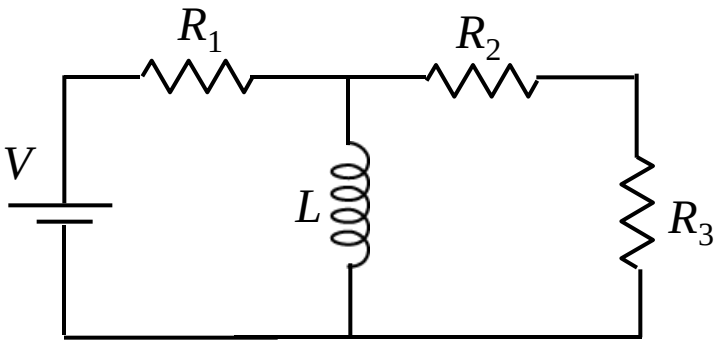
Follow Up

The switch in the circuit shown has been closed for a long time.

What is I_2, the current through R_2 ?
(Positive values indicate current flows to the right)



A) $I_2 = +\dfrac{V}{R_2 + R_3}$ B) $I_2 = +\dfrac{V(R_2 R_3)}{R_1 + R_2 + R_3}$ C) $I_2 = 0$ D) $I_2 = -\dfrac{V}{R_2 + R_3}$

After a long time, $dI/dt = 0$
Therefore, the voltage across $L = 0$
Therefore the voltage across $R_2 + R_3 = 0$
Therefore the current through $R_2 + R_3$ must be zero!