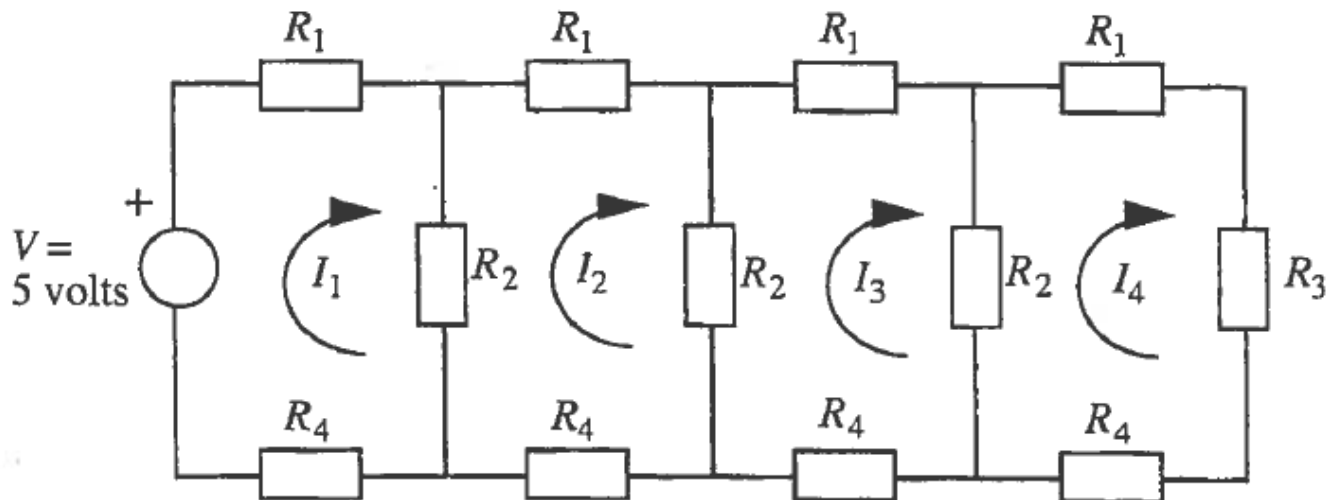


Sample 4a



In the electrical network shown above, the equations for the currents $I_1 - I_4$ are:

$$(R_1 + R_2 + R_4) I_1 - R_2 I_2 = V$$

$$(R_1 + 2R_2 + R_4) I_2 - R_2 I_1 - R_2 I_3 = 0$$

$$(R_1 + 2R_2 + R_4) I_3 - R_2 I_2 - R_2 I_4 = 0$$

$$(R_1 + R_2 + R_3 + R_4) I_4 - R_2 I_3 = 0$$

where $R_1=0.3$, $R_2=0.6$, $R_3=0.2$, $R_4=0.5$, and $V=5$. Write a MATLAB program to calculate and print the currents $I_1 - I_4$.

The output of this program should look like this:

$I =$

```
4.1678
1.3914
0.4703
0.1764
```