

نہ لکھا

$$\{1\} \quad \{2, 4, 8\} \quad \{5, 9, 17, 33, 65\} \quad \{10, 11, 12, 13, 14, 15, 16\} \quad \dots \quad (1)$$

$$\begin{array}{ccccccc} 1 & 2 & 5 & 10 & 17 & 24 & 37 & 50 & 65 \\ \hline 1 & 3 & 5 & 7 & 9 & 11 & 13 & 15 & 17 \end{array}$$

$$1, 4, 9, 16, \dots, 9^2 = 81$$

$$\text{مجموعہ} = \frac{81 + 65}{2} = \frac{146}{2} = \boxed{73}$$

$$\{1, 2, 3\} \quad \{4, \dots, 12\} \quad \{13, \dots, 39\} \quad \{40, \dots, 110\} \quad (2)$$

$$\{121, \dots, 361\}$$

$$\text{مجموعہ} = \frac{361 + 121}{2} = \frac{482}{2} = \boxed{241}$$

$$a_F = F \quad a_P = 1+a \quad a_{PS} = P \quad a_E = P \quad (3)$$

$$a_D = 1+a \quad a_G = F \quad a_{VS} = P \quad a_L = P+a$$

$$a_q = 1$$

$$P_D + P_{D1} = 19 \rightarrow a = -P$$

$$10a + (1+1+P+P+\dots+P) = 11 + 10(-P) = -P$$

$$\textcircled{K}, \text{---}, \textcircled{V}, P$$

$$a_n = an^r + bn + c$$

$$a_n = -\omega n^r + Kn - 1$$

$$\frac{1}{V_0} x - 1\varepsilon = -\omega$$

$$\textcircled{B} \begin{cases} a_\omega = -\omega + \omega b + c \\ a_V = -\frac{Kq}{\omega} + Vb + c \end{cases}$$

$$-K, \lambda + Pb = K, P$$

$$b = \varepsilon$$

$$\frac{a_\omega}{a_n} = \frac{-11K\omega + q_0 - 1}{-\omega + K - 1} = \frac{-10444}{-1} = \boxed{10444}$$

$$a_1, \dots, a_n$$

(4)

$$a_1, \dots, a_n \rightsquigarrow a + \nu d, \dots, a + \nu d$$

$\nu a + b$ $\nu a + b$

~~der~~

$$\text{der } a + b$$

$$\text{der } a_1 + (n-1)d$$

$$Fd = \omega a \rightarrow d = \frac{\omega a}{\varepsilon}$$

$$1 \cdot a + b = 0 \Rightarrow b = -1 \cdot a \rightsquigarrow 1 \omega a - 1 \cdot a = \omega a \rightarrow \text{der}$$

$$\frac{\omega a}{d} = \frac{\omega a}{\frac{\omega a}{\varepsilon}} = \varepsilon$$

(4)

$$q a_1^r = \omega a_1^r + \nu a_1^r$$

$$q(a+d)^r = \omega a(a+d) + \nu a(a+d)$$

$$q a^r + q d^r + \nu a d = \omega a^r + \omega a d + \nu a^r + \nu a d$$

$$+ \nu a^r + a d - q d^r = 0$$

$$a = \frac{-d \pm \sqrt{d^2 - 4 \times \nu \times -q d^r}}{r} = \frac{-d \pm \nu d}{\varepsilon}$$

$$a = -\frac{\nu d}{\varepsilon} \quad a = \frac{\nu d}{\varepsilon}$$

$$\frac{a_1}{d} = \frac{-\nu d + \nu d}{d} = 1 \quad \text{or}$$

$$\frac{a_1}{d} = \frac{\frac{\nu d}{\varepsilon} + \nu d}{d} = \nu \varepsilon$$

$$a, b, c \quad \text{no} \quad \text{①} \quad \text{②} \quad \text{③}$$

$$b, \frac{a}{\epsilon}, \frac{c}{\epsilon} \quad \text{①} \quad \text{②} \quad \text{③}$$

④

$$\epsilon b = ac$$

$$\rightarrow a = \epsilon b - c$$

$$\frac{a^2}{\epsilon} = \frac{bc}{\epsilon} \Rightarrow a^2 = bc$$

$$(\epsilon b - c)^2 = bc \rightarrow \epsilon^2 b^2 + c^2 - 2\epsilon bc = bc$$

$$\epsilon^2 b^2 + c^2 - 2\epsilon bc = 0$$

$$(c-b)(c-\epsilon b) = 0$$

$$\rightarrow b = c \quad \times$$

$$\epsilon b = c \quad \checkmark$$

$$a, b, \epsilon b$$

$$\epsilon b = \epsilon b + a$$

$$a = -\epsilon b$$

$$b, -b, b \rightarrow q = -1$$

$$\epsilon q = -\epsilon$$

$$\epsilon b, \epsilon a, c \quad \text{no}$$

$$a, b, c \quad \text{no}$$

①

$$b^2 = ac$$

$$\epsilon a = \epsilon b + c$$

$$\epsilon a - c = \epsilon b$$

$$\frac{\epsilon a - c}{\epsilon} = b$$

$$\frac{\epsilon^2 a^2 + c^2 - 2\epsilon ac}{\epsilon} = ac \rightarrow \epsilon^2 a^2 + c^2 - 2\epsilon ac = 0$$

$$(c - \epsilon a)(c - a) = 0$$

$$C = a x$$

$$C = K a \checkmark$$

$$a, -K a, K a$$

$$a^r = 1q$$

$$\frac{a q}{a q^r} = \frac{a q^r}{a q^a} = q^r \rightarrow (-\varepsilon)^r = \boxed{-q\varepsilon}$$

$$\frac{a q^a}{a^r q^r} + \frac{a q}{a a} = \frac{q^r}{a^r} + \frac{q}{a} = r \quad (7)$$

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

$$n^r + n - r = 0$$

$$(n-1)(n+r) = 0$$

$$n = 1 \text{ or } n = -r \quad \frac{q}{a}$$

$$\frac{a a}{a q} = \frac{a}{q} \Rightarrow \boxed{1 / \frac{-1}{r}}$$

$$\sqrt{a_\xi}, a_\xi, \nu$$

$\textcircled{\nu}$ $\textcircled{\xi}$ $\textcircled{\nu}$

10

$$\sqrt{a q^\nu} = a q^\nu \quad \leadsto \quad a^2 q^\xi = a q^\nu$$

$$a q = 1$$

$$\frac{a q^\xi}{a q} = q^\nu = \nu$$

$$q = \nu$$

$$\hookrightarrow a x^\nu = 1$$

$$a = \frac{1}{\nu}$$

$$\frac{1}{\nu} - \frac{1}{\nu} = \frac{1}{a}$$