

(۱۱ و ... و ۹۵) و ... و (۹ و ... و ۹۵) و (۱۱ و ... و ۹۵) و (۱۱ و ... و ۹۵)

$$\text{میانگین} = \frac{۱۱ + ۹۵}{۲} = \sqrt{۳} \rightarrow \text{جواب}$$

(۱۱ و ... و ۹۵) و ... و (۹ و ... و ۹۵) و (۱۱ و ... و ۹۵) و (۱۱ و ... و ۹۵)

$$\text{تعداد} = (۳۶۳ - ۱۲۱) + ۱ = ۲۴۳$$

$$\text{مجموع} = ۲۴۳(۳۶۳ + ۱۲۱) = ۱۱۸۰۴$$

$$\text{میانگین} = \frac{۱۱۸۰۴}{۲۴۳} = ۲۴۲ \rightarrow \text{جواب}$$

$$n = 3k = ۱, ۲, ۳, ۴, ۵ \Rightarrow 1 + 2 + 3 + 4 + 5 = ۱۵$$

$$n = 3k + 1 = ۱, ۴, ۷, ۱۰ \Rightarrow 1 + 4 + 7 + 10 = ۲۲$$

$$n = 3k + 2 = ۲, ۵, ۸ \rightarrow \begin{cases} k=0 \\ n=2 \end{cases} \rightarrow 1 + a \quad \begin{cases} k=1 \\ n=5 \end{cases} \rightarrow 1 + a \quad \begin{cases} k=2 \\ n=8 \end{cases} \rightarrow 2 + a \rightarrow$$

$$1 + a + 1 + a + 2 + a = 3a + 4$$

$$3a + 4 + 15 = 3a + 19 = ۱۹ \rightarrow 3a = -۶ \rightarrow a = -۲$$

$$a_1 + a_2 + a_3 + a_4 + \dots + a_{19} \rightarrow \left(\frac{n}{k+1} \right) - 2 \rightarrow (-1) + (-1) + 0 + 0 + 0 + \dots = -2 \rightarrow \text{جواب}$$

$$a = ar^n + bn + c \rightarrow a(a^n) + bn + c = 18 \rightarrow 2a + b + c = 18$$

$$a(v^n) + bn + c = 17, 2 \rightarrow 4a + b + c = 17, 2$$

$$a = \frac{1}{v_0} \times (-18) = \frac{-1}{a} \rightarrow 4a = 2a \left(\frac{-1}{a} \right) + b + c = 18 \rightarrow -2 + b + c = 18$$

$$\begin{cases} -2 + b + c = 18 \\ 4a + b + c = 17, 2 \end{cases} \rightarrow \begin{cases} b = 18 \\ c = -1 \end{cases} \rightarrow \frac{-1}{a} n + 18n - 1$$

$$\frac{18}{1} = \frac{\frac{-1}{a} \times 18 + 18 \times 1 - 1}{\frac{-1}{a} + 18 - 1} = \frac{18}{\frac{18}{a}} = a \rightarrow \text{جواب}$$

$$a_n = a_1 + (n-1)d$$

$$a_8 = a + 7d$$

$$a_n = a + vd$$

$$a_8 = t_r \Rightarrow a_n - a_8 = t_v - t_r \rightarrow a + vd - (a + 7d) = t_v - t_r \rightarrow 8d = ar$$

$$\frac{t_{10}}{d} = \frac{t_{10} + ar}{d} = \frac{ar + ar}{d} = \frac{2ar}{d} \rightarrow \text{جواب} \rightarrow r = \frac{8d}{a}$$

$$\begin{aligned} \gamma(a+d)^r &= \alpha(a+rd)a + r(a+d)a \rightarrow (ra^r + ad - \gamma d^r = 0) \times r \\ \epsilon a^r + rad - rd^r &= 0 \rightarrow (ra + \epsilon d)(ra - rd) = 0 \quad \frac{a\epsilon}{d} = ? \\ \Rightarrow \frac{a+rd}{d} &= ? \quad \frac{a}{d} + \frac{rd}{d} \rightarrow \\ ra &= -\epsilon d \rightarrow a = -rd \Rightarrow \left. \begin{aligned} -r\epsilon &= 1 \\ 1/a + r &= \epsilon/a \end{aligned} \right\} \rightarrow \text{جواب} \\ ra &= rd \rightarrow a = 1/d \quad 1/a + r = \epsilon/a \end{aligned}$$

$$\begin{aligned} b &= \frac{a+c}{r} \rightarrow rb = a+c \\ \left. \begin{aligned} (a/r)^r &= b(\frac{c}{\epsilon}) \rightarrow \frac{a^r}{r} = \frac{bc}{\epsilon} \rightarrow a^r = bc \\ \frac{a^r}{b} &= r - \frac{a}{b} \rightarrow (\frac{a}{b})^r + \frac{a}{b} - r = 0 \rightarrow a^r + a - r = 0 \end{aligned} \right\} \rightarrow a^r = b(rb-a) \rightarrow a^r = rb^r - ab \\ r &= \frac{a^r}{b} = \frac{1}{r}(\frac{a}{b}) = \frac{a}{r} = \frac{1}{r}(-r) = -1 \rightarrow r \times (-1) = -r \rightarrow -1/r \end{aligned}$$

$$\begin{aligned} ra &= r \frac{b+c}{r} \rightarrow \epsilon a = rb + c \rightarrow b = \frac{\epsilon a - c}{r} \\ \left. \begin{aligned} b^r &= ac \\ 14a^r + c^r - 14ac &= 9ac \end{aligned} \right\} \rightarrow \left(\frac{\epsilon a - c}{r} \right)^r = ac \\ 14a^r + c^r - 14ac &= 9ac \rightarrow 14a^r + c^r - 14ac = 0 \rightarrow C^r - 14arC + 14a^r = 0 \\ (C-a)(C-14a) &= 0 \rightarrow C=a, C=14a \\ \frac{a_9}{a_v} &= \frac{a_9}{a_v} = q^r = \left(\frac{b}{a} \right)^r = \left(\frac{-\epsilon a}{a} \right)^r = -9\epsilon \rightarrow \text{جواب} \quad \downarrow \quad \downarrow \\ b &= 1 \quad b = -\epsilon a \end{aligned}$$

$$\begin{aligned} \frac{a_v}{a_r \times a_r \times a_r} + \frac{a_r}{a \times a} &= r \rightarrow \frac{a_9^3}{(a_9)^r} + \frac{a_9}{r} = r \rightarrow \frac{r^r}{a^r} + \frac{q}{a} = r \\ x = \frac{q}{a} &\rightarrow x^r + x = r \rightarrow x^r + x - r = 0 \rightarrow x=1, x=-r \\ \frac{q}{a} = 1 \leq \frac{q}{a} = -r &\rightarrow \frac{a}{r} = 1, \frac{a}{r} - \frac{1}{r} \quad \frac{a^r}{a_r} = \frac{a^r}{a_9} = \frac{a}{q} \rightarrow \left[\frac{1}{r} \right] \rightarrow \text{جواب} \end{aligned}$$

$$\begin{aligned} aq^r &= \sqrt{a}q^r, aq^\epsilon = rv \rightarrow a^r q^\epsilon = aq^r \rightarrow a^r q^\epsilon - aq^r = 0 \\ a(qq^\epsilon - q^r) &= 0 \rightarrow a(rv - q^r) = 0 \\ rva - aq^r &= 0 \rightarrow rva = aq^r \rightarrow q = r \\ aq^\epsilon &= (a)(r^\epsilon) \rightarrow 1/a = rv \rightarrow a = \frac{1}{r} \rightarrow \frac{1}{r} - \frac{1}{r} = \frac{1}{r} \rightarrow \text{جواب} \end{aligned}$$