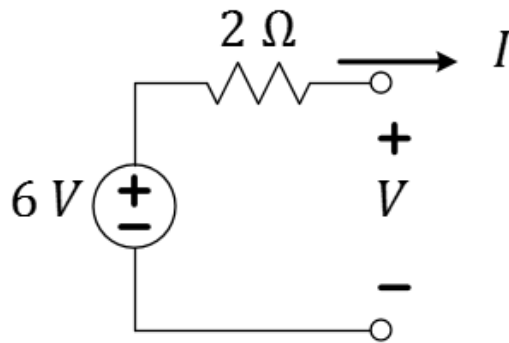
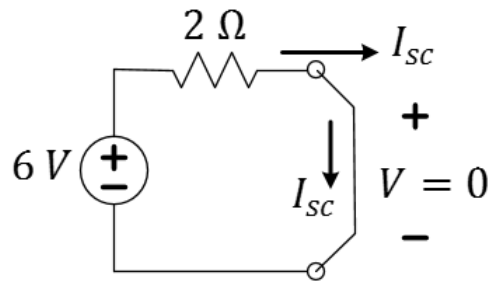


Find the short-circuit current, I_{sc} , for the Circuit.



Step 1. Place a virtual short circuit (i.e. a wire) across the output terminal.



Step 2. Determine the current flow through the wire in the direction consistent with the arrow for I .

The short circuit forces the voltage between the terminals to be 0 V (they actually become part of the same node!). The short circuit is equivalent to the current through the $2\ \Omega$ resistor (by KCL) for this example. It can be found according to Ohm's Law.

$$I_{sc} = I_{2\Omega} = \frac{6}{2} = 3\text{ A}$$

Answer: $I_{sc} = 3\text{ A}$