

الف) $t_n = 3n^2 - 1 \Rightarrow 2, 11, 26, 47, 74, \dots$

ب) $t_n = \frac{n+1}{n+4} \Rightarrow \frac{3}{5}, \frac{4}{6}, 1, \frac{9}{8}, \frac{11}{9}, \dots$

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الف) $t_n = \frac{(-1)^n}{\sqrt{n+3}} \Rightarrow t_{13} = \frac{(-1)^{13}}{\sqrt{16}} = -\frac{1}{4}$

ب) $t_n = 2n - \left\lfloor \frac{n}{4} \right\rfloor \Rightarrow t_{14} = 28 - \left\lfloor \frac{14}{4} \right\rfloor = 23$

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الف) $t_n = 2n - 10 \Rightarrow 2n - 10 < 0 \Rightarrow 2n < 10 \Rightarrow n < 5$
 عدد ۴

ب) $t_n = n^2 - 18n + 80 \Rightarrow (n-4)(n-10) < 0 \Rightarrow \frac{4}{+} \frac{10}{-}$
 عدد ۷

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الف) $t_n = 2n - 19 \Rightarrow 2n - 19 \leq 0 \Rightarrow 2n \leq 19 \Rightarrow n \leq 9$
 عدد ۸

ب) $t_n = n^2 - 12n + 27 \Rightarrow (n-3)(n-9) \leq 0 \Rightarrow \frac{3}{+} \frac{9}{-}$
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$t_5 = 7 \Rightarrow t_1 + 4d = 7$

$t_9 = 22 \Rightarrow t_1 + 8d = 22$

$d = \frac{22-7}{4} = \frac{15}{4} = 3 \Rightarrow t_1 = -2$

$t_3 = t_1 + 2d = -2 + 6 = 4$

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c) $t_n = n^r - g_n + r$ $\text{Min} \Big|_{-V}^r \Rightarrow y_{\min} = -V$

$$b) t_n = n^2 + \varepsilon_{n+1}$$

$$\text{Min} / -r \rightarrow n \text{ میانی نداریم}$$

$$\text{Min} / 9 \Rightarrow y_{\min} = 9 \rightarrow n_{\min} = 1$$

$t_{c^n} = 1$
 $r_a = r$
 $a = 1$

$t_n = n^r - g_{n+1} \Rightarrow t_{10} = 100 - g_{10} + 1 = 1$

$t_n = -9, -1, 1, 7, 13, \dots$
 $c = (-V)$
 $r_a = \epsilon$
 $a = r$
 $t_n = r_n^r - n - V$

$$\left. \begin{array}{l} \text{I. } a + \varepsilon = r_{a+1} \Rightarrow a = r \\ \text{II. } a + \varepsilon < r_{a+1} \Rightarrow r < a \end{array} \right\} a \geq r$$

الف) چند عدد ۳ بخش نیز ؟ $n(A) = \frac{99-3}{3} + 1 = 32$ ؟
 ب) " " " " " ؟ $n(B) = \frac{100-4}{4} + 1 = 25$ ؟
 ج) " " " " " ؟ $n(A \cap B) = \frac{90-18}{18} + 1 = 6$ ؟
 د) " " " " " ؟ $n(A \cup B) = n(A) + n(B) - n(A \cap B)$
 $32 + 25 - 6 = 51$