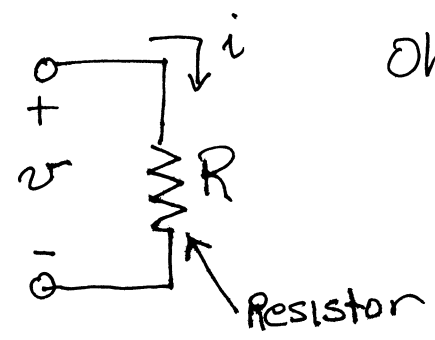
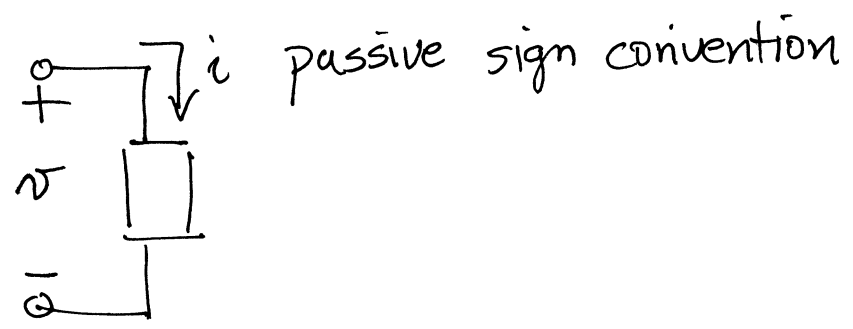
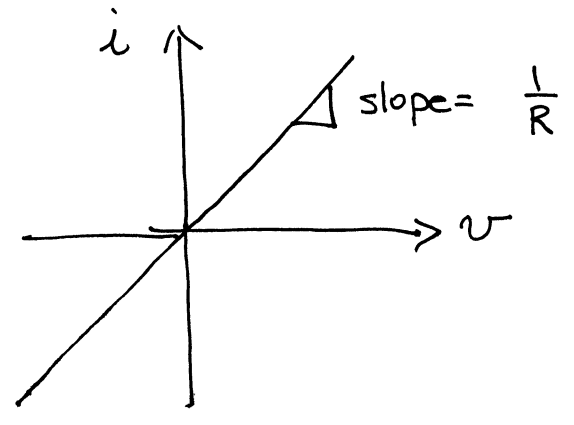


Element constraints

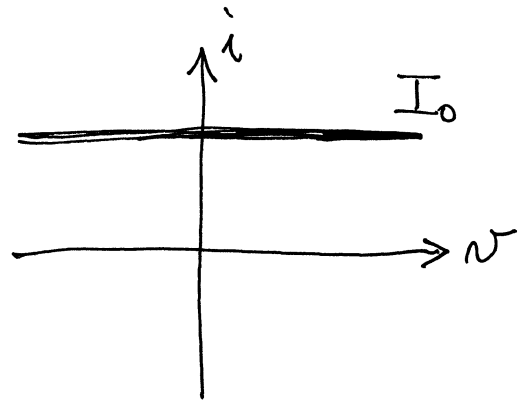
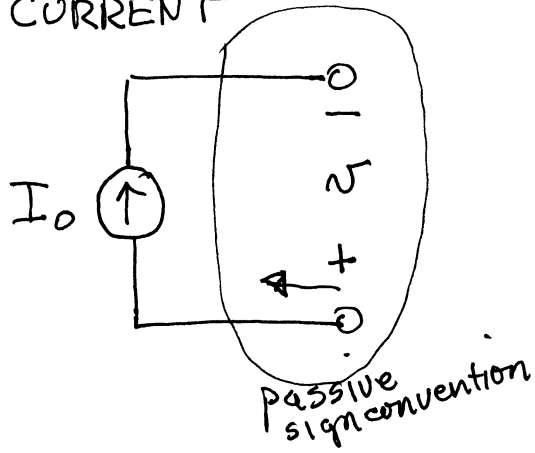


Ohm's Law $v = iR$

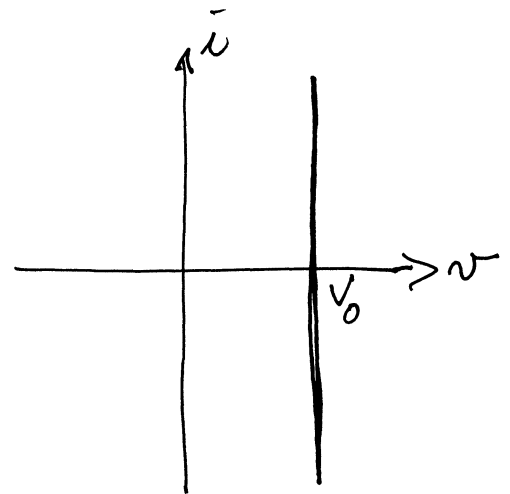
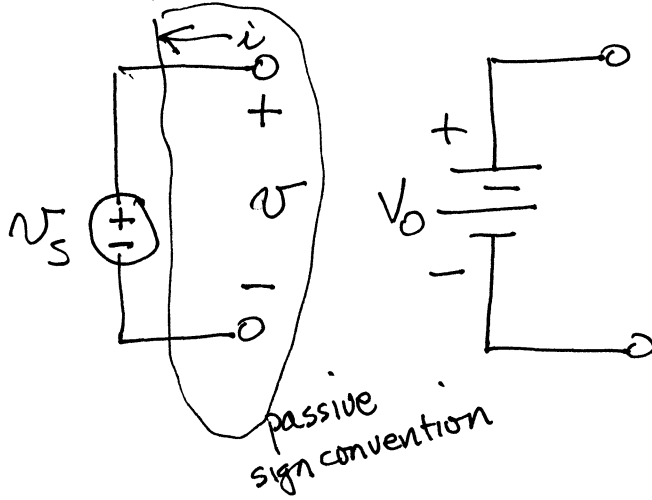


SOURCES

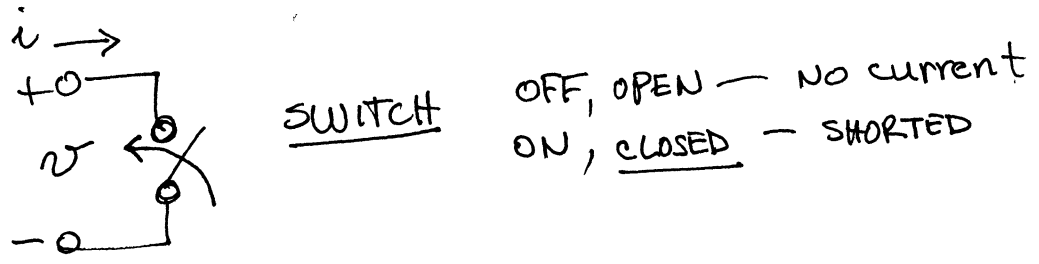
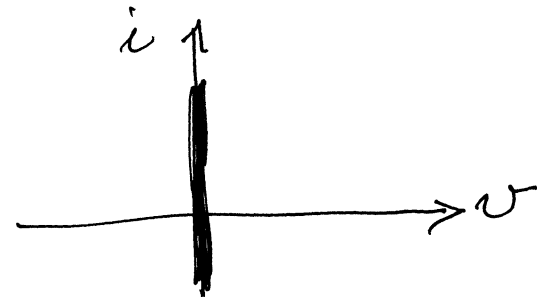
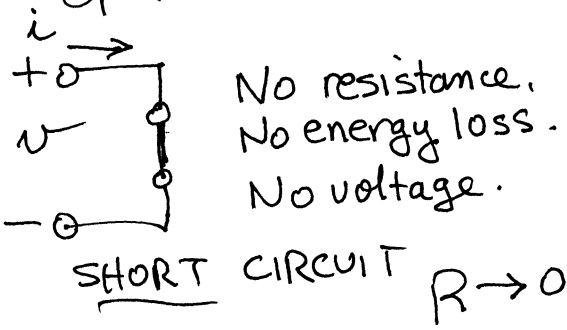
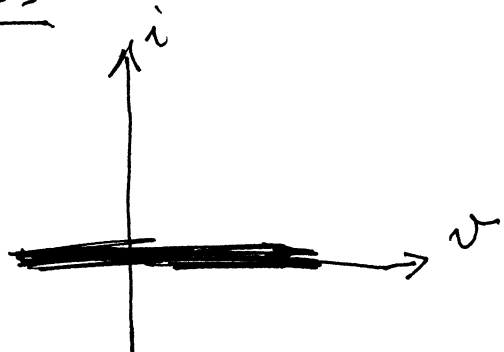
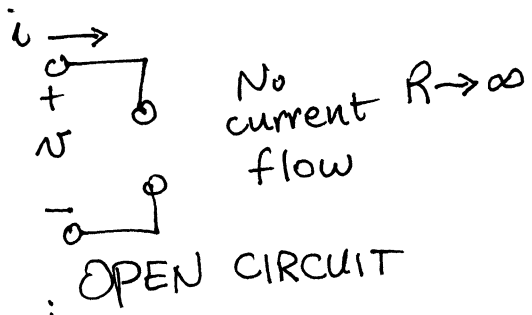
CURRENT

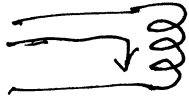
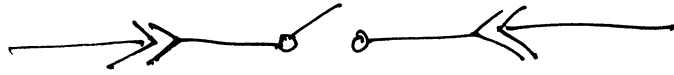


VOLTAGE



Opens, shorts, switches

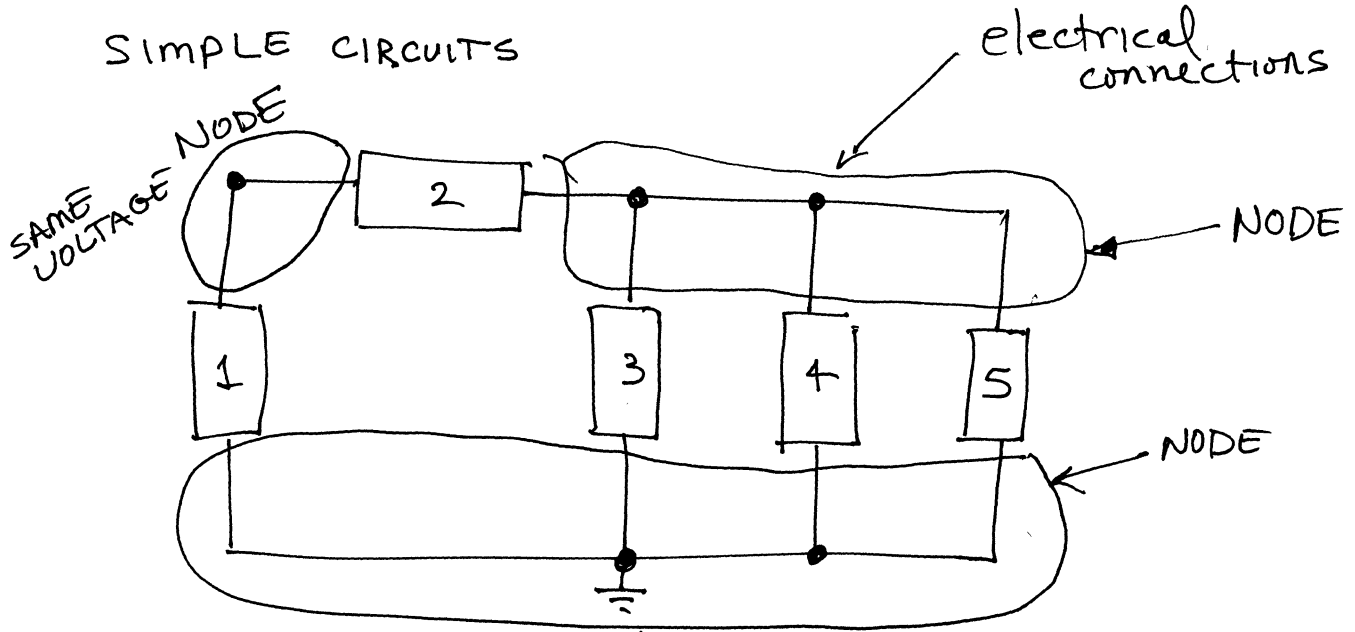




RELAY

SOURCES

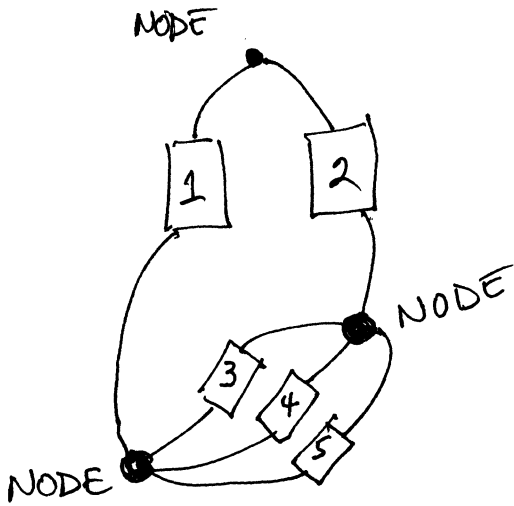
SIMPLE CIRCUITS



5 elements
3 nodes

NODE

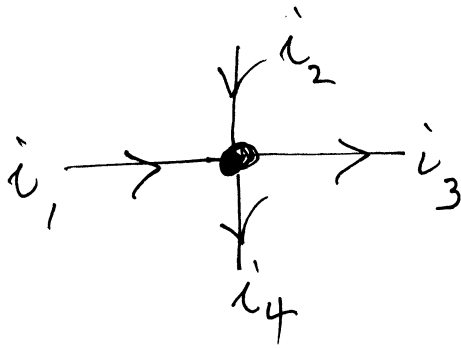
~~connection~~ common voltage



ALWAYS PICK A REFERENCE NODE
CALL IT NODE \emptyset
CALL IT GROUND.

Connection equation

Kirchoff's current law



$$\sum_{+in} i_j = 0$$