Problem 1

Evaluate $R_{AB}$

Problem 2

Obtain the Thévenin equivalent at terminals $A-B$.

Problem 3

A) Find the condition for which $V_{AB} = 0$

B) Given $R_1 = 4\Omega$, $R_2 = 12\Omega$, $R_3 = 2\Omega$, $R_4 = 6\Omega$

Evaluate $R_{AB}$.

Problem 4

$a(t)$ = $77 + 100 \cos(454t)$

A) Evaluate the steady-state response $\delta(t)$

B) Derive the transfer function

$H(j\omega) = \frac{V_0}{V_i}$

C) Use the result in (B) to verify the result in (A).
PROBLEM 5

The switch $S$ has been open for a long time and is closed at $t=0$.

Evaluate $V_0(t)$ for $t \geq 0$.

PROBLEM 6

The switch $S$ has been in position $B$ for a long time. At $t=0$ $S$ is moved to position $A$.

Determine the following:

A) $L(0^+), L_c(0^+), V_L(0^+), V_c(0^+)$

B) $L(\infty), V_c(\infty)$. 
