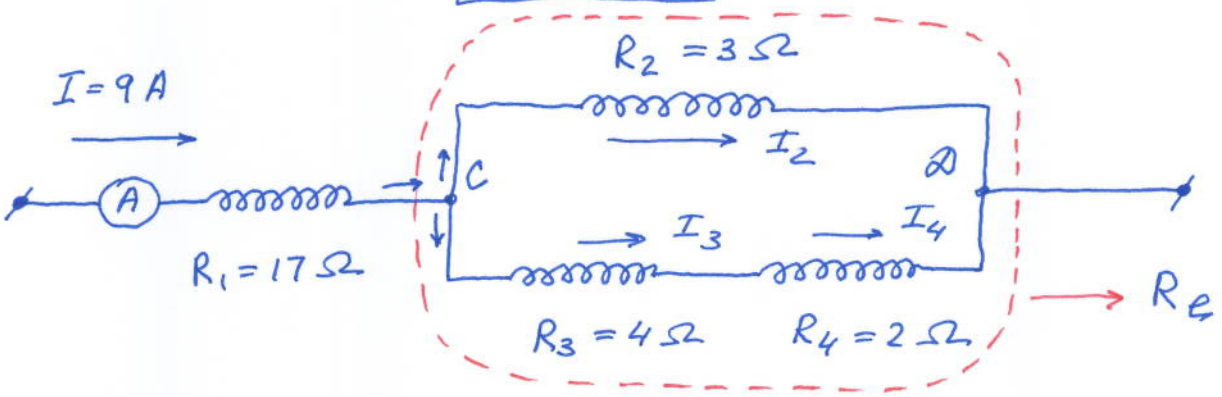
#18.33



1) find R_e

$$\frac{1}{R_e} = \frac{1}{R_2} + \frac{1}{R_3 + R_4} \quad \Rightarrow \quad R_e = \frac{1}{2}$$

2) Ohm's Law to find V_{CD}:

$$V_{CD} = I R_e \quad \Rightarrow \quad V_{CD} = 18\ V$$

3) Ohm's Law to find I_2:

$$V_{CD} = I_2 R_2 \quad \Rightarrow \quad I_2 = 6\ A$$

4) Note that $I_3 = I_4$ (R_3, R_4 are in series)

$$I = I_2 + I_3 \quad \Rightarrow \quad I_3 = 3\ A\ ,\ I_4 = 3\ A$$