

نام و نام خانوادگی سروش اخوان پاسخنامه تشریحی تکلیف شماره ... ۱۱ ... کلاس ... دهم ... پیر ... B

$$a_n = \frac{n(n+1)}{2} + n(n-1)$$

$$\Rightarrow a_{11} = \frac{11 \times 12}{2} + 11 \times 10 = 66 + 110 = \boxed{176}$$

$$a_n = \frac{n(n-1)}{2} \quad \frac{n(n-1)}{2} = 66$$

$$\Rightarrow n(n-1) = 132 \Rightarrow \boxed{n = 12}$$

$$\text{زنی} \rightarrow a_n = 1 + 4n \quad a_{11} = 1 + 4(11) = \underline{45}$$

$$\text{کلی} \rightarrow \text{مویز} + \text{زنی} \rightarrow a_n = 1 + 4n + 4(n-1)$$

$$a_{11} = 1 + 44 + 40 = \underline{85} \quad 85 + 45 = \boxed{130}$$

$$\text{برترین} \rightarrow n = 2 \Rightarrow a_2 = \frac{1}{2}$$

$$\text{چهارمین} \rightarrow n = 4 \Rightarrow a_4 = -1$$

$$\frac{1}{2} - (-1) = \boxed{1.5}$$

$$b_3 = (-3)^3 - (5 \times 3) = -27 - 15 = -42$$

$$a_k = -42 \Rightarrow -8k + 22 = -42$$

$$\Rightarrow -8k = -64$$

$$\Rightarrow 8k = 64$$

$$\Rightarrow \boxed{k = 8}$$

$t_1 - t_0 = 1r \Rightarrow r d = 1r \Rightarrow d = \frac{1r}{r} = 1r$ $t_4 - t_1 = \delta d \Rightarrow t_4 - t_1 = \delta \times 1r = 1r_0$	6
$a_r = 1r, a_f = 1\delta \Rightarrow r d = 1\delta - 1r \Rightarrow d = 1r$ $\Rightarrow a_1 = a_r - r = 1r - 1r = 0$ $\Rightarrow a_1 = b_1 = 0$ $\Rightarrow a_r = b_r$ $\Rightarrow a_1 = b_1$ $\Rightarrow a_r - a_1 = 1r - 0 = 1r$ $\Rightarrow b_r - b_1 = 1r - 0 = 1r$ $d = 1r$	7
$t_n = \frac{r(n-1)}{r_n + r}$ $\frac{r}{r} > \frac{r(n-1)}{r_n + r}$ $\Rightarrow n - 1 < r_n + 1 \Rightarrow r_n < 1r \Rightarrow n < 4, \delta$ $\hat{n} = 1$	8
$t_n = \frac{4, 4, 4, 4, 0}{+9 +3 +0 -3 -4}$ $n_0 + 4 = 4 \Rightarrow 0$ $-1\delta \times 1 + b \times 1 = 4$ $\Rightarrow b = 5, \delta$	9
$t_n = \frac{-4, -1r, 0, \dots}{+0 +r +r}$ $a_r = 1r$ $a_f = 1r$ $\Rightarrow d = \delta \Rightarrow a_1 = 1r - \delta = 1r$ $\Rightarrow a_n = \delta n + 1r$	10

$\Rightarrow (n-4)(n+3) = 0$
 $\Rightarrow n = 4, -3 \rightarrow n = 4$