

**27.30** Consider the circuit shown at right. The capacitors are initially uncharged and all parameters indicated in the figure are considered known. At time  $t = 0$  the switch is closed.

a) Determine current in each branch of the circuit and voltage across each circuit element at the instant just after the switch is closed.

**TIP:** first redraw the circuit with uncharged capacitors acting like a *short* (a *closed* switch with *zero* resistance). Use this to determine the current paths.

b) Determine current in each branch of the circuit and voltage across each circuit element at the instant in steady-state (a long time after the switch was closed).

**TIP:** first redraw the circuit with fully charged capacitors acting like a *break* (an *open* switch with *infinite* resistance). Use this to determine the current paths.

