

### **Ch 20 HW Quiz #1B**

A circuit contains a 12 Volt battery, a switch, a 3.4 Ohm resistor and a 44  $\mu\text{F}$  capacitor. When the switch is first closed to complete the circuit at  $t=0$ , the capacitor is uncharged.

- a) After 1.5 time constants have elapsed, what is the voltage drop across the capacitor?
- b) At this time, what is the voltage drop across the resistor?
- c) At what time is the capacitor at 91% of its maximum possible charge?