Physics II

RL Circuits

Inductance equation: $V_L = L\frac{dI}{dt}$

Rise in current in an LR circuit: $I = I_o\left(1 - e^{-t/\tau}\right)$ where $I_o = \frac{V_o}{R}$ and $\tau = \frac{L}{R}$

Problem 1.- Find how long after closing the switch the current in the circuit will reach 0.65A