

نام و نام خانوادگی علی جمشیدیان پاسخنامه تشریحی تکلیف شماره ۱۱ کلاس پسر ۵

$t_1 = 1 = a + b \Rightarrow b = -0.5$
 $\Rightarrow t_n = 1.5n^2 + bn$
 $t_n = 1.5n^2 - 0.5n \Rightarrow t_{10} = 14.5$

$c=0$
 $a=1, d=3$

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$t_n = 0.5n^2 - 0.5n = 0.5$
 $0.5(n^2 - n) = 0.5$
 $n^2 - n = 1 \Rightarrow n(n-1) = 1 \Rightarrow n=2$

$c=0$
 $a=0.5$
 $t_n = 0.5n^2 + bn$

$t_1 = 0 = 0.5 + b \Rightarrow b = -0.5$

$n=11$

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$11n - 3 = 128$
 $11n = 131 \Rightarrow n = 12$

$11n - 3 = 128$
 $11n = 131 \Rightarrow n = 12$

$11n - 3 = 128$
 $11n = 131 \Rightarrow n = 12$

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$a_n = \frac{(-1)^n}{n} \rightarrow \text{صورت} = -1, +1$
 $n \geq 1 \in \mathbb{N}$

$t_n \max \rightarrow t_p = \frac{1}{p}$
 $t_n \min \rightarrow n=1 \rightarrow t_1 = -1$

$\Delta t_n = 1.5$

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$b_n = (-3)^n - 7n$
 $b_7 = (-3)^7 - 49$
 $b_7 = -41$

$-41 = -2k + 22$
 $2k = 63 \Rightarrow k = 31.5$

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$$t_{10} - t_7 = 1^2 = 3d \Rightarrow d = \frac{1}{3}$$

$$t_3 - t_1 = 2d = \frac{2}{3}$$

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$$t_5 - t_4 = 1 = 2d \Rightarrow d = \frac{1}{2}$$

$$\Rightarrow a_n = 3n - 1 \rightarrow a_1 = 2, a_{10} = 29$$

$$\rightarrow b_1 = 3, b_4 = 11 \Rightarrow d = 3 \Rightarrow b_n = 3n - 5$$

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$$\frac{2}{5}, \frac{6}{7}, \frac{10}{9}, \frac{14}{11}, \dots \Rightarrow t_n = \frac{4n-2}{2n+3} \rightarrow \frac{4n-2}{2n+3} < \frac{3}{2} \rightarrow 4n-2 < \frac{3(2n+3)}{2}$$

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$$\rightarrow 8n-4 < 3n+9 \rightarrow 5n < 13 \Rightarrow n < 2.6 \Rightarrow n = 1, 2 \Rightarrow \text{جواب} = 2$$

$$0, 6, 9, 9, 6, 0, \dots$$

$$3A + 2B = -4, 0 + 3 \times 7, 0 = 21$$

$$A = -1, 0 \rightarrow -1, 0n^2 + Bn \rightarrow t_1 = -1, 0 + B = 9 \Rightarrow B = 9, 0$$

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$$-4, -6, -4, \dots$$

$$a_5 - a_4 = 1 \Rightarrow 2d = 1$$

$$d = \frac{1}{2} \Rightarrow a_1 = 2.5 \Rightarrow a_n = 2.5n + 1$$

$$a = 1$$

$$c = -4$$

$$n^2 + bn - 4 \rightarrow t_1 = -4 = 1 + b - 4 \Rightarrow b = -1$$

$$t_n = n^2 - n - 4$$

$$n^2 - n - 4 = 2n + 1$$

$$n^2 - 3n - 5 = 0$$

$$(n+3)(n-9) = 0 \Rightarrow 9, -3$$

$$\text{جواب} = 9$$

جواب 9 و -3

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