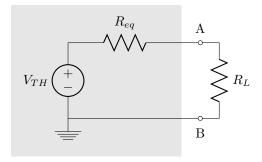
## 1. Thevenin's Equivalent circuit

- (a) Remove the portion of the network across which you want to find the equivalent circuit.
- (b) Label those two terminals.
- (c) Calculate  $R_{eq}$  by replacing voltage sources with a short circuit and current sources with an open circuit.
- (d) Calculate  $V_{TH}$  by inserting back all the sources to their original state then finding the open-circuit voltage between the marked terminal. Draw your circuit as shown below.



## 2. Norton Equivalent

- (a) Remove the portion of the network across which you want to find the equivalent circuit.
- (b) Label those two terminals.
- (c) Calculate  $R_{eq}$  by replacing voltage sources with a short circuit and current sources with an open circuit.
- (d) Calculate  $I_N$  by inserting back all the sources to their original state then finding the short-circuit current between the marked terminal. Draw your circuit as shown below.

