

$$9^2, 11 \Rightarrow \text{آخرین عدد در ۹}$$

$$48 \Rightarrow \text{اولین عدد} \Rightarrow 1^2, 4^2 \Rightarrow \text{آخرین عدد در ۱}$$

$$\text{میانگین} = \frac{11+48}{2} = \frac{134}{2} = 67$$

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$$3, \dots, 11 \mid 12, \dots, 19 \mid 20, \dots, 27 \mid 28, \dots, 34$$

$$\text{میانگین} = \frac{34+11}{2} = 22.5$$

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$$a_0 + a_1 + a_2 + a_3 + \dots + a_9 = 19$$

$$a_0 = 1^2 = 1$$

$$a_1 = 4$$

$$a_2 + a_3 + a_4 + \dots + a_9 = 11$$

$$\left[\frac{1}{1}\right] + 1 + \left[\frac{4}{4}\right] + 1 + \left[\frac{9}{9}\right] + 1 + \dots$$

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$$\left[\frac{16}{16}\right] + 1 + \left[\frac{25}{25}\right] + 1 + \left[\frac{36}{36}\right] + 1 + \left[\frac{49}{49}\right] + 1 + \left[\frac{64}{64}\right] + 1 + \left[\frac{81}{81}\right] + 1 + \left[\frac{100}{100}\right] + 1 = 11$$

$$a_2 = 16$$

$$a_4 = 16, 2$$

$$a_n = \frac{1}{\delta} \times (-\delta) n^2 + bn + c = -\frac{1}{\delta} n^2 + bn + c$$

$$\frac{a_0}{a_1} = ? \rightarrow \frac{-\frac{1}{\delta} \times (0)^2 + 1 \times 0^2 - 1}{-\frac{1}{\delta} + 1} = \frac{16}{16} = 1$$

$$-\frac{1}{\delta} \times 16 + db + c = 16$$

$$-\frac{1}{\delta} \times 25 + 16b + c = 16, 2$$

$$\begin{cases} 8b + c = 19 \\ 16b + c = 24 \end{cases}$$

$$\Rightarrow 8b = 5 \quad b = \frac{5}{8} \quad c = -1$$

$$t_k = a_k$$

$$t_1 = a_1$$

$$d = \frac{t_1 - t_k}{r} = \frac{a_1 - a_k}{r}$$

$$a_{10} = 0$$

$$\frac{a_{10}}{d} = ?$$

$$\frac{a_{10} + \delta d}{\frac{a_{10} - a_k - a_{10} + \delta d}{r}} = \frac{a_{10} + \delta d}{\frac{a_{10} - a_k - a_{10} + \delta d}{r}} = r$$

$$\frac{a_{10} + \delta d}{\frac{a_{10} - a_k - a_{10} + \delta d}{r}} = r$$

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$$\begin{aligned}
 ya^r &= \delta a + r a r a & y(a+rd)^r &= \delta(a+rd)a + r(a+rd)a \\
 & & ya^r + yd^r + 1rad &= \delta a^r + \delta ad + ra^r + rad \\
 ra^r + ad &= yd^r & ra^r + ad - yd^r &= 0 \\
 \frac{a^r}{d} &= \frac{a+rd}{d} = \frac{a}{d} + r = \left[\frac{1}{r} \right] \left[\frac{1}{d} \right] & \frac{a^r}{d^r} + \frac{a}{d} - y &= 0 \\
 & & x &= \frac{-1 \pm \sqrt{1+r}}{r} \\
 & & x &= \frac{r}{r} \\
 & & x &= -r
 \end{aligned}$$

$$\begin{aligned}
 a, b, c &\rightarrow \text{gl} & rb &= a+c \\
 b, \frac{a}{r}, \frac{c}{r} &\rightarrow \text{cis} & \frac{a^r}{r} &= \frac{bc}{r} \Rightarrow a^r = bc \rightarrow b, a, c \rightarrow \text{cis} \\
 r_q &=? & & \\
 \frac{a}{a+d} &= \frac{a+rd}{a} & a^r &= a^r + rad + rd^r & rad &= -rd^r d & d &= -\frac{ra}{r} \\
 b &= -\frac{a}{r} & c &= -ra & q &= \frac{\frac{a}{r}}{\frac{a}{r}} = \frac{a}{rb} = \frac{a}{-a} = -1 & r_q &= -r
 \end{aligned}$$

$$\begin{aligned}
 a, b, c &\rightarrow \text{cis} & b^r &= ac \\
 rb, ra, c &\rightarrow \text{gl} & ra &= rb + c \\
 & & ra &= raq + aq^r \\
 \frac{aq}{a^r} &= ? & \frac{aq^r}{aq^r} &= q^r & q^r + r_q - r &= 0 \\
 q^r &= 1 & q^r &= -r & q &= \frac{-r \pm \sqrt{r^2 + 4r}}{r} \Rightarrow q = 1 \\
 & & & & q &= -r
 \end{aligned}$$

$$\begin{aligned}
 \frac{a_q}{(a^r)^r} + \frac{a_r}{(a)^r} &= r & \frac{aq^r}{a^r a^r q^r} + \frac{aq}{a^r a} &= r & \frac{q^r + aq}{a^r} &= r \\
 \frac{q^r}{a^r} + \frac{q}{a} - r &= 0 & \frac{q}{a} = x \Rightarrow x^r + x - r &= 0 & q^r + aq &= ra^r \\
 x &= \frac{-1 \pm \sqrt{1+r}}{r} & x &= -r
 \end{aligned}$$

$$\begin{aligned}
 a_q &= \sqrt{a_r} = \sqrt{aq^r} = aq^r & aq^r &= a^r q^r & aq &= 1 \Rightarrow a_r &= 1 \\
 a_q &= rV = aq^r = rV \\
 q^r &= \frac{rV}{1} & q &= r & a &= \frac{rV}{11} \\
 \frac{1}{r} - \frac{rV}{11} &= \frac{11 - \delta r}{11r} = \frac{rV}{11r} = \frac{1}{4}
 \end{aligned}$$