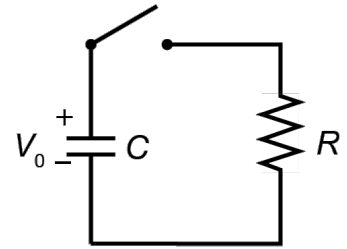

RC Circuits

1. Suppose a capacitor is charged to voltage V_0 and connected in series to a resistor with an open switch. At time $t = 0$, the switch is closed, allowing the charges on the plates of the capacitor to flow through the circuit and come to equilibrium. Sketch below graphs showing what you expect for:



a. The voltage across the capacitor as a function of time

b. The charge on the capacitor as a function of time

c. The current through the resistor as a function of time

2. Given our solution of the function for voltage, find the functions for charge and current.

