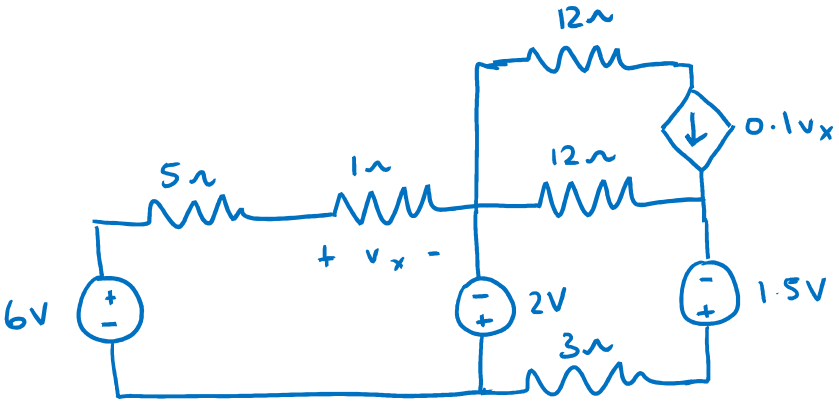
At Tutorial 3 – Marked Question (29th March 2019)

Chapter 4, Ex 36: Mesh analysis

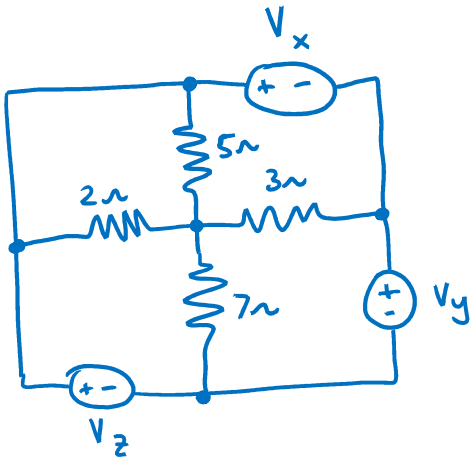
Determine each mesh current in the circuit below.



At Tutorial 3 – Unmarked Questions (29th March 2019)

Chapter 4, Ex 40: Mesh analysis

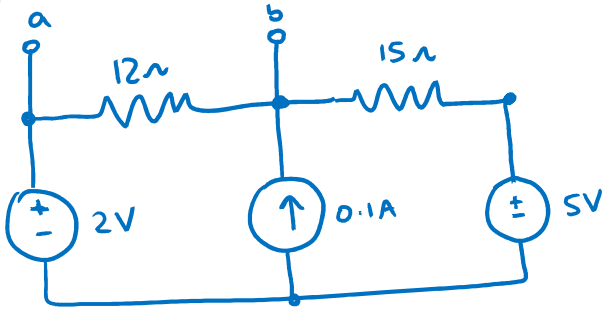
Choose non-zero values for the three voltage sources in the circuit below, such that no current flows through any resistor in the circuit. Recommend using mesh analysis to solve.



Chapter 5, Ex 45: Norton equivalent (use mesh analysis)

For the network below:

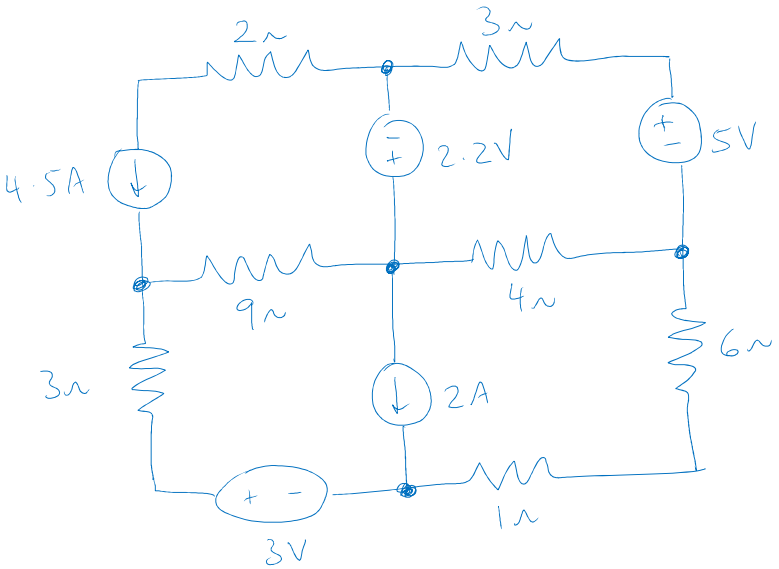
a) find the Norton equivalent seen at terminals a and b.



Extra Questions for Tutorial 3 (no worked solutions just final answer given)

Ch 4, Ex 43: Mesh analysis [Ans: -3.654 W]

Use the supermesh technique to determine the power supplied by the 2.2 V source in the circuit below.



Ch 5 ex 7: Superposition [Ans: $v_x = 10.33\ V$]

Apply superposition to the circuit below in order to find the value of v_x.