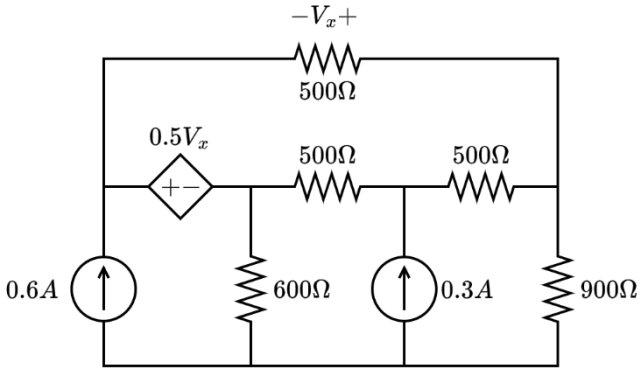
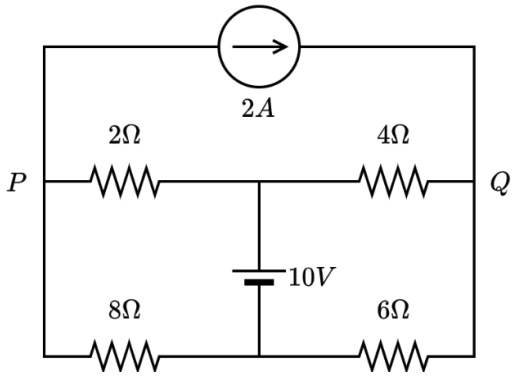
ESO203 Tutorial 2

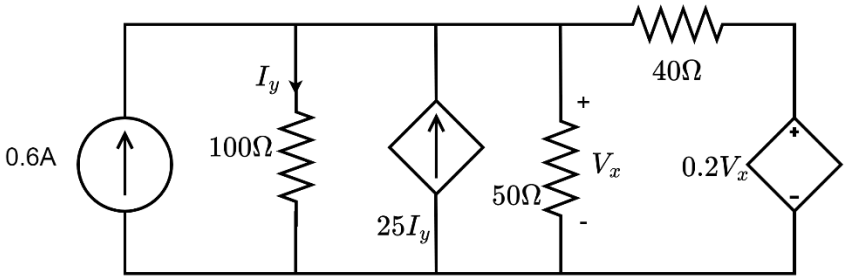
Q. 1: Find the value of V_x in the following figure.



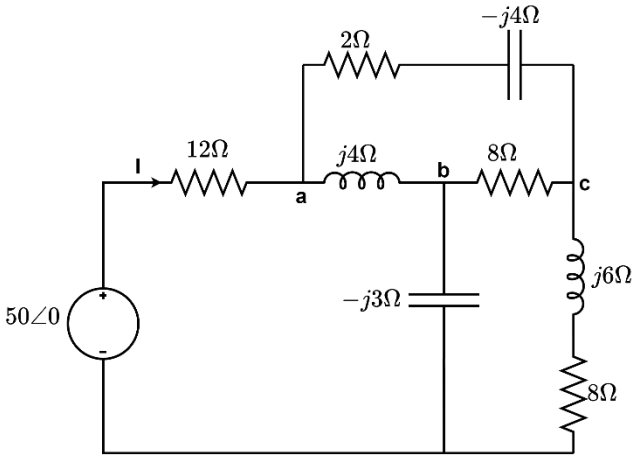
Q. 2: Determine the potential difference between P and Q.



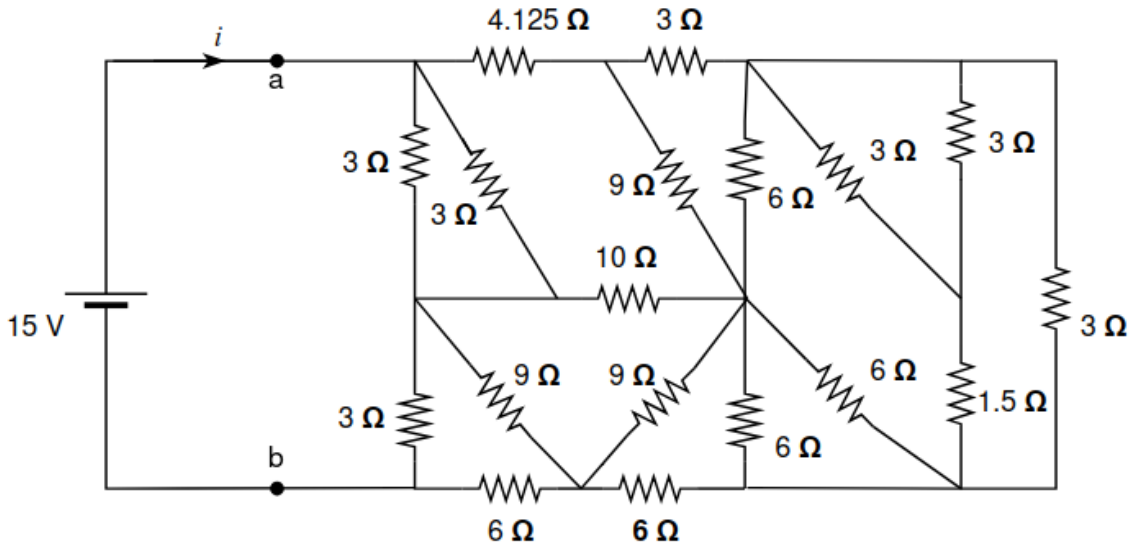
Q. 3: For the circuit of the given figure, find the voltage V_x using the nodal analysis.



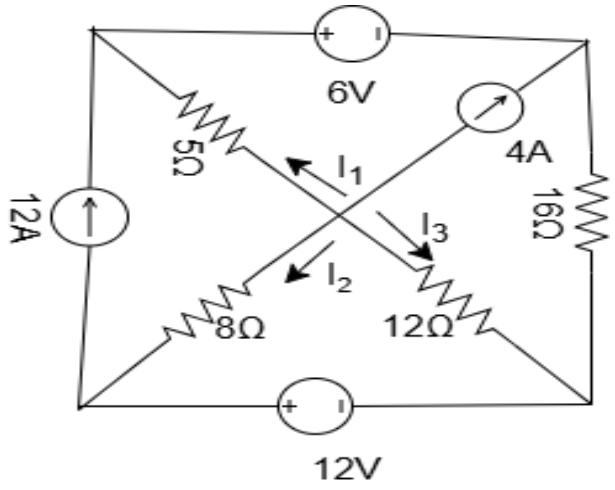
Q. 4: Find the current I in the given circuit.



Q. 5: Obtain the equivalent resistance R_{ab} for the circuit shown in the figure and find the current "i".



Q. 6: In the given circuit, find the current I_1, I_2, and I_3 using nodal and mesh analysis.



Q. 7: A source $w = 314\ rad/sec$ is connected to a load Z_L as shown in the figure. Find the value of the capacitance for the load Z_L to be completely resistive. Z_L is the impedance seen from the source.