Answer #74

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 an mpeg video by clicking your mouse on the photograph at the right below.

![Diagram of a circuit with two lamps and a capacitor](image)

When the switch is closed, current begins to flow through the entire circuit, lighting both lamps. As the capacitor becomes charged, the current reduces exponentially to zero, when the capacitor is fully charged and the light bulbs cease to glow.

The next Question of the Week involves what happens when the switch is flipped in the other direction,
Dr. Richard E. Berg by e-mail or using phone number or regular mail address given on the Lecture-Demonstration Home Page.