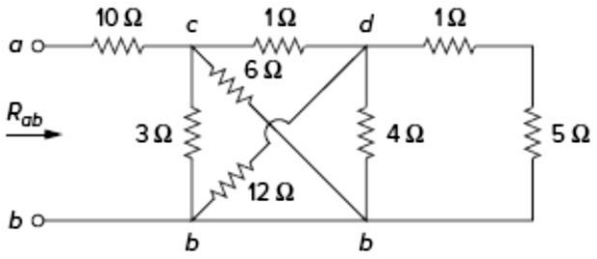
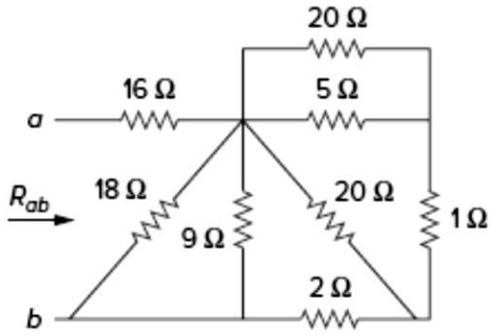
Tutorial-1

Electric Circuits & Systems **Date: 20.09.21**

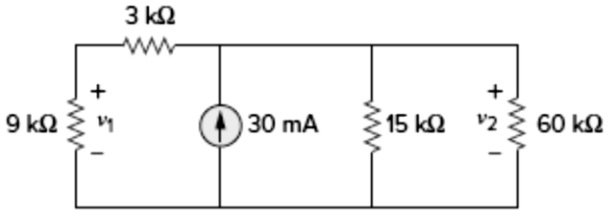
1. Find the equivalent resistance, R_{ab} for the following.



2. Find the equivalent resistance, R_{ab} for the following.



3. Find: (a) V_1 and V_2 as shown in figure, (b) the power dissipated in the 3-kΩ and 20-kΩ resistors, and (c) the total power supplied by the current source.



4. A voltage source of 20 sin πt V is connected across a 5-kΩ resistor. Find the current through the resistor and the power dissipated.

5. An energy source forces a constant current of 2 A for 10 s to flow through a light bulb. If 2.3 KJ is given off in the form of light and heat energy, calculate the voltage drop across the bulb.