

0, 9, 14, ...

$$\left. \begin{array}{l} d=5 \\ a_1=0 \end{array} \right\} \begin{array}{l} t_n = a_1 + (n-1)d \Rightarrow t_n = 5n-1 \\ t_{10} = 5 \cdot 10 - 1 = 49 \end{array}$$

$t_n = 4, 10, 16, 22, \dots \Rightarrow \left. \begin{array}{l} d=6 \\ a_1=4 \end{array} \right\} \begin{array}{l} t_n = 6n-2 \\ t_{10} = 58 \end{array}$

$S_n = \frac{n}{2}(a_1 + t_n) = S_{10} = \frac{10}{2}(4 + 58) = 5 \cdot 62 = 310$

$t_{29}, t_{30}, t_{31}, t_{32}$

$t_{29} = 5 \cdot 29 - 2 = 143$

$t_{32} = 5 \cdot 32 - 2 = 158$

$S = \frac{4}{2}(143 + 158) = 2(301) = 602$

$d = 3 - \sqrt{3} - 2 = 1 - \sqrt{3}$

$t_{15} = a_1 + (n-1)d = 1 + \sqrt{3} + (14)(1 - \sqrt{3}) = 15 - 13\sqrt{3}$
 $t_{16} = 1 + \sqrt{3} + (15)(1 - \sqrt{3}) = 16 - 14\sqrt{3}$

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$2 \cdot 2 + 6^{ka} = 6^{ka} + 6^y \Rightarrow 6^y = 6^{ka}(4-1) \Rightarrow 6^y = 6^{ka+1}$

$ka+1 = y$

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$x+y = 4(2) \Rightarrow x+y = 8 \Rightarrow ka+1 + u = 8 \Rightarrow ka+1 = 8 \rightarrow ka = 7$
 $y = 3$

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$2(ka-1) = ka + 4 - 2 \Rightarrow 2ka - 2 = ka + 2 \Rightarrow ka = 4 \rightarrow a = \frac{1}{k}$

-3, 0, 3, ...

$\left. \begin{array}{l} d=3 \\ a_1=-3 \end{array} \right\} \begin{array}{l} t_n = -3 + (n-1) \cdot 3 = 3n-6 \\ t_8 = 3 \cdot 8 - 6 = 18 \end{array}$

$$\left. \begin{aligned} a_n &= 2n+1 \Rightarrow a_{r_0} = \varepsilon_1 \\ b_n &= 2n-1 \Rightarrow b_{r_1} = \omega_9 \\ \underbrace{d}_{\substack{\text{число} \\ \text{членов}}} &= 4 \rightarrow \underbrace{c_n}_{\substack{\text{число} \\ \text{членов}}} = 4n-1 \\ \underbrace{a_1}_{\substack{\text{число} \\ \text{членов}}} &= \omega \end{aligned} \right\} \begin{aligned} a_n - 1 &\in \varepsilon_1 \\ 4n &\in \varepsilon_2 \\ n &\leq v \Rightarrow n = v \end{aligned} \quad (4)$$

$$a_1 + a_1 + d + a_1 + rd = 2a_1 + rd = 21 \Rightarrow a_1 + rd = v \quad (v)$$

$$a_1 + a_1 + rd + a_1 + rd = 3a_1 + 2d = 10\omega \Rightarrow a_1 + rd = 2\omega$$

$$\begin{cases} a_1 + rd = 2\omega \\ a_1 - d = -v \end{cases} \Rightarrow a_1 = -v \Rightarrow a_1 + rd - a_1 - d + a_1 = a_1 + rd = v \Rightarrow \frac{a_1 - a_1 + a_1}{a_1} = \frac{-1}{v} \quad (1)$$

$$a_1 + a_1 + a_1 = 3a_1 + rd = 1\omega \Rightarrow a_1 + rd = \omega \quad (1)$$

$$a_1 + \omega = a_1 + rd + a_1 + rd = 2\omega \Rightarrow 2a_1 + 2d = 2\omega \Rightarrow a_1 + rd + \omega d = 2\omega$$

$$2(\underbrace{a_1 + rd}_{\omega}) + \omega d = 2\omega \Rightarrow \omega d = 1\omega \rightarrow d = 1, a_1 = 1 \Rightarrow a_{10} = 1 + 9 \cdot 1 = 10$$

$$\cancel{a_1} + a_1 = 2a_1 = 2(a_1 + ar) \Rightarrow (a_1 + a_1) = 2(a_1 + ar) \quad (4)$$

$$a_1 + rd + a_1 = 2(a_1 + rd) \Rightarrow 2a_1 + rd = 2a_1 + 2d \Rightarrow rd = 2d$$

$$d = 2a_1 \Rightarrow \frac{a_{r_1}}{a_v} = \frac{a_1 + rd}{a_1 + 4d} = \frac{a_1 + 2\lambda a_1}{a_1 + 8a_1} = \frac{3a_1}{9a_1} = \frac{1}{3}$$

$$a_1 = 11, a_1 + 4d = 2\omega \Rightarrow 4d = 2\omega \rightarrow d = 1 \Rightarrow r_2 = a_1 + rd = 11 + 11 = 22 \quad (1.)$$

$$2\lambda + rd = 2r \Rightarrow rd = -1\omega \rightarrow d = -\omega \Rightarrow d = \frac{b-a}{k+1} \Rightarrow -\omega = \frac{1^2 - 1\lambda}{k+1}$$

$$-\omega = \frac{1^2 - 1\lambda}{k+1} \rightarrow 6k + \omega = 1\omega \rightarrow k = 1$$