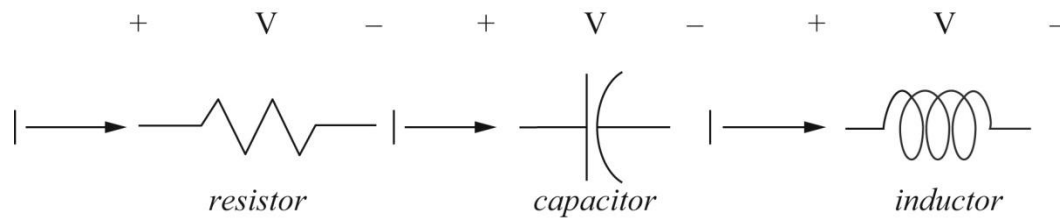
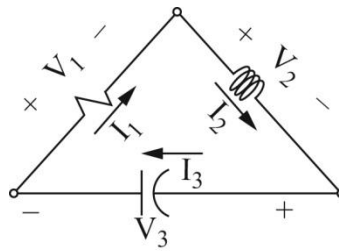


# APPENDIX B

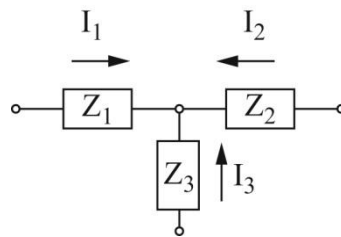
## Circuits



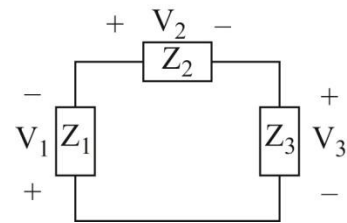
**FIGURE B.1:** Currents and voltages in resistors, capacitors, and inductors.



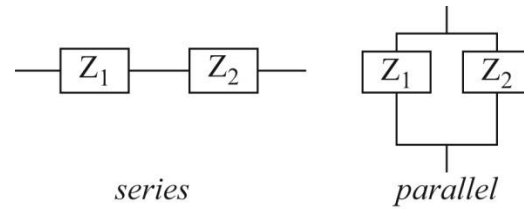
**FIGURE B.2:** An electrical circuit.



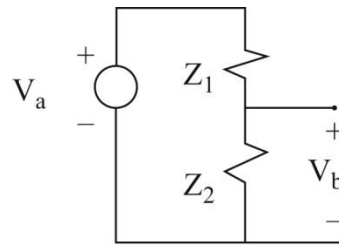
**FIGURE B.3:** Kirchhoff's Current Law.



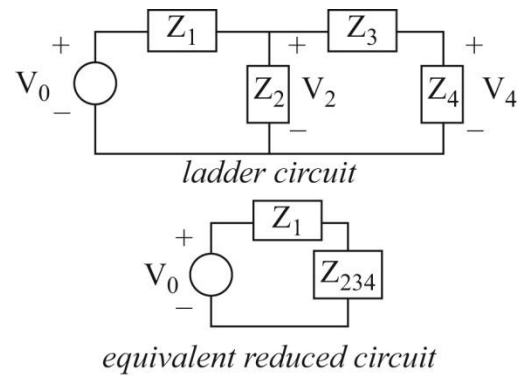
**FIGURE B.4:** Kirchhoff's Voltage Law..



**FIGURE B.5:** Series and parallel impedances.

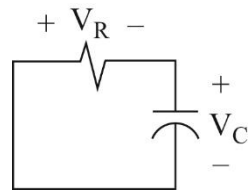


**FIGURE B.6:** A voltage divider.

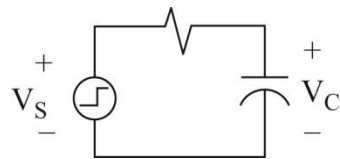


**FIGURE B.7:** Analysis of a two-section ladder network.

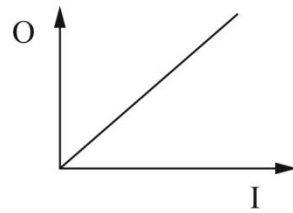




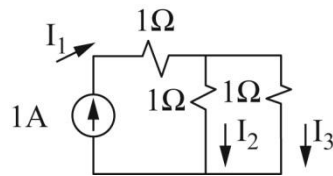
**FIGURE B.8:** An RC circuit.



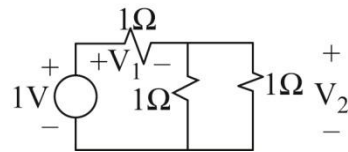
**FIGURE B.9:** An RC circuit with a voltage step source.



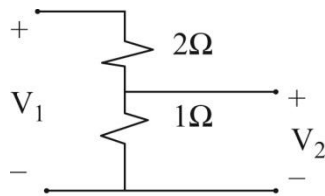
**FIGURE B.10:** Form of a linear system..



**QB-1** Solve for the currents in this circuit.



**QB-2** Solve for the voltages in this circuit.



**QB-3** If  $V_1$  is 1.0 V, what is  $V_2$ ?