

دسته نهم $\rightarrow 9^2 = 81$
 $\rightarrow 8^2 + 1 = 65$

میانگین حسابی: $\frac{65 + 81}{2} = 73$

$\{1, 2, 3\}$

$\{4, \text{---}, 12\}$

$\{13, \text{---}, 39\}$

$\{40, \text{---}, 120\}$

$\{121, \text{---}, 363\} \Rightarrow$ دسته دهم

میانگین دسته دهم: $\frac{121 + 363}{2} = 242$

$(r^0 + r^1 + r^2 + r^3) + (r^4 + r^5 + 0) + (1 + a + \frac{a}{r} + a + r + a) = 19$

$25 + 3a = 19 \quad 3a = -6 \quad a = -2$

$a_r + a_0 + a_1 + \dots + a_9 = -1 + -1 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 = -2$

$\frac{a_{15}}{a_1} = \frac{1 \times 1 \times (-\frac{1}{\omega}) + 1 \times 1^4 - 1}{-\frac{1}{\omega} + 1 - 1} = \frac{1^4}{\frac{1^4}{\omega}} = \omega$

$\left. \begin{aligned} 2\omega a + \omega b + c &= 1^4 \\ 49a + 7b + c &= 1^4 \end{aligned} \right\} 12a + b = 1, 9$

$2\omega \times (-\frac{1}{\omega}) + 1 + c = 1^4$

$a = \frac{1}{70} \times (-1^4) = -\frac{1}{70} \quad b = 1, 9 - 12 \times (-\frac{1}{70}) = \frac{4}{5}$

$c = 1$

$a + rd \quad a + vd$

$b + d'$

$b + 9d'$

$b + 9d' = 0 \Rightarrow b = -9d'$

$\frac{b + 1^4 d'}{d} = \frac{-9d' + 1^4 d'}{d} = \frac{-8d'}{d}$

$+ \omega \times \frac{4}{5} = \frac{4}{5}$

$\left. \begin{aligned} -9d' + d' &= a + rd \Rightarrow a + rd = -8d' \\ -9d' + 9d' &= a + vd \Rightarrow a + vd = 0 \end{aligned} \right\} 4d = \omega d' \Rightarrow \frac{d'}{d} = \frac{4}{\omega}$

$q(a+d)^r = \omega(a+rd)/a + r(a+d)a \Rightarrow qd^r = ad + ra^r \Rightarrow ra^r + ad - qd^r = 0$ $qd^r - ad - ra^r = 0 \quad d = \frac{a \pm \sqrt{ar + r\Lambda ar}}{1r} \rightarrow d = -\frac{a}{r} \Rightarrow a = -rd$ $\frac{a}{d} = \frac{a+rd}{d} \rightarrow \frac{-rd+rd}{d} = \underline{+1}$ $\rightarrow \frac{r}{r}d + rd = \underline{\frac{a}{r}}$	6
$c \quad b \quad a \quad b = c+d \quad -rcd:rd^r \pi d=0 \quad \odot \odot \odot$ $a = c+rd = c+r(-\frac{r}{r}c) = -\frac{1}{r}c \quad \rightarrow -rc = rd \Rightarrow d = -\frac{r}{r}c$ $\frac{c}{r} \quad \frac{a}{r} \quad b \Rightarrow (c+d)\frac{c}{r} = (\frac{c+rd}{r})^r \quad \frac{c^r+cd}{r} = \frac{c^r+rd^r+rd}{r}$ $rd = \frac{r}{r} \times \frac{a}{r} = r \times \frac{ra}{c} = \frac{ra}{c} = r(-\frac{1}{r}c) = r \times -\frac{1}{r} = \underline{-1}$	7
$c \quad b \quad a \quad b = cq \quad a = cq^r \quad q^r = \frac{r}{r}$ $c \quad ra \quad rb \quad \frac{c^r(cq)}{r} = rcq^r \quad r \cancel{c} \cancel{q} = r \cancel{c} q^r$ $\frac{a}{a_q} = q^r = (-\frac{1}{r})^r = \underline{-\frac{1}{r}}$ $\frac{c((1+rd))}{r} = rcq^r \quad 1+rd = rcq^r$ $q = \frac{r}{r} = 1 \quad q = -\frac{1}{r} (q-r)(q+1) = 0$	8
$\frac{aq^\omega}{(aq)^r} + \frac{aq}{(a)^r} = r \quad \frac{a^r}{a} = \frac{a^r}{aq} \rightarrow \frac{a^r}{ara} = \frac{a^r}{ar} = \underline{1}$ $\frac{q^r}{a^r} + \frac{q}{a} = r \quad q^r + aq = ra^r$ $q^r + aq - ra^r = 0 \quad q = \frac{-a \pm \sqrt{a^r + \Lambda a^r}}{r} = \frac{a}{ra} = \underline{\frac{1}{r}}$	9
$a_r = \sqrt{a_r} \quad \frac{a_\omega}{a_r} = q^r = \frac{rV}{1} = rV \Rightarrow q = r$ $a q^r = \sqrt{a q^r} \quad \frac{a_r}{q} = a_1 \quad a_1 = \frac{1}{r}$ $a^r q^r = a q^r \quad \frac{1}{r} - a_1 = \frac{1}{r} - \frac{1}{r} = \underline{\frac{1}{r}}$ $aq = 1 = a_r$	10