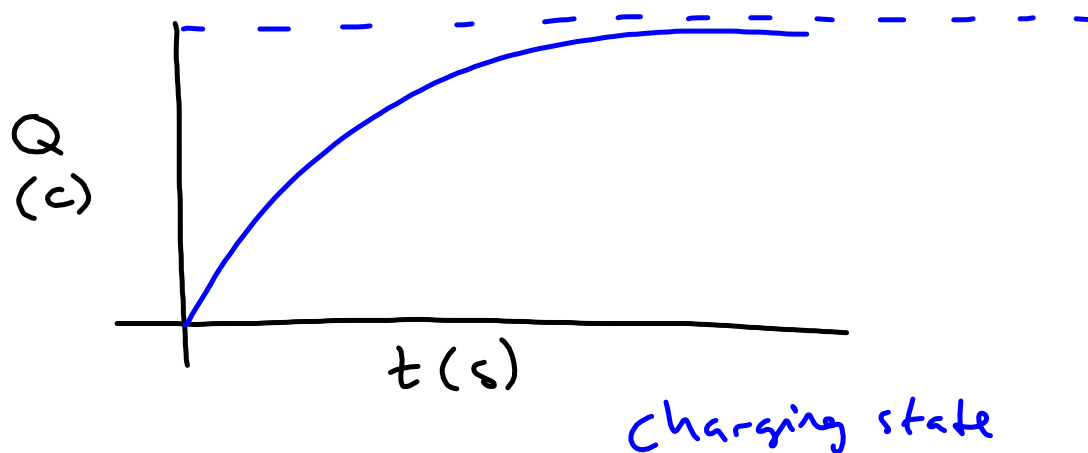
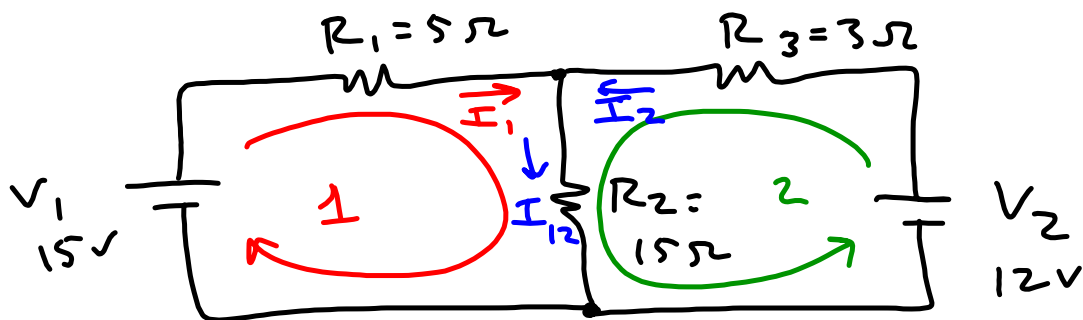




Charge in an RC Circuit

$$Q = CV(1 - e^{-t/RC})$$





Find  $I$  through  $R_2$

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

$$+V_2 - I_2 R_3 - I_2 R_2 = 0$$

$$I_1 + I_2 = I_{12}$$

$$I_1 = \frac{V_1}{R_1 + R_2}$$

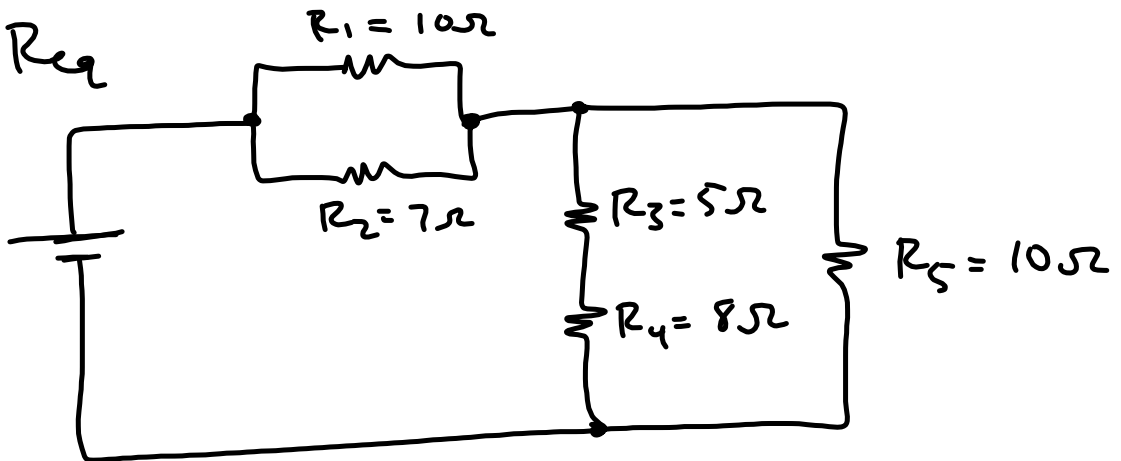
$$I_2 = \frac{V_2}{R_3 + R_2}$$

$$I_{12} = I_1 + I_2$$

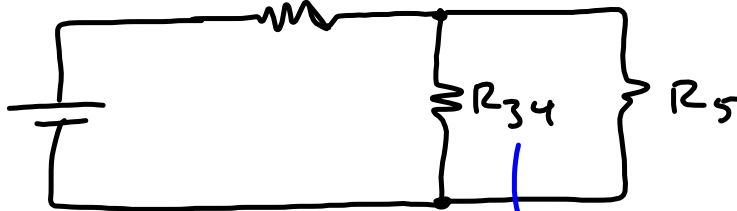
$$= \frac{V_1}{R_1 + R_2} + \frac{V_2}{R_2 + R_3}$$

$$= 1.42 \text{ A}$$

Find  $R_{eq}$



$R_{12}$  (use parallel eqn.)



use series eqn.

