$$R = \begin{cases} 1 & R = ? \\ 2 & R = 1.5 \text{ m/m}, R_2 = 1.5 \text{ m/m}, \\ 2 & R = 500 \text{ m/m}, E = 10 \text{ m/m}, \\ 2 & R = ? \\ 2 & R = 1.5 \text{ m/m}, R_2 = 1.5 \text{ m/m}, \\ 2 & R = 1.5 \text{ m$$

$$R = \sum_{i=1}^{h} \sum_{j=1}^{h} \sum_{j=1}^{h} \sum_{i=1}^{h} \sum_{j=1}^{h} \sum_{i=1}^{h} \sum_{j=1}^{h} \sum_{i=1}^{h} \sum_{j=1}^{h} \sum_{j=1}^{h} \sum_{j=1}^{h} \sum_{i=1}^{h} \sum_{j=1}^{h} \sum_{i=1}^{h} \sum_{j=1}^{h} \sum_{j=1}^{h} \sum_{j=1}^{h} \sum_{i=1}^{h} \sum_{j=1}^{h} \sum_{j=1}^{h}$$

$$R_{1} = 10, R_{2} = 30, R_{3} = 20, R_{4} = 20$$

$$V_{0} = 6V$$

$$V_{0} = 6V$$

$$V_{0} = R_{1}$$

$$V_{0} = R_{2}$$

$$R_{1} = R_{2}$$

$$R_{2} = R_{2}$$

$$R_{2} = R_{2}$$

$$R_{3} = R_{4}$$

$$R_{4} = R_{2}$$

$$R_{4} = R_{2}$$

$$R_{4} = R_{4}$$

$$R_{5} = R_{4}$$

$$R_{5} = R_{5}$$

$$R_{5} = R_{5}$$

$$R_{6} = R_{6}$$

$$R_{7} = R_{7}$$

$$R_{8} = R_{7}$$

$$R_{8} = R_{7}$$

$$R_{8} = R_{7}$$

$$R_{9} = R_{1}$$

$$R_{1} = R_{1}$$

$$R_{1} = R_{2}$$

$$R_{2} = R_{3}$$

$$R_{3} = R_{4}$$

$$R_{4} = R_{4}$$

$$R_{4} = R_{4}$$

$$R_{5} = R_{5}$$

$$R_{7} = R_{7}$$

$$R_{8} = R_{7}$$

$$R_{8} = R_{7}$$

$$R_{1} = R_{1}$$

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$$R_{7} = R_{7}$$

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$$R_{8} = R_{7}$$

$$R_{8} = R_{8}$$

$$R_{9} = R_{1}$$

$$R_{1} = R_{1}$$

$$R_{1} = R_{2}$$

$$R_{2} = R_{3}$$

$$R_{3} = R_{4}$$

$$R_{4} = R_{4}$$

$$R_{4} = R_{4}$$

$$R_{5} = R_{7}$$

$$R_{7} = R_{8}$$

$$R_{8} = R_{8}$$

$$R_{8} = R_{8}$$

$$R_{9} = R_{1}$$

$$R_{1} = R_{1}$$

$$R_{1} = R_{1}$$

$$R_{2} = R_{1}$$

$$R_{3} = R_{1}$$

$$R_{4} = R_{1}$$

$$R_{4} = R_{1}$$

$$R_{1} = R_{2}$$

$$R_{1} = R_{2}$$

$$R_{2} = R_{3}$$

$$R_{3} = R_{4}$$

$$R_{4} = R_{4}$$

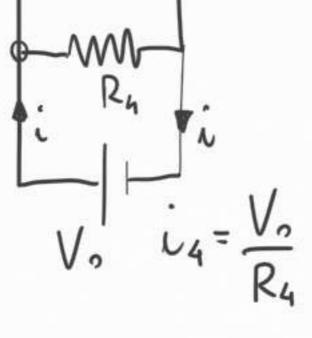
$$R$$

$$\begin{array}{c|c}
R_{1} \\
R_{2} \\
R_{3} \\
R_{4} \\
V_{0} \\
\end{array}$$

$$\begin{array}{c|c}
R_{2} \\
R_{4} \\
V_{0} \\
\end{array}$$

$$\begin{array}{c|c}
V_{0} \\
V_{0} \\
\end{array}$$

$$\Omega = Ri^2$$



$$\lambda_{2} = \frac{\Delta V_{2}}{R_{2}} = \frac{V_{o} - \Delta V_{1}}{R_{2}} = \frac{V_{o} - R_{1}\lambda_{1}}{R_{2}}$$

$$\lambda_{3} = \frac{V_{o} - R_{1}\lambda_{1}}{R_{3}} = \lambda_{1} = \lambda_{2} + \lambda_{3}$$

$$\mathcal{E}_{1}$$
 \mathcal{E}_{1}
 \mathcal{E}_{1}
 \mathcal{E}_{2}
 \mathcal{E}_{1}
 \mathcal{E}_{2}
 \mathcal{E}_{3}
 \mathcal{E}_{4}
 \mathcal{E}_{2}

$$\mathcal{E}_{1} = 59V, \quad \mathcal{E}_{2} = 109V, \quad \mathcal{R} = 50 - \Omega$$

$$\mathcal{R}_{1} = 20 - \Omega, \quad \mathcal{R}_{2} = 30 - \Omega$$

$$\dot{\mathcal{E}}_{1} = \mathcal{E}_{2}$$

$$\dot{\mathcal{E}}_{1} - \mathcal{E}_{2} = (\mathcal{R}_{1} + \mathcal{R}_{2} + \mathcal{R}_{3}) \quad \dot{\mathcal{E}}_{1} = \mathcal{E}_{2}$$

$$\dot{\mathcal{E}}_{1} - \mathcal{E}_{2} = (\mathcal{R}_{1} + \mathcal{R}_{2} + \mathcal{R}_{3}) \quad \dot{\mathcal{E}}_{2} = \mathcal{E}_{3}$$

$$\dot{\mathcal{E}}_{1} - \mathcal{E}_{2} = (\mathcal{R}_{1} + \mathcal{R}_{2} + \mathcal{R}_{3}) \quad \dot{\mathcal{E}}_{3} = \mathcal{E}_{3}$$

$$\dot{\mathcal{E}}_{1} - \mathcal{E}_{2} = (\mathcal{R}_{1} + \mathcal{R}_{2} + \mathcal{R}_{3}) \quad \dot{\mathcal{E}}_{3} = \mathcal{E}_{3}$$

$$-E_{1} + E_{2} = (2.+2z+R)i_{F}$$

$$i = \frac{E_{2} - E_{1}}{2.+2z+R} > 0$$

$$\mathcal{E}_{1}$$
 \mathcal{E}_{1}
 \mathcal{E}_{1}
 \mathcal{E}_{2}
 \mathcal{E}_{3}
 \mathcal{E}_{4}
 \mathcal{E}_{4}

$$i_{1}$$
 $E_{1} = 18V$, $E_{2} = 12V$, $R_{1} = 12\Omega$, $R_{2} = 2\Omega$
 $R_{3} = 6\Omega$, $R_{4} = 4\Omega$
 $L_{3} = L_{1} + L_{2}$
 $-E_{1} = R_{1}L_{1} + R_{3}(L_{1} + L_{2})$
 $-E_{2} = (R_{2} + R_{4})L_{2} + R_{3}(L_{1} + L_{2})$
 $E_{3} = L_{1} + L_{2}$
 $E_{4} = 0.8 A$
 $E_{5} = 0.8 A$
 $E_{6} = 0.8 A$
 $E_{7} = 0.8 A$
 $E_{7} = 0.8 A$
 $E_{7} = 0.8 A$

$$\begin{cases}
-\mathcal{E}_{1} = R_{1} \dot{i}_{1} + R_{3} \dot{i}_{1} - R_{3} \dot{i}_{2} \\
\mathcal{E}_{2} = (R_{2} + R_{4}) \dot{i}_{2} + R_{3} \dot{i}_{2} - R_{3} \dot{i}_{1}
\end{cases}$$

$$\begin{cases}
-\mathcal{E}_{1} = R_{1} \dot{i}_{1} + R_{3} \dot{i}_{1} - R_{3} \dot{i}_{2} \\
\mathcal{E}_{2} = (R_{2} + R_{4}) \dot{i}_{2} + R_{3} \dot{i}_{2} - R_{3} \dot{i}_{1}
\end{cases}$$

$$\begin{cases}
-\mathcal{E}_{1} = R_{1} \dot{i}_{1} + R_{3} \dot{i}_{2} + R_{3} \dot{i}_{2} - R_{3} \dot{i}_{1}
\end{cases}$$

$$-\mathcal{E}_{3} = \dot{i}_{2} - \dot{i}_{1}$$

$$-\mathcal{E}_{1} = R_{1} \dot{i}_{1} + R_{3} \dot{i}_{3} - R_{1} \dot{i}_{1} + R_{3} (\dot{i}_{2} - \dot{i}_{1})
\end{cases}$$

$$\mathcal{E}_{1} = (R_{2} + R_{4}) \dot{i}_{2} + R_{3} (\dot{i}_{2} - \dot{i}_{1})$$

$$\mathcal{E}_{1} = (R_{2} + R_{4}) \dot{i}_{2} + R_{3} (\dot{i}_{2} - \dot{i}_{1})
\end{cases}$$

$$-2 = 2 \text{ Km}, b = 3 \text{ Km}, h = 500 \text{ M}$$

$$-9 = -80 \text{ C}$$

$$-9 = -80 \text$$

Q
$$E = \frac{5}{\epsilon} = \frac{9}{35\epsilon}$$
 (3.10 $\frac{6}{m}$

(b)
$$C = \frac{\varepsilon \Delta \Sigma}{h} = \frac{\varepsilon \Delta b}{h}$$
, $\Delta V = \frac{9}{C} = \frac{9h}{ab\varepsilon_0} = \frac{Eh}{Eh}$
 $E = \frac{9}{ab\varepsilon_0}$ 2) $U_c = \frac{1}{2} \frac{9}{C^2} = \frac{1}{2} \frac{9\Delta V}{12} = \frac{1}{2} \frac{1}{2$

$$E = \frac{9}{ab \, \epsilon_o}$$
 2) U_c

