

① ② ③
 $(11), (2, 3, 4), (5, 4, 7, 8, 9) \dots$
 عدد وسط $\rightarrow n^2 - (n-1) \rightarrow 9 \times 9 - 8 = \boxed{73}$

$(\dots 64) - 64 \leftarrow 73 \rightarrow (11) (12 \dots)$

$\frac{11 + 7 \times 9}{2} = \frac{73}{2} = \boxed{73}$

$(1, 2, 3), (4, 5, 6, \dots, 12), (3, 14, \dots, 39), (50, 41, 47, \dots, 130),$

$(121, 122, 123, 124, \dots, 363)$

2×3
جمله

$\frac{121 + 363}{2} = 242$

$a_0, a_3, a_6, a_9 \rightarrow$ ضرایب $\left[\frac{n}{k+2} \right] - 2 \rightarrow \left[\frac{3k+2}{k+2} \right] - 2 =$

$a_1, a_4, a_7 \rightarrow$ ضرایب $\left[\frac{n}{k+2} \right] - 2 =$

$a_2, a_5, a_8 \rightarrow$ ضرایب $\left[\frac{n}{k+2} \right] - 2 = \left[\frac{k-2}{k+2} \right]$

$S_{10} = 1 + 4 + (1+4) + 2 + (1+4) + 4 + 0 + (2+4) + 8 = 19$
 پاسخ: ۱۹

$a_n = an^2 + b + c$

$25a + 5b + c = 14$
 $49a + 7b + c = 17/2$
 $12a + b = 1/4 \rightarrow b = 4$
 $c = -1$

$a = \frac{1}{15} \times (-14) = (-1/15)$

$91 = -1/15 + 4 - 1 = 2/15$

$a_{15} = 15 \times (-1/15) + 4 \times 15 - 1 = 14$
 برابر ۱۴

$a_1 + 3d_1 = a_2 + d_1$
 $a_1 + 7d_1 = a_2 + 4d_1$

$a_2 + 9d_1 = 0 \rightarrow a_2 = -9d_1$

$a_1 + 7d_1 - a_1 - 3d_1 = a_2 + d_1$

$d_1 = \frac{a_2}{4}$

$a_1 + 14d_1 = -9d_1 + 14d_1 = 5d_1$

$d_1 = \frac{a_1}{5} \rightarrow \frac{1/15}{5} = \left(\frac{1}{75} \right)$

$$y a^r + y d^r + 1 k a d = 1 a^r + 1 k a d$$

$$y d^r = r a^r + a d$$

$$y d^r - r a^r - a d = (y d + a)(k d - r a)$$

$$t \varepsilon = a + r d$$

$$a = -r d$$

$$a = 1/a d$$

$$\frac{d}{d} = 1$$

$$\frac{\varepsilon r d}{d} = \varepsilon / r$$

$$a, b, c$$

$$r b = a + c$$

$$r b - a = c$$

$$\frac{c}{\varepsilon}, \frac{a}{r}, b$$

$$a^r = b c$$

$$\frac{a^r}{b} = c$$

$$r b - a = \frac{a^r}{b}$$

$$r b^r - a b - a^r \rightarrow (r b + a)(b - a) = 0$$

$$r b = -a$$

$$b = 0$$

$$\text{سأبر}$$

$$r b, r a, c$$

$$\varepsilon a = r b + c$$

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

$$\varepsilon a - r b = c$$

$$\varepsilon a - r b = \frac{b^r}{a} \rightarrow (\varepsilon a + b)(a - b) = 0$$

$$\varepsilon a = -b$$

$$a = b$$

$$q = \frac{b}{a} = \frac{c}{b}$$

$$q^r = \frac{c}{b}$$

$$(-\varepsilon) = -1/\varepsilon$$

$$\frac{a \cdot q^a}{a^r \cdot q^r} + \frac{a \cdot q}{a^r} = r$$

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

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

$$\frac{q(q+a)}{a^r} = r$$

$$(r a - q)(a + q) = 0$$

$$r a = q$$

$$-a = q$$

$$a^r = a q^r$$

$$a \varepsilon_1 = a q^r = (a q^r)^r$$

$$a \varepsilon = a q^r = r \gamma$$

$$a q^r - a q^r \rightarrow a q = 1$$

$$\frac{a q^r}{a q} = \frac{r \gamma}{1}$$

$$q = \omega$$

$$\frac{1}{r} - \frac{1}{r} = \frac{1}{r}$$