(a) Find the effective resistance seen by the capacitor. (i.e.: the Thevenin resistance across the port between terminals 1 and 2). Call it $R_{12}$.

(b) Determine the Thévenin equivalent (i.e.: open circuit) voltage seen from a port between node 1 and ground. Call it $V_{oc-1,0}$.

(c) Determine the Thévenin equivalent (i.e.: open circuit) voltage seen from a port between node 2 and ground. Call it $V_{oc-2,0}$.

(d) What is the current between terminals 1 and 2? Be sure to explain why.

(e) If $C_1$ is changed to a resistor of 5k$\Omega$, determine the current between terminals 1 and 2 and its direction. Hint: you already know $R_{12}$, what other quantity would make this easy to calculate?

(f) If $I_1$ is changed to a dependent current source with a current of 1mS*v2, what is the effective resistance seen by the capacitor?