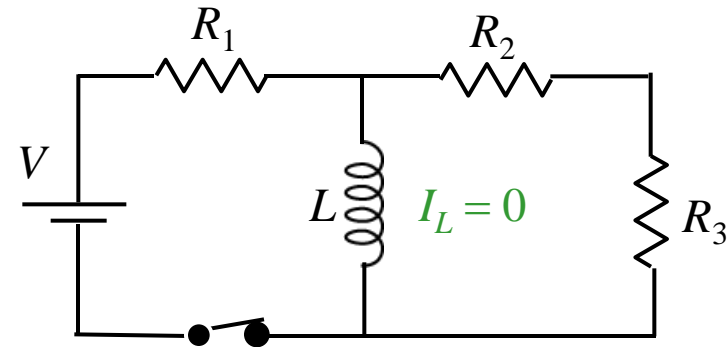


Calculation



The switch in the circuit shown has been open for a long time. At $t = 0$, the switch is closed.



What is I_L , the current in the inductor, immediately after the switch is closed?

A) $I_L = V/R_1$ up

B) $I_L = V/R_1$ down

C) $I_L = 0$

INDUCTORS: Current cannot change discontinuously !



Current through inductor immediately **after** switch is closed
is the same as
the current through inductor immediately **before** switch is closed

Immediately **before** switch is closed: $I_L = 0$ since no battery in loop