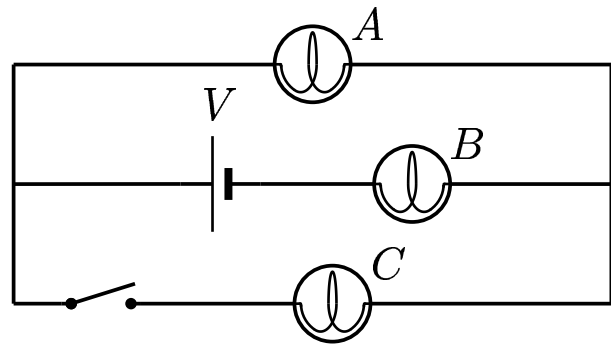
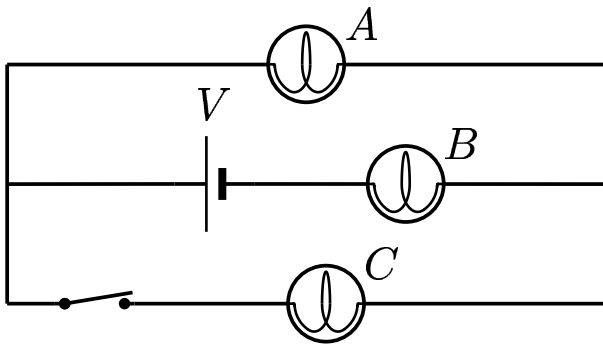


Three identical bulbs are connected in two ways as shown. Denote the current I when the switch is closed and I' when the switch is open.



The ratio of currents through the bulb B is given by

- A) $\frac{I'_B}{I_B} = \frac{4}{3}$
- B) $\frac{I'_B}{I_B} = 1$
- C) $\frac{I'_B}{I_B} = \frac{3}{4}$
- D) $\frac{I'_B}{I_B} = \frac{2}{3}$

$$\frac{I'_B}{I_B} = \frac{\frac{V}{2R}}{\frac{V}{3R}} = \frac{3}{4}$$

Answer **C**.