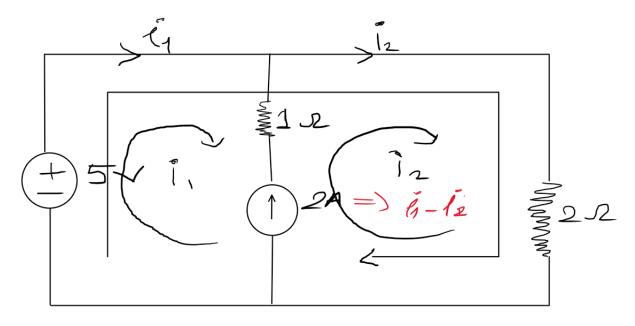


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Circuit Theory



Using mesh analysis , find mesh currents $\dot{I}_1 \ \& \ \dot{I}_2$

Apply KVL in loop – 1

$$5 - 2i_2 = 0 \Rightarrow i_2 = 5/2 = 2.5A$$

Now
$$i_1-i_2 = -2A \Rightarrow i_1-2.5 = -2 \Rightarrow i_1 = 0.5 A$$

$$i_1 = 0.5 A$$
 $i_2 = 2.5 A$