

$$d_n = n^r + \frac{n(n-1)}{r} \rightarrow a_1 = (1.)^r + \frac{1 \cdot (9)}{1} = 1 + 9 = 10 \quad \checkmark$$

$$d_n = \frac{n(n-1)}{r} \rightarrow \frac{n(n-1)}{r} = \infty \Rightarrow n(n-1) = 11 \Rightarrow n = 11 \quad (y)$$

(7)

für $d = k \Rightarrow a_n = kn - k$

$$\Rightarrow \left. \begin{aligned} d_1 &= -1 \rightarrow \text{کوتاهترین} \\ d_2 &= \frac{1}{r} \rightarrow \text{بزرگترین} \end{aligned} \right\} \quad \frac{1}{r} - (-1) = \frac{r}{r} = 1/\omega$$

$$d_n = -\omega n + r r \rightarrow \alpha_k = -\omega k + r r = -r \Lambda \Rightarrow -\omega k = -v \Rightarrow \omega k = v \Rightarrow k = \frac{v}{\omega} = 1 \text{ K}$$

③

$$d_{i_1} - d_Y = a + qd - a - qd = 1r \Rightarrow rd = 1r \Rightarrow d = r$$

$$d_Y - d_{i_1} = a + \omega d - a \rightarrow a + \omega r - a = \overline{r} \quad \checkmark$$

$$d_Y - d_{i_1} = a + qd - a - qd = 1r \Rightarrow -rd = 1r \Rightarrow d = -r$$

$$d_{i_1} - d_Y = a - a - \omega d = -\omega d = \overline{r} \quad \checkmark$$

(Y)

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$$\left. \begin{array}{l} d_Y = v \\ d_R = 1\omega \end{array} \right\} \Rightarrow d = \frac{1\omega - v}{r - r} = \frac{1}{r} = r \rightarrow d_Y = d + d = v \Rightarrow d = v - r = r$$

$$\left. \begin{array}{l} d_i = r = b_i \\ d_Y = r + r \times r = 11 = b_Y \end{array} \right\} \Rightarrow d = \frac{11 - r}{r - 1} = \lambda \Rightarrow b_n = \overline{r + (n-1)\lambda} = \lambda n - \omega \quad \checkmark$$

(Y)

Y

$$f_n = \frac{r}{\omega} \xrightarrow{+r} \frac{q}{v} \xrightarrow{+r} \frac{1}{q} \xrightarrow{+r} \frac{1}{11}$$

$$f_n = \frac{r + (n-1)r}{\omega + (n-1)r} = \frac{rn - r}{rn + r} \Rightarrow \text{If } \frac{rn - r}{rn + r} = 1/\omega \Rightarrow rn + r/\omega = rn - r \Rightarrow n = q/\omega \Rightarrow n \in \mathbb{N}, n < q/\omega \Rightarrow n = \{1, 2, \dots, q\} \quad \checkmark$$

(Y)

Λ

$$f_n = q, q, q, q, q, \dots$$

$$f_{n=0} = \dots$$

$$U = \dots$$

$$C = \dots$$

$$f_n = -\frac{r}{Y} n^r + Bn$$

$$f_1 = -\frac{r}{Y} + B = q \Rightarrow B = q + \frac{r}{Y} = v/\omega$$

$$rx - \frac{r}{Y} + \omega \times v/\omega = \overline{rY} \quad \checkmark$$

$$-\frac{r}{Y} = -r/\omega$$

(Y)

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$$f_n = -q, -q, -q, \dots$$

$$f_{n=0} = \dots$$

$$C = -q$$

$$\left. \begin{array}{l} B_Y = r1 \\ B_r = r1 \end{array} \right\} \Rightarrow \frac{r1 - r1}{r - r} = \frac{1}{Y} = 0 \Rightarrow B_Y = B_1 + \omega = r1 \Rightarrow B_1 = rY$$

(Y)

$$B_n = rY + (n-1)\omega$$

$$B_n = \omega n + r1$$

$$f_n = \frac{r}{Y} n^r + Bn - q \quad \left. \begin{array}{l} \\ \end{array} \right\} f_n = n^r - n - q$$

$$f_1 = 1 + B - q = -q \Rightarrow B = -1$$

$$n^r - n - q = \omega n + r1 \Rightarrow n^r - qn = rY$$

$$h(n-q) = q(q-r)$$

$$\checkmark \Rightarrow n = q$$

1.