4(2) + 2 = -2$$

$$\begin{matrix} 4 & -8 & 2 \\ & -4 & -2 \end{matrix}$$

$$t_n = n^2 + 2n + 1 \Rightarrow n = -\frac{b}{2a} = -\frac{2}{2} = -1$$

$$(1)^2 + 2(1) + 1 = 4$$

$$\begin{matrix} 1 & 2 & 1 \\ & 2 & 2 \end{matrix}$$

7 - جلد اسم

$$t_n = -n^2 - 2n - 1, -19 - 29 - 49, \dots$$

$$\begin{matrix} \downarrow \\ -19 \\ -1 \\ -1 \\ -1 \\ -1 \end{matrix}$$

$$\begin{matrix} +r & +r & +r & +r \end{matrix}$$

$$r = -1$$

$$\begin{matrix} 2a = 2 \\ a = 1 \end{matrix}$$

$$t_n = an^2 + bn + c$$

$$t_n = 1n^2 + bn - 1$$

$$t_n = n^2 + n - 1$$

$$t_{10} = (10)^2 + 10 - 1 = 109$$

$$\frac{100}{110 - 1} = 109$$

$$t_n = -y_2 - 19 \wedge 21$$

$$\begin{array}{ccccccc} & +1 & +2 & +3 & +4 & +5 & +6 \\ \swarrow & & & & & & \\ +1 & +2 & +3 & +4 & +5 & +6 & \end{array}$$

فيديو

$-v$

$ra = r$
 $a = r$

$$t_n = ah^r + bh + c \quad -1$$

$$t_n = rn^r + bh - v$$

$$t_n = rn^r - h - v$$

$$ra + 1 \geq a + r$$

$$ra - a \geq r - 1$$

$$a \geq 3$$

$$1) \quad \frac{100}{9} \div \frac{10}{9} = 33$$

$$2) \quad \frac{100}{10} \div \frac{10}{10} = 20$$

$$3) \quad \frac{100}{10} \div \frac{10}{10} = 10$$

$$4) \quad \frac{33 + 20 - 10}{10} = 1$$

-9

-10