

$t_n = 5, 9, 13, 17, \dots \rightarrow t_n = 4n + 1$  - تعریف

c)  $t_1 = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10$

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$$t_n = 4, 1, 16, 1A, \dots \Rightarrow t_n = t_{n+1}$$

الف)  $t_1 = 42$  /  $S_1 = \frac{1}{2} (4 + 42) = 23$ .

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$\rightarrow a_{px} = 10 \times 6 + 1 = 19$   
 $a_{py} = 11 \times 6 + 1 = 17$   
 $a_{pz} = 12 \times 6 + 1 = 19$   
 $a_{pq} = 13 \times 6 + 1 = 11$

$$\{ a_{11} + a_{12} + a_{13} + a_{14} = 13 + 14 + 15 + 11 = 53 \}$$

$$d, \frac{r-1-\sqrt{r}}{r} = 1-\sqrt{r} \rightarrow t_{ra}-t_{rp} = rd \rightarrow r-1-\sqrt{r}$$

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$$rx + x + x^2 = a^y + \Delta r^2 \rightarrow x + \Delta r^2 = a^y + \Delta y \rightarrow a^y = x + \Delta r^2 \rightarrow y = rx + 1$$

$$x+y = t \rightarrow 2x+1+2t \rightarrow 2x = 2 \rightarrow x=1, y = 2x+1+1: 2 \rightarrow 2y = 1 \times 2 = 2$$

1

$$f(x) = 4x + 4x - 8 \rightarrow f(x) = 8 \rightarrow x = \frac{1}{4}$$

$$a_n = -r, 0, r, 4 \rightarrow a_4 = 4$$

Δ

دسته ششم:  $rd = 12$  و  $k = 4$   $\rightarrow$   $tn = 5, 11, 17, \dots \Rightarrow tn = 4n - 1$

$$\left. \begin{array}{l} ar = 11 \\ br = 19 \end{array} \right\} \begin{array}{l} 4n-1 \leq 11 \rightarrow n \leq 3 \\ 4n-1 \leq 19 \rightarrow n \leq 5 \end{array} \rightarrow \text{دسته ششم}$$

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$$\begin{aligned} a + a + d + a + rd &= 11 \rightarrow 3a + rd = 11 \rightarrow a + d = 11 \\ a + a + rd + a + rd &= 12 \rightarrow 3a + 2d = 12 \rightarrow a + rd = 4 \\ \hline d &= 7, a = -2 \end{aligned}$$

$$\Rightarrow a + rd - a - d + a = a + d = 11 \rightarrow \frac{a+d}{a} = \frac{11}{-2} = -\frac{11}{2}$$

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$$\begin{aligned} a + a + d + a + rd &= 10 \rightarrow 3a + rd = 10 \rightarrow a + d = \frac{10}{3} \rightarrow 3a + rd = 10 \\ a + rd + a + rd &= 12 \rightarrow 2a + 2d = 12 \rightarrow a + d = 6 \\ \hline d &= 4, a = 2 \end{aligned}$$

$$\Rightarrow a_1 = a + 9d = 2 + 9 \times 4 = 38$$

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$$\begin{aligned} a_1 + ar + ar + ar + ar + ar + ar + ar + ar &= 9a_1 = 9(3a_1) \rightarrow 9a_1 = 27a_1 \rightarrow a_1 = 3a_1 \\ \rightarrow a + rd &= 3a + rd \rightarrow a = \frac{rd}{2} \rightarrow \frac{ar}{av} = \frac{a + rd}{a + rd} = \frac{\frac{d + 3rd}{2}}{\frac{d + rd}{2}} = \frac{rd}{rd} = 1 \end{aligned}$$

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$$a_1 = 11 \rightarrow d = \frac{3 \times 11 - 11}{4} = 2 \rightarrow a_5 = a + 4d = 11 + 8 = 19$$

$$\rightarrow b_5 = 33, b_1 = 19 \rightarrow d' = \frac{33 - 19}{4} = 4$$

$$\rightarrow h_n = 19, 23, 27, 31, 35 \Rightarrow \text{دسته ششم}$$

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