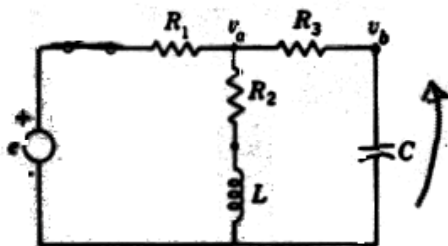


# SCRIVERE LE EQUAZIONI DI INGRESSO-STATO-USCITA

2.1. Write the

state equations for the circuit shown.

Let  $y = v_b$ . (d) Determine the transfer function  $v_b/e$ .

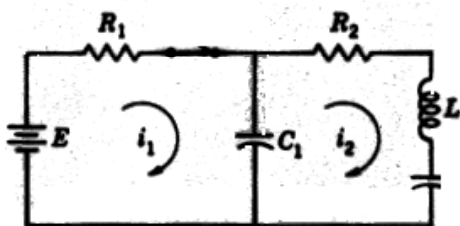


$$u = [e]$$

$$y = [v_b]$$

2.2. Write the

state equations for the circuit shown-

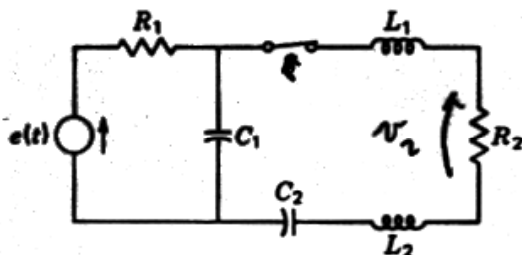


$$u = [e]$$

$$y = [i_2]$$

2.3. The circuits shown

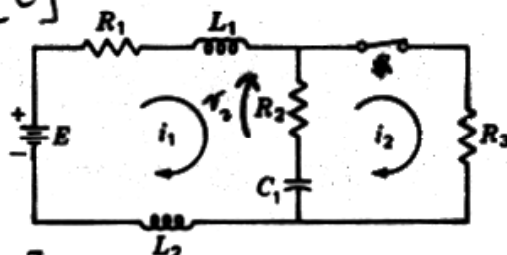
Write the state equations.



Circuit 1

$$u = [e]$$

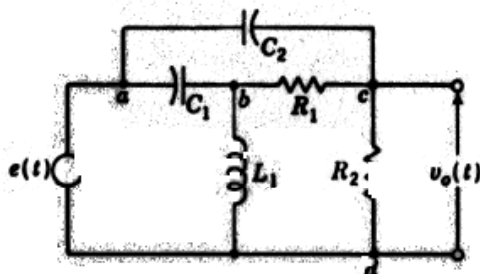
$$y = [v_2]$$



Circuit 2

2.4.

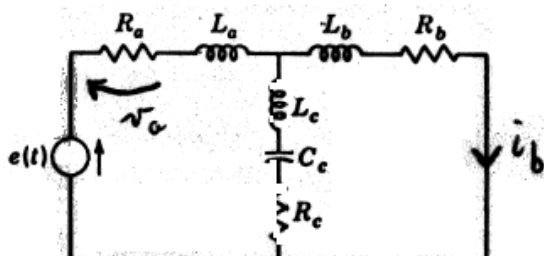
Write the state and output equations.



$$u = [e]$$

$$y = [v_o]$$

2.5. Derive the state equations. Note that there are only three independent state variables.



$$u = [e]$$

$$y = [v_a, i_b]$$