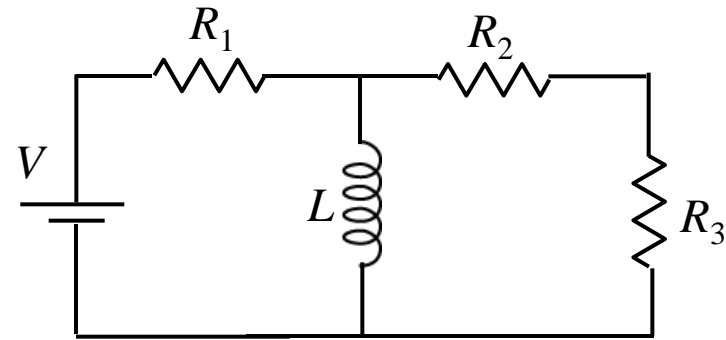


Calculation



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



$$I_L(t = 0+) = 0$$

What is the magnitude of I_2 , the current in R_2 , immediately after the switch is closed?

- A) $I_2 = \frac{V}{R_1}$ B) $I_2 = \frac{V}{R_2 + R_3}$ **C) $I_2 = \frac{V}{R_1 + R_2 + R_3}$** D) $I_2 = \frac{VR_2R_3}{R_2 + R_3}$

We know $I_L = 0$ immediately after switch is closed



Immediately after switch is closed, circuit looks like:

