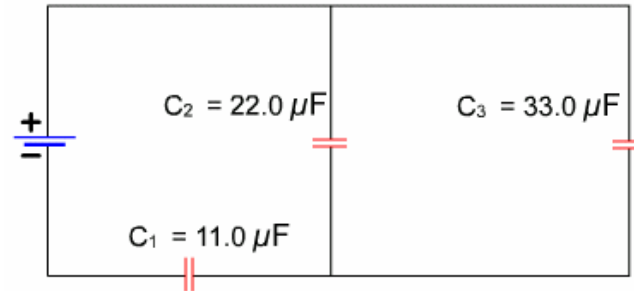
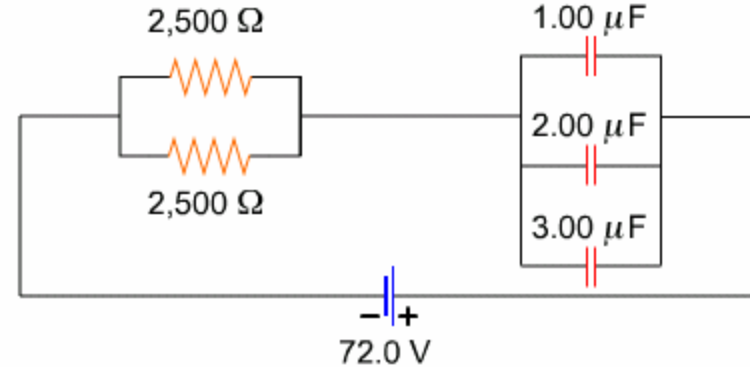


Homework 9

1. What is the equivalent capacitance of this circuit?



2. In equilibrium (i.e., when the capacitors are fully charged), what is the charge on the (a) $1.00 \mu\text{F}$ capacitor, (b) $2.00 \mu\text{F}$ capacitor, and (c) $3.00 \mu\text{F}$ capacitor?



3. A $474 \text{ k}\Omega$ resistor, an initially uncharged $15.0 \mu\text{F}$ capacitor and a 12.0 V battery are connected in series with a switch which is initially open. The switch is then closed. (a) At a time 0.500 seconds later, at what rate is the charge of the capacitor increasing? (b) At what rate is it storing energy?