

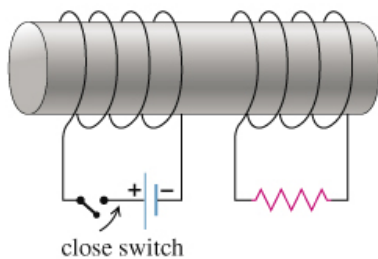
PHYSQ 126, Quiz 7 (26 mars 2015)

Induced Current in a Pair of Solenoids Conceptual Question

For each of the actions depicted, determine the direction (right, left, or zero) of the current induced to flow through the resistor in the circuit containing the secondary coil. The coils are wrapped around a plastic core.

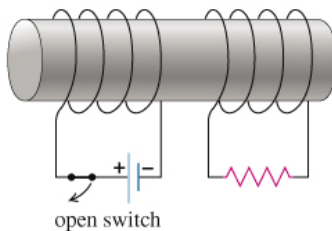
Part A

Immediately after the switch is closed, as shown in the figure, (Figure 1) in which direction does the current flow through the resistor? **Ans. RIGHT**



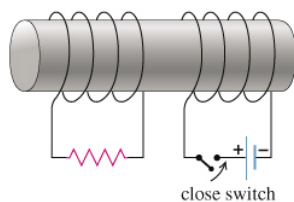
Part B

If the switch is then opened, as shown in the figure, in which direction does the current flow through the resistor? **Ans. LEFT**



Part C

Immediately after the switch is closed, as shown in the figure, in which direction does the current flow through the resistor? **Ans RIGHT**

**Part D**

If the circuit containing the battery moves to the left, as shown in the figure, in which direction does the current flow through the resistor? **Ans LEFT**

