## Problem 1

The switch in the circuit has been in position a for a long time. At $t=0$, it moves to position $b$. Calculate $i(t)$ for all $t>0$.


## Problem 2

In the following circuit, $i_{s}(t)=5 u(t)$. Find $v(t)$.


## Problem 3

Obtain the inductor current for both $\mathrm{t}<0$ and $\mathrm{t}>0$ in each of the circuits.


## Problem 4

For $\mathrm{t}<0$, the switch is closed. Assume that a steady state has been reached by $\mathrm{t}=0$. At $\mathrm{t}=0$, the switch is open. Find $v(\mathrm{t}), v_{R}(\mathrm{t})$ for $\mathrm{t}>0$.


## Problem 5

For the network shown in the following circuit. Find $v(t)$ for $t>0$.


## Problem 6

Determine the step response $v_{0}(t)$ to $v_{s}=9 u(t) V$ in the following circuit.


## Problem 7

Obtain $v(t)$ and $i(t)$ in the following circuit.


## Problem 8

Find $v_{0}(t)$ for $t>0$ in the following circuit.


