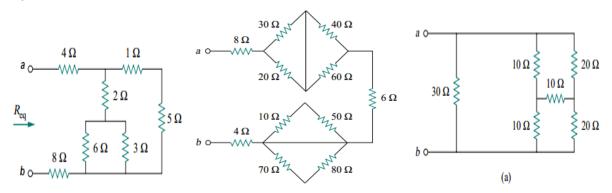
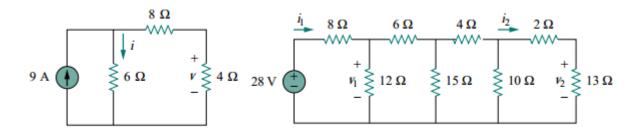
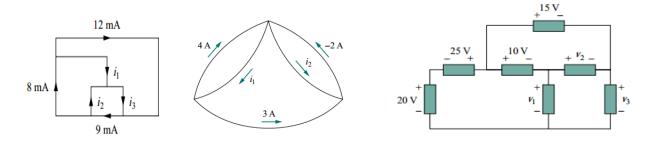
**Q1)** Obtain the equivalent resistance at the terminals a-b for each of the circuits



- **Q2)** a) Find i, v and the power dissipated in the  $6\Omega$  resistor
- **b)** Determine  $i_1, i_2, v_1$ , and  $v_2$  in the ladder network, Calculate the power dissipated in the  $2\Omega$  resistor.



**Q3)** Use **KCL** to obtain currents i<sub>1</sub>, i2 and i<sub>3</sub> and Use **KVL** to obtain voltages v<sub>1</sub>, v<sub>2</sub>, v<sub>3</sub> and v<sub>4</sub> in the circuits



- **Q4)** a) Find  $v_1$ ,  $v_2$  and  $v_3$  in the circuits shown below
- **b**) Find I and V<sub>ab</sub> in the circuit

