

الف $t_n = 3n^2 - 1$ $2, 11, 22, 47, 74$

جواب ۱

ب $t_n = \frac{n+1}{n+4}$ $\frac{3}{5}, \frac{4}{9}, \frac{5}{13}, \frac{6}{17}, \frac{7}{21}$

الف $\frac{(-1)^{13}}{\sqrt{3+3}} = \frac{-1}{\sqrt{14}} = -\frac{1}{\sqrt{14}}$

جواب ۲

ب $2 \times 13 - \left[\frac{13}{4} \right] = 26 - 3 = 23$

جواب ۳

الف $2n-1 < 0$ $2n < 1$ $n < \frac{1}{2}$ $\bar{1}$

ب $(n-1)(n-4)$ $\begin{array}{cc|cc} & 1 & & 4 \\ & | & | & \\ + & 0 & - & 4 & + \end{array}$ $\frac{2, 4, 7, 11, 14}{\bar{5}}$

الف $2n-14 < 0$ $2n < 14$ $n < 7$ $\bar{7}$

ب $(n-9)(n-3)$ $\begin{array}{cc|cc} & 9 & & 3 \\ & | & | & \\ + & 0 & - & 3 & + \end{array}$ $\frac{3, 4, 7, 11, 14}{\bar{7}}$

$t_4 = 4a + b = 7$

$t_3 = 3 \times 3 - a = 4$ جواب ۴

$t_4 = 4a + b = 7$

$-a = -10$ $a = 10$ $b = -37$