<u>Quiz 20.1F</u>

A 125 μ F capacitor and a 33,500 Ohm resistor are connected in series with a 78.0 Volt power source. At t = 0.00 s, a switch a closed to complete the circuit, and the capacitor begins to charge.

- a) At what time will the voltage drop across the resistor be 24.0 Volts?
- b) After 2.50 time constants have elapsed, what will be the voltage drop across the capacitor?
- c) After 2.50 time constants have elapsed, what will be the voltage drop across the resistor?
- d) After 2.50 time constants have elapsed, what will be the current in the circuit?