Problem 4. RLC-circuit ***(5 points)***

For the circuit shown in Figure, $R_1 = 3R$, $R_2 = R$, $C_1 = C_2 = C$, and $L_1 = L_2 = L$. The electromotive force of the battery is $\mathcal{E}$. Initially the switch is closed and the system is operating in a stationary regime.

i. (1 pt) Find the reading of the voltmeter in the stationary regime.

ii. (2 pts) Now, the switch is opened. Find the reading of the voltmeter immediately after the opening.

iii. (2 pts) Find the total amount of heat which will be dissipated on each of the resistors after opening the switch, and until a new equilibrium state is achieved.

