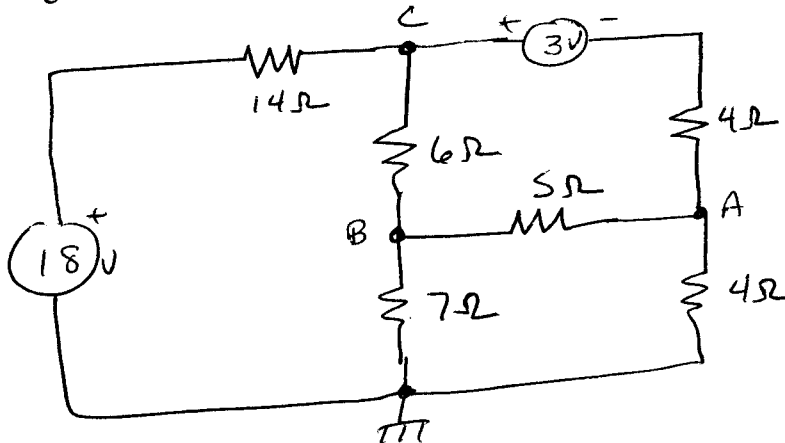


Homework #5

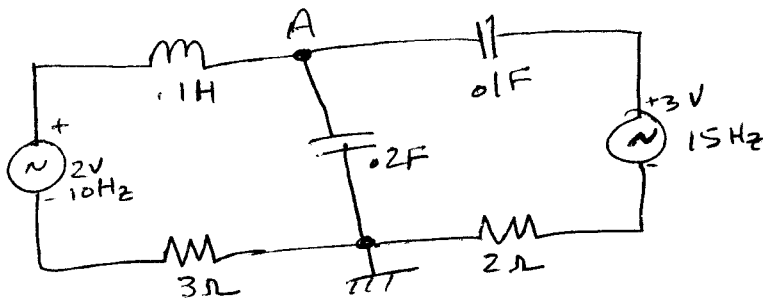
Due next Wed

1. For the following network -- perform either node or mesh analysis to determine the operating point voltages.



$V(A)?$
 $V(B)?$
 $V(C)?$

2. For the following network, use impedances to determine the voltage and phase for the indicated points.



Find $V(A(t))$
 Given: Both sources are ϕ @ $t=0$ & Rising

3. Consider the following linear differential system, find a general solution:

$$\begin{bmatrix} 2 & -3 \\ 4 & 6 \end{bmatrix} \begin{bmatrix} y_1 \\ y_2 \end{bmatrix} = \begin{bmatrix} y_1' \\ y_2' \end{bmatrix}$$