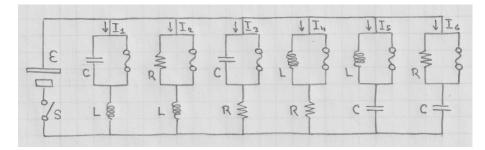
[lex139] Circuit breaker contest II

This circuit contains six identical fuses. Each fuse has zero impedance when intact and breaks when the current through it exceeds the value 2A. The other device specifications in the circuit are $\mathcal{E} = 3V$, $R = 1\Omega$, L = 1H, and C = 1F.

(a) Find the currents I₁,..., I₆ right after the switch S has been closed.
(b) Find the average currents I₁,..., I₆ a long time after the switch S has been closed.



Solution: