

$\{1\}$ $\{2,3,4\}$ $\{5,6,7,8,9\}$ $\{(n-1)^2+1, \dots, n^2\}$ $\leftarrow n$ $a_n = \frac{45+11}{2} = 28 \leftarrow \{45, \dots, 11\} \leftarrow n=9$	۱
$\{1,2,3\}$, $\{4,5,6,7,8,9,10,11,12\}$, $\{13, \dots, 24\}$, $\{25, 26, \dots, 36\}$ $\frac{121+243}{2} = 182$	۲
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$a_0 = 14$ $a_1 = 17/2$ $a_n = \frac{1}{8}n^2 + bn + C$ $14 = 0 + 0b + C \Rightarrow C = 14$ $17/2 = 1/8 + b + C \Rightarrow 17/2 = 1/8 + b + 14$ $\Downarrow$ $b = 0/8$ $C = 14$ $\frac{a_{10}}{a_1} = \frac{\frac{1}{8}10^2 - (0/8 \times 10) + 14}{\frac{1}{8}1^2 - \frac{1}{8} + 14} = \frac{44}{124} = \frac{11}{31}$	۴
$a_f = b_r \Rightarrow a + r d_1 = b + d_c$ $a_n = b_r \Rightarrow a + r d_1 = b + r d_c$ $b_{10} \Rightarrow b = -9d_r$ $b_{10} = b + 14d_r \Rightarrow b_{10} = 5d_r$ $\frac{b_{10}}{d_1} = \frac{5d_c}{\frac{1}{10}d_r} = \frac{5}{1/10}$	۵

$$\gamma(a+d)^r = \gamma a^r + \gamma d^r + r a^r + r a d^r \Rightarrow \gamma d^r = r a^r + a d^r$$

$$\frac{a^r}{a} + \frac{a+d^r}{d} = \frac{a}{a} + r \Rightarrow \frac{a}{d} + r = t \Rightarrow r t^r + t = \gamma a^r t^r + t - \gamma = 0$$

$$t = \frac{-1 \pm \sqrt{r\gamma}}{r} \quad \begin{cases} t = \frac{\gamma}{r} \\ t = -r \end{cases}$$

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$$b-d, b, b+d \quad b, \frac{b-d}{r}, \frac{b+d}{r}$$

$$\Rightarrow d(d-rb) \Rightarrow d = rb$$

$$b, -b, b \Rightarrow a = 1, r a = -r$$

$$\frac{b+bd}{\varepsilon} = \frac{b^r - rdb + d^r}{\varepsilon} \Rightarrow$$

$$d^r - r b d = 0$$

$$b, \frac{b-rb}{r}, \frac{b+rb}{r}$$

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$$a, aq, aq^r$$

$$raq, ra, aq^r$$

$$\left. \begin{aligned} raq + aq^r &= \varepsilon a \rightarrow ra + q^r = \varepsilon \\ a^r + r q - \varepsilon &= 0 \end{aligned} \right\}$$

$$q = \frac{-r \pm \sqrt{r\varepsilon}}{r}$$

$$\begin{cases} q = -\varepsilon \quad \checkmark \\ q = 1 \quad \times \end{cases}$$

$$\Rightarrow \frac{aq^r}{aq^d} \Rightarrow q^r = (-\varepsilon)^r - \gamma r$$

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$$\frac{aq^d}{a^r q^r} + \frac{aq}{a^r} = r \Rightarrow \frac{q^r}{a^r} = \frac{q}{a} = r$$

$$\frac{a^r}{aq} = \frac{a}{q}$$

$$\frac{q^r}{a^r} = \frac{q}{a} = r = 0$$

$$\left(\frac{q}{a}\right)^r + \frac{q}{a} - r = 0 \Rightarrow \frac{q}{a} = \frac{-1 \pm \sqrt{r}}{r} \quad \begin{cases} \frac{q}{a} = 1 \\ \frac{q}{a} = -r \end{cases} \Rightarrow \frac{q}{a} < \frac{1}{r}$$

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$$(aq^r)^r = aq^{\varepsilon} \times aq^r \Rightarrow a^r q^r = aq^{\varepsilon} \times aq^r \Rightarrow aq^{\varepsilon} = q^r \Rightarrow q^{\varepsilon} = rv \Rightarrow q = \sqrt{rv}$$

$$\Rightarrow aq^{\varepsilon} = rv \Rightarrow v r q a = rv \Rightarrow a = \frac{1}{rv}$$

$$\frac{rv}{\Delta \varepsilon} - \frac{r}{\Delta \varepsilon} = \frac{rv}{\Delta \varepsilon}$$

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