

$\frac{e}{k} + k = \frac{11}{6}$

$$(x - \varepsilon)(x + \gamma)_{x=0} \rightarrow \int_{\gamma-\varepsilon}^{\gamma+\varepsilon} x \, dx$$

$\gamma = +\gamma$

3

① $\frac{1}{2}$

7

1

$$-rc + \frac{-9d}{c} \rightarrow \dots \rightarrow d = \frac{1}{c} \rightarrow a = a + 1 \cdot d = rc + ra = 1 \quad (iv)$$

$$\text{also } a_{1,1} = a_{11} = 1 \rightarrow 1 = a_{11} \rightarrow 1 \cdot r \cdot a \times q = 1 \rightarrow \boxed{q = \frac{1}{r}}$$

$$a_{11} a_{11} = a_{11} \quad b^T = ac \quad (v)$$

$$\rightarrow a + r d + a + r d + a + 1d \rightarrow (a + rd)^T = (a + rd)(a + 1d)$$

$$a^T + r a d^T + 1 r a d = a^T + 1 d^T + 1 \cdot a d = 2$$

$$a_{12} = -rd, a_{21} = -cd$$

$$a_{12} = -1d \rightarrow -1 \cdot d, -2d, -1d, \dots$$

$$a_{12} = -rd \rightarrow \boxed{rd = -1d}$$

$$\boxed{rd = -1d}$$

$$a_{12} a_{21} = a_{11} \quad rd = \frac{1}{c}$$

$$a + d, a + rd + a + vd \rightarrow (a + rd)^T = (a + vd)(a + d)$$

$$a^T + 1d^T + 1ad = a^T + 1ad + vd \rightarrow d = a$$

$$a_1 = d = \frac{1}{c} \rightarrow a_1 = a + d = rd = \frac{1}{c}, a_{12} = 1, a_{13} = r$$

$$q = r \rightarrow a_1 = a q = \frac{1}{c} \times r = r \quad \boxed{r = 1}$$

$$ra + r a_{12} = a_{11} \rightarrow r b = ac \Rightarrow ca q^T = a q^T + r a q$$

$$ca q^T = a q^T (r q^T) \rightarrow r q^T = r + q^T \rightarrow q^T + -ca q + r = 0$$

$$(q-1)(q-r) = 0 \rightarrow q = \boxed{1}$$

(9)

$$a \in \mathbb{C}, a_1, a_2, d = -\frac{1}{r}$$

$$\frac{a + \frac{1}{r}d}{a - \frac{1}{r}d} = \frac{a + \frac{1}{r}d}{a - \frac{1}{r}d} \cdot \frac{a + \frac{1}{r}d}{a + \frac{1}{r}d} = \frac{(a + \frac{1}{r}d)^2}{a^2 - \frac{1}{r^2}}$$

$$b = ac = (a - \frac{1}{r})^2 = (a - \frac{1}{r})(a - \frac{1}{r})$$

$$a^2 + \frac{1}{r^2} - \frac{2}{r}a = a^2 + \frac{1}{r^2} - \frac{2}{r}a$$

$$\text{Since } a_1 = a_2 \text{ also } \rightarrow \frac{-1/r}{r} - \frac{1}{r} = -r$$

$$a_1 = a_2 \rightarrow \frac{-1/r}{r} - \frac{1}{r} = -r$$

$$\text{Since } a_1 = a_2 = -\frac{1}{r} \rightarrow \frac{-1/r}{r} - \frac{1}{r} = -r$$

$$a_1 = -\frac{1}{r} - \frac{1}{r} = -\frac{2}{r} \rightarrow \boxed{a_1 = -\frac{2}{r}}$$

$$a + a + a = V^w \rightarrow a + aq^w + aq^w = V^w \rightarrow a + 1 \cdot d \quad (10)$$

$\begin{array}{c} a \\ \downarrow \\ a + d \\ \downarrow \\ a + d \end{array}$
 $\begin{array}{c} a \\ \downarrow \\ a + d \\ \downarrow \\ a + d \end{array}$

$$b^r = a \cdot c$$

$$(a+d)^r = (a+q \cdot d)(a) \rightarrow a + d + r \cdot a \cdot d = a + q \cdot a \cdot d$$

$$d^r = V \cdot a \cdot d \rightarrow d = V \cdot a$$

$$a + 1 \cdot d = V^w \rightarrow a + V \cdot a = V^w \rightarrow a = 1 \rightarrow d = V \cdot a \quad \square$$

Subo