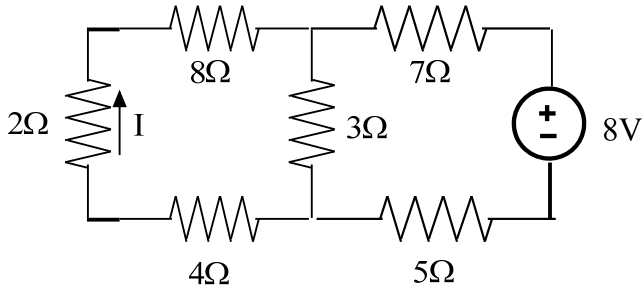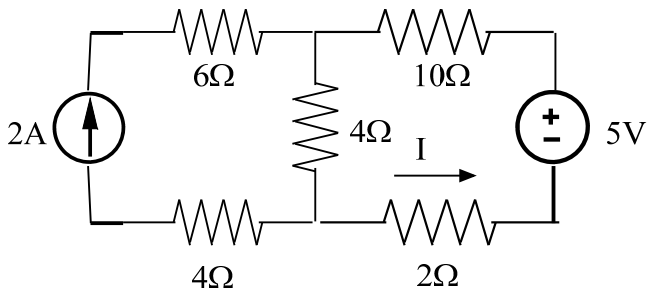EE201 Practice Problems-A
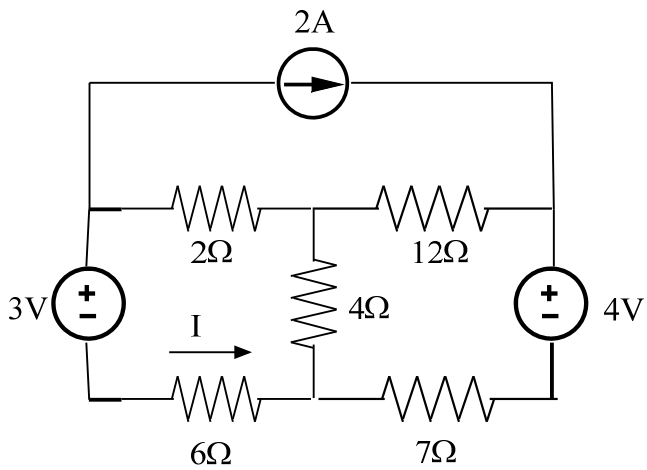
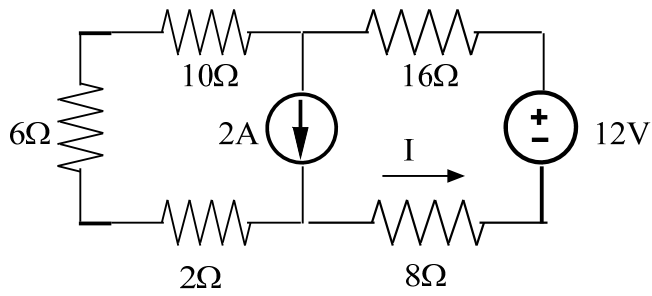1. For each of the circuits, find the current I by loop analysis method.

(a)

(b)
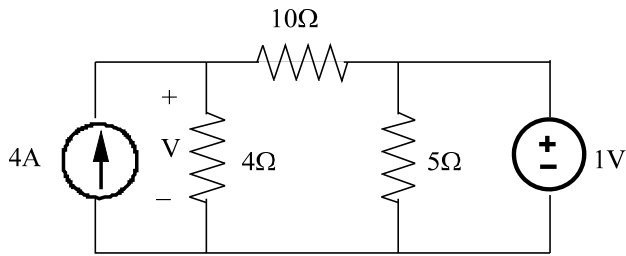

(c)
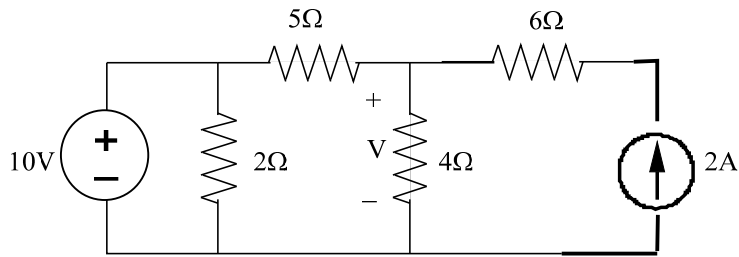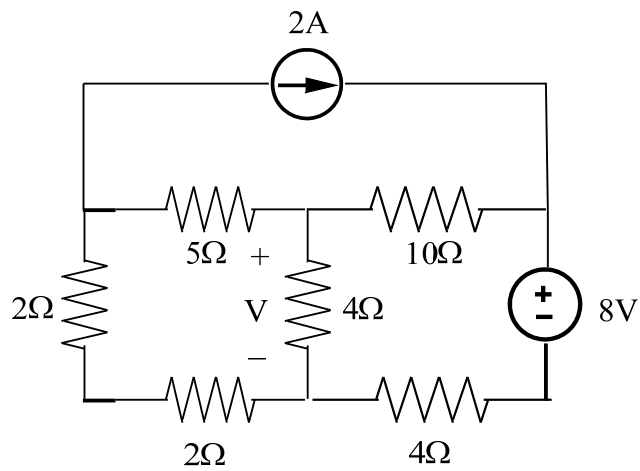
(d)

2. For each of the circuits, find the voltage V by nodal analysis method.
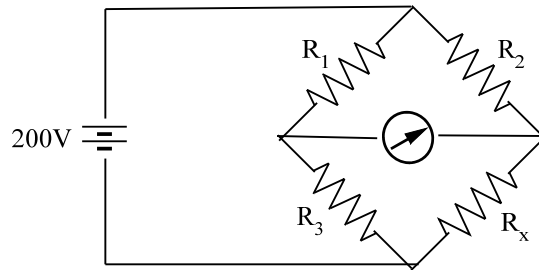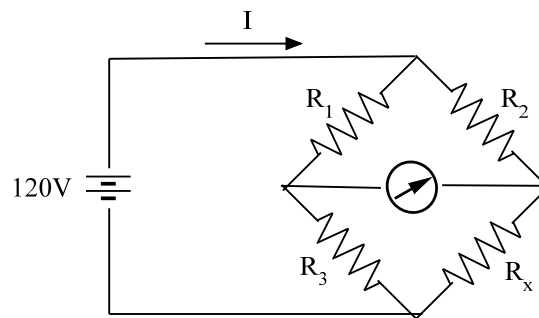

(a)

(b)

(c)

3. The bridge circuit shown below is energized from a 200V source. The bridge is balanced when $R_1 = 800\Omega$, $R_2 = 600\Omega$ and $R_3 = 800\Omega$. What is the value of R_x?

4. The bridge circuit shown below is energized from a 120V source. The bridge is balanced when $R_1 = 400\Omega$, $R_2 = 300\Omega$ and $R_3 = 400\Omega$. What is the value of the current I when the bridge is balanced?

5. The bridge circuit shown below is energized from a 120V source. The bridge is balanced when $R_1 = 600\Omega$, $R_2 = 400\Omega$ and $R_3 = 300\Omega$. What is the value of the current I when the bridge is balanced?