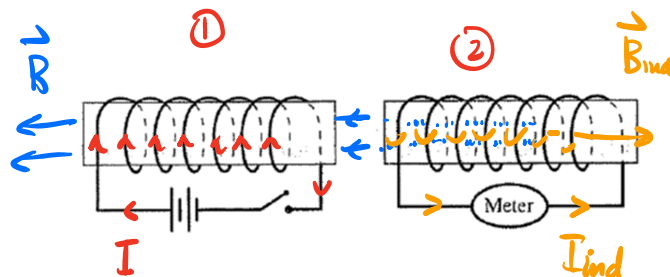


(2pts) 1.

- a. Just after the switch on the left coil is closed, does current flow right to left or left to right through the current meter of the right coil? Or is the current zero?



When switch is closed, Φ through ② increase to the left. $\therefore I_{ind}$ creates \vec{B}_{ind} to the right to oppose this change in Φ . By RHR, I_{ind} is the the right through meter.

- b. Long after the switch on the left coil is closed, does current flow right to left or left to right through the current meter of the right coil? Or is the current zero?

A long time after the switch is closed,

\vec{B} is constant. \therefore flux through ② is constant.

$$\Rightarrow \mathcal{E} = - \frac{d\Phi}{dt} = 0$$

$$\therefore I_{ind} = 0$$