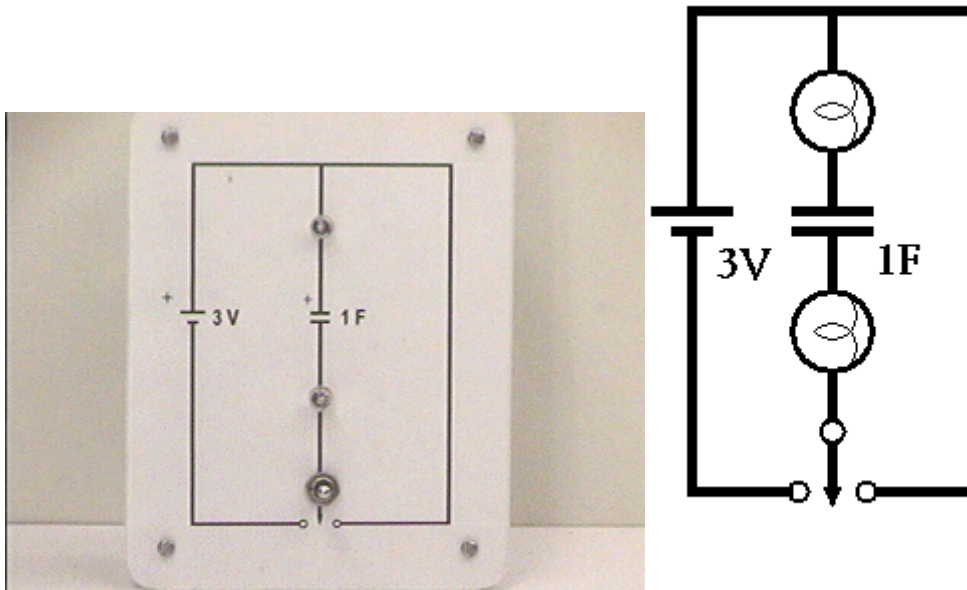


## Answer #75

The answers are:

- (a): both lamps will light, and they will both
- (b): go on brightly and decrease in intensity to a constant level of 0.

This can be seen with a jpeg video by clicking your mouse on the photograph at the left below. (Note that the switch is being flipped to the right.)



When the switch is flipped the loop around the right side of the circuit is closed *after* the capacitor has been charged. The capacitor immediately begins to discharge; the current immediately rises to its highest value, then begins to decrease exponentially as the charge (and the voltage) of the capacitor decreases to zero. The brightness of the light bulbs and how their intensity decreases with time is virtually identical to the case in which the capacitor is being charged beginning from its uncharged state.

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For questions and comments regarding the *Question of the Week* contact [Dr. Richard E. Berg](#) by e-mail or using phone number or regular mail address given on the [Lecture-Demonstration Home Page](#).