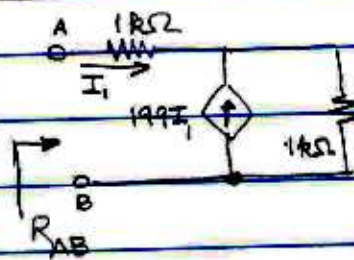
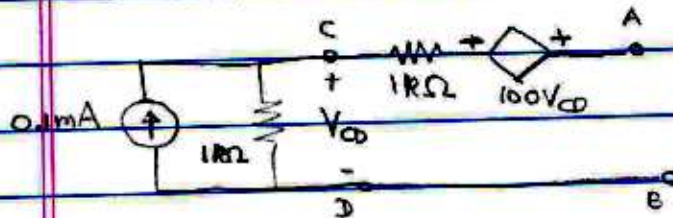


PROBLEM 1

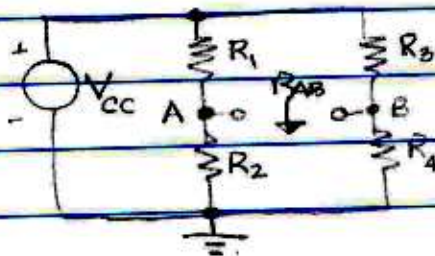
Evaluate R_{AB}

PROBLEM 2

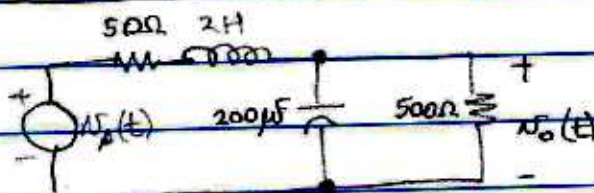


Obtain the Thevenin equivalent at terminals A-B.

PROBLEM 3

A) Find the condition for which $V_{AB} = 0$ B) If $R_1 = 4\Omega$, $R_2 = 12\Omega$, $R_3 = 2\Omega$, $R_4 = 6\Omega$
Evaluate R_{AB} .

PROBLEM 4



$$v_i(t) = 77 + 100 \cos 754t$$

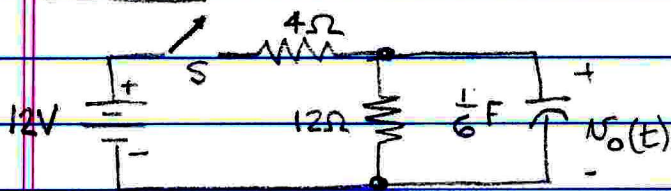
A) Evaluate the steady-state response $v_o(t)$.

B) Derive the transfer function

$$H(j\omega) = V_o/V_i$$

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

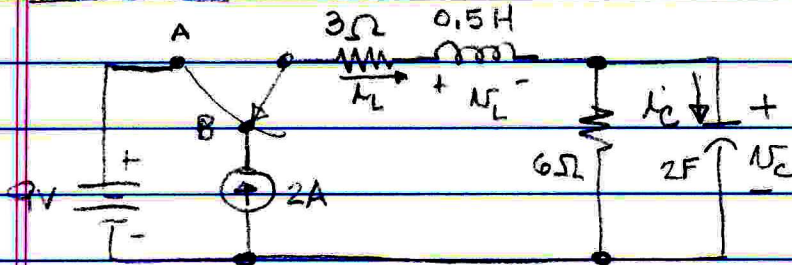
PROBLEM 5



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

Evaluate $v_o(t)$ 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) $i_L(0^+)$, $i_C(0^+)$, $v_L(0^+)$, $v_C(0^+)$

B) $i_L(\infty)$, $v_C(\infty)$.