

$$a - aq + aq^2$$

$$a^2 q^2 = 4r$$

$$aq = r$$

$$a + aq + aq^2 = 21$$

$$a(1 + q + q^2) = 21$$

$$\frac{a}{q} + a + aq = 21$$

$$\frac{r}{q} + r + rq = 21$$

$$rq^2 - 17q + r = 0 \rightarrow (q-1)(q-12) \rightarrow q < \frac{1}{r} \times \frac{1}{r} = \frac{1}{r^2}$$

$$q = r$$

$$2x^2 + r \quad 2x \quad 2x^2 - 2$$

$$\frac{2x}{2x^2 + r} = \frac{2x^2 - 2}{2x}$$

$$(2x^2 + r)(2x^2 - 2) = r2x^2$$

$$2x^4 + 2x^2 - 2 = r2x^2$$

$$2x^4 - 4x^2 - 2 = 0$$

$$(2x^2 - 2)(2x^2 + 2) = 0 \rightarrow 2x^2 < -2x$$

$$2x = \pm 2$$

$$q < \frac{1}{r}$$

$$\ln\left(\frac{1 - (r^{-1})^V}{1 - \frac{1}{r}}\right) = \ln\left(\frac{12V}{9r}\right) = \frac{12V}{r}$$

$$a = 24r$$

$$a(1 + q + q^2 + q^3 + q^4) = 24r \times \frac{121}{241} = 12r$$

$$a + aq + aq^2 + aq^3 + aq^4$$

$$d = \frac{9r - 1}{2 + 1} = 10/3$$

$$A = ar = a + rd = 24r/3$$

$$q^5 = \frac{9r}{1} \Rightarrow q = \frac{1}{r}$$

$$aq^2 = 16 - 1$$

$$24r/3 + 1 = 16/3$$

$$24r/3 - 1 = 16/3$$

$$d_1 = \frac{1}{r} \quad a + 100\left(\frac{1}{r}\right) = -24 + 4a = 1$$

$$aq^2 = 1$$

$$\frac{aq^2}{a} = q^2 = \frac{1}{121} = \frac{1}{11^2} \rightarrow q = \frac{1}{11}$$

$$a + r d \quad a + r d \quad a + \lambda d$$

$$a \in a - \frac{a}{10} \in a - \frac{r a}{10}$$

$$\frac{a + r d}{a + r d} = \frac{a + \lambda d}{a + r d}$$

$$(a + r d)^r = (a + r d)(a + \lambda d)$$

$$a^r + r a d + r^2 d^2 - (a^r + r a d + r^2 d^2) = 0$$

$$r a d + r^2 d^2 = 0 \rightarrow r d (a + r d) = 0 \rightarrow r d = 0 \quad d = 0$$

$$d = -\frac{a}{10}$$

$$a + d \in a + r d \quad a + \lambda d$$

$$r a \quad r a \quad \lambda a$$

$$\frac{a + r d}{a + d} = \frac{a + \lambda d}{a + r d}$$

$$q = r \quad a_1 = r a$$

$$r a \times r^q = 10 r^q a$$

$$r^q \times r^{-r} = r^v$$

$$(a + d)(a + \lambda d) = (a + r d)^r$$

$$a^r + r a d + r^2 d^2 = a^r + \lambda a d + \lambda^2 d^2$$

$$r a d = r d^2$$

$$a = d$$

$$r a = a + d = \frac{1}{r}$$

$$r a r \quad r a r \quad a r$$

$$q^r - r q + r = 0$$

$$r a q \quad r a q^r \quad a q^r$$

$$(q - 1)(q - r) = 0 \quad \begin{cases} q = r \\ q = 1 \times \end{cases}$$

$$r a q^r - r a q = a q^r - r a q$$

$$r a q^r - r a q = a q^r$$

$$r d^r - r d = q^r \rightarrow r d - r = q^r$$

$$a = r \quad a_r = r + \frac{r}{r} = \frac{a}{r}$$

$$d = -\frac{1}{r} \quad a_1 = r + \frac{r}{r} = \frac{1}{r}$$

$$a_{1r} = r + \frac{1r}{r} = -1$$

$$\frac{\frac{1}{r} + r}{\frac{a}{r} + r} = \frac{-1 + r}{\frac{1}{r} + r}$$

$$\frac{1}{1r} + \frac{1}{r} r + r^r = -\frac{a}{r} + \frac{1}{r} r + r^r$$

$$\frac{r}{1r} + \frac{1}{r} r = 0$$

$$r = -\frac{r}{r} \rightarrow q = \frac{\frac{1}{r} + \frac{r}{r}}{-\frac{r}{r} + \frac{a}{r}} = \frac{\frac{r_0}{r}}{\frac{1r}{r}} = \frac{r_0}{1r} = \frac{a}{r} = 1, r a$$

$$a \quad a q^r \quad a q^r$$

$$a q^r = a + d$$

$$a \quad a + d \quad a + q d$$

$$a(d^r - 1) = d$$

$$a q^r = a + q a q^r - q a = a(1 + q q^r - q) = a q^r$$

$$q^r - q q^r + 1 = 0$$

$$(q^r - 1)(q^r - 1) = 0 \rightarrow q^r < 1 \rightarrow q < 1 \rightarrow a(1 + 1 + r^r) = v r$$

$$a = 1$$

$$d = 1(1 - 1) = v$$

$$a(1 + q^r q^r) = v r$$

$$a + d + a + q d + a = v r$$