

Sub:

(طها جبری)
1970

$$a_1 - a_2 - a_3$$

$$\frac{a_2}{4} \times a_2^2 \times a_2^2 = 4\varepsilon \quad a_2^2 = \varepsilon$$

$$a_1 + a_3 = \frac{a_2}{4} + a_2^2 = 1V \xrightarrow{\times 4} a_2^2 + a_2^2 = 1V4$$

$$a_2^2 - 1V4 + a_2 = 0 \rightarrow \varepsilon q^2 - 1V4 + \varepsilon = 0$$

$$(\varepsilon q - 1)(q - \varepsilon) \Rightarrow 4q^2 - 1V4 + \varepsilon \quad 4 \begin{matrix} \nearrow + \varepsilon \\ \searrow \frac{1}{\varepsilon} \end{matrix}$$

(2) ✓

$$(q = \frac{1}{\varepsilon})$$

$$\frac{a_2}{a_1} = \frac{a_3}{a_2} \rightarrow \frac{r n}{n^2 + \varepsilon} = \frac{n^2 - r}{r n}$$

$$\varepsilon n^2 = n^2 + r n^2 - 1 \rightarrow n^2 - r n^2 - 1 = (n^2 + r)(n^2 - \varepsilon)$$

$$n^2 \begin{matrix} \nearrow -r \\ \searrow +\varepsilon \end{matrix} \quad n \begin{matrix} \nearrow -\sqrt{r} \\ \searrow \pm r \end{matrix} \quad n = +r \rightarrow (q > 0)$$

$$a_1 - a_2 - a_3 \dots$$

$$1 - \varepsilon - r \dots$$

$$sv = \frac{1}{r} \times \left(\frac{\frac{1}{r} - \frac{1}{r}}{\frac{1}{r}} \right) = \frac{1V}{1V} \times \frac{1}{1}$$

(2) ✓

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$$2\varepsilon^3 (1 + q + q^2 + q^3 + q^4) = \frac{121}{11}$$

$\downarrow$
 a_1
(2) ✓

$$a_1 + a_1 q + a_1 q^2 + a_1 q^3 + a_1 q^4 = 121 \times 3 = 363$$

$$\frac{q^5}{1} = q^{n+1} \quad q = 2 \quad a_1 q^3 = 11$$

$$\frac{q^5 - 1}{q - 1} = \frac{q^5}{q} = 1011 = d \quad a_1 + 3d = 1 + 3118 = 3219$$

(2) ✓

$$q = \pm 1$$

$$3219 + 11 = 3012 \quad 3219 - 11 = 3208$$

$$-2\varepsilon, -\frac{9d}{2}, \dots$$

$$d = -\frac{9d}{2} + \frac{9d}{2} = \frac{1}{2}$$

(2) ✓

$$a_{101} = -2\varepsilon + (100) \frac{1}{2} = (1)$$

$$121, a_2, \dots$$

$$\frac{a_2}{a_1} = \frac{121}{1}$$

$$\rightarrow a q^{-1} = 121 \quad (q = \frac{1}{r})$$

$$t_3, t_4, t_9 \Rightarrow a_1, a_2, a_3$$

$$\downarrow \quad \downarrow \quad \downarrow$$

$$\frac{a_1 + 2d}{a_1 + 2d} = \frac{a_1 + 11d}{a_1 + 2d}$$

$$\frac{a_1 + 3d}{a_1 + 3d} = \frac{a_1 + 11d}{a_1 + 3d} \rightarrow 10a_1 d = -2a_1 d$$

$$10d = -2a_1$$

$$d = 0$$

$$t_3 = -11d$$

$$t_4 = -4d$$

$$t_9 = -2d$$

$$10d = -a_1$$

$$(d = -\frac{a_1}{11})$$

$d=0$ م قابل قبول
است چون سوال گفته جلالت نمی‌باشد

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$$a_1, a_2, a_3 \Rightarrow t_1, t_2, t_3$$

-v

$$\frac{a_1 + \mu d}{a_1 + d} = \frac{a_1 + v d}{a + \mu d} \longrightarrow$$

$$\textcircled{1} \checkmark \quad \cancel{a_1} + \cancel{q} d^r + \cancel{q} d a_1 = \cancel{a_1} + v d^r + \mu a_1 d$$

$$v d^r = \mu a_1 d \quad v d = \mu a_1 \longrightarrow a_1 = d$$

$$t_1 \longrightarrow v d$$

$$t_2 \longrightarrow \varepsilon d$$

$$4 \longrightarrow \frac{\mu d}{\varepsilon d} = \textcircled{2}$$

$$0.12 \times \frac{1}{\varepsilon} = 121$$

$$t_3 \longrightarrow \mu d$$

$$\alpha_1 = \frac{1}{\varepsilon}$$

$$\frac{d^{1/2}}{a^{1/2}} = \frac{1}{\mu} \frac{d^{1/2}}{a^{1/2}} = \frac{1}{\mu}$$

$$\cancel{a_1} \mu a_1, \mu a_2, a_3 \longrightarrow t_1, t_2, t_3$$

-v

$$(a_1 = a)$$

$$a^r - \mu a^r = \mu a^r - \mu a^1$$

$$a^r (a - \mu) = \mu (a - \mu)$$

$$a^r - \mu = \mu a - \mu$$

$$a^r - \mu a + \mu = 0$$

$$(a - 1)(a - \mu) = 0$$

$$a = 1$$

$$= \mu$$

$$\textcircled{2} \checkmark \quad a^1, a^2, a^3$$

$$\cancel{1}, \cancel{1}, \cancel{1} \quad \mu, \mu, \mu$$

$$(\cancel{q=1}) \quad \text{غير ثابت} \quad (q=\mu)$$

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

.9

$$t_\varepsilon, t_1, t_1 \rightarrow \frac{a}{\varepsilon} + n, \frac{1}{\varepsilon} + n, -1 + n$$

$$\frac{\frac{1}{\varepsilon} + n}{\frac{a}{\varepsilon} + n} = \frac{n-1}{\frac{1}{\varepsilon} + n}$$

$$\cancel{a} + \frac{1}{\varepsilon} n + \frac{1}{\varepsilon} = \cancel{a} + \frac{1}{\varepsilon} n - \frac{a}{\varepsilon}$$

$$\frac{1}{\varepsilon} n = -\frac{a}{\varepsilon} \quad n = -\frac{a}{\varepsilon}$$

$$a_1, a_2, a_3 \rightarrow -\frac{1}{\varepsilon}, -\frac{a_0}{\varepsilon}, -\frac{a_0}{\varepsilon}$$

(✓)

$$q = \frac{\frac{-\frac{a_0}{\varepsilon}}{\frac{-a_0 \varepsilon}{\varepsilon}}}{\frac{-\frac{a_0}{\varepsilon}}{\frac{-a_0 \varepsilon}{\varepsilon}}} = \frac{-\frac{a_0}{\varepsilon}}{\frac{-a_0 \varepsilon}{\varepsilon}} = \frac{a}{\varepsilon}$$

$$a_1, a_\varepsilon, a_V \Rightarrow t_1, t_2, t_{10}$$

. 1.

$$w a_1 + 10 d = V w$$

$$\frac{a_\varepsilon}{a_1} = \frac{a_V}{a_\varepsilon} \rightarrow \frac{a_1 + d}{a_1} = \frac{a_1 + q d}{a_1 + d}$$

$$\cancel{a_1} + d + \frac{a_1 d}{a_1} = \cancel{a_1} + q a_1$$

$$d = V a_1$$

(✓)

$$w a_1 + 10 d = V w a_1 = V w \quad \boxed{a_1 = 1}$$

$$\boxed{d = V}$$

$$d = 0 \quad w a_1 = V w$$

$$\boxed{a_1 = \frac{V w}{w}} \quad \boxed{d = 0}$$