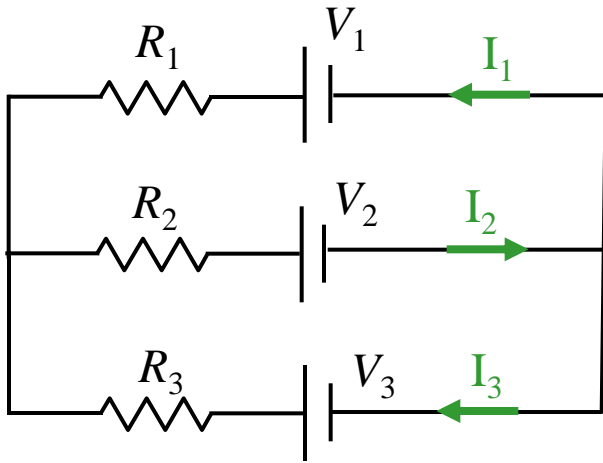


# Calculation



In this circuit, assume  $V_i$  and  $R_i$  are known.

What is  $I_2$  ?

We have 3 equations and 3 unknowns.

$$I_2 = I_1 + I_3$$

$$V_1 + I_1 R_1 - I_3 R_3 + V_3 = 0$$

$$V_2 - I_2 R_2 - I_1 R_1 + V_1 = 0$$



Now just need to solve 😊

The solution will get very messy!

Simplify: assume  $V_2 = V_3 = V$

$$V_1 = 2V$$

$$R_1 = R_3 = R$$

$$R_2 = 2R$$

