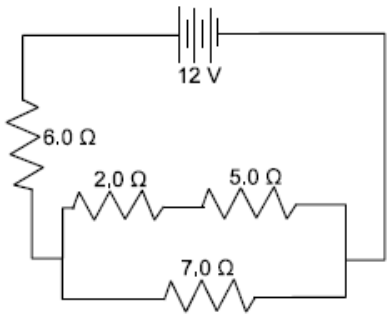
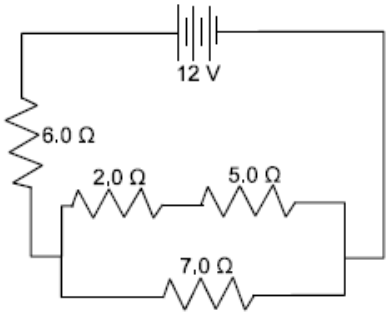
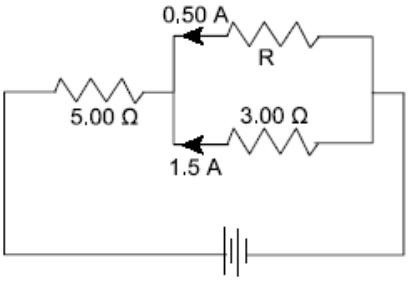
52.(d) For the circuit shown in the diagram below, calculate:



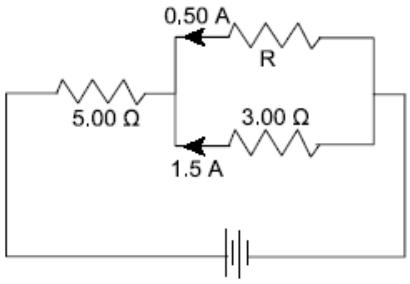
(i) the voltage across the 6.0 Ohm resistor;
(ii) the current through the 5.0 Ohm resistor;
(iii) the power dissipated in the 2.0 Ohm resistor.


12 V
6.0 Ω
2.0 Ω
5.0 Ω
7.0 Ω

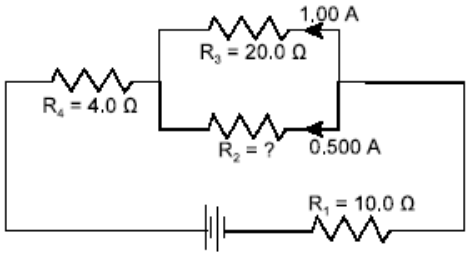
52.(c) Given the circuit in the diagram below, calculate:



(i) the current through the 5.00 Ω resistor.
(ii) the resistance of R.
(iii) the potential difference across the battery.

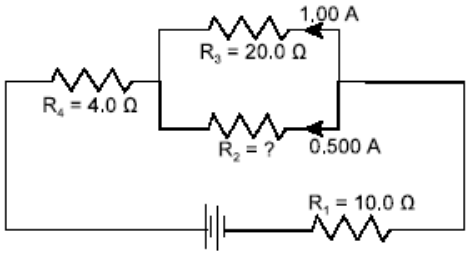

0.50 A
R
5.00 Ω
3.00 Ω
1.5 A

6% 52.(c) For the circuit below calculate:



i) the value of R .
ii) the power dissipated in R4
iii) the voltage across the source.

iv) Explain how the addition of another resistor in parallel will change the total resistance of the circuit.


1.00 A
R_3 = 20.0 Ω
R_4 = 4.0 Ω
R_2 = ?
0.500 A
R_1 = 10.0 Ω

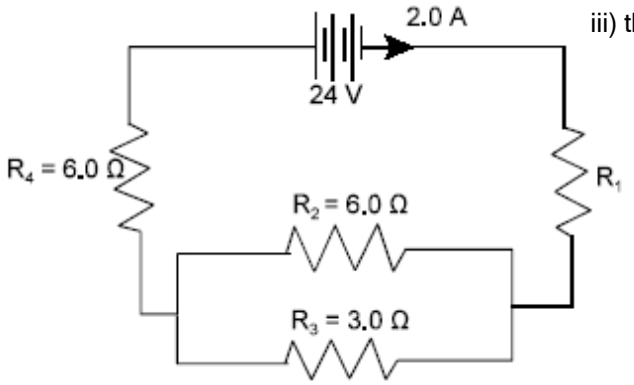
Value

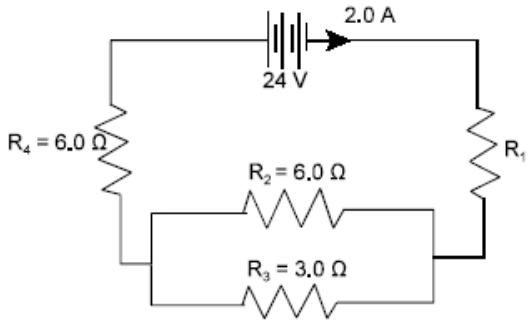
5% 52.(c) In the circuit shown, calculate:

i) the voltage for R_4.

ii) the value of R_1.

iii) the power dissipated in R_3.




2.0 A
24 V
R_4 = 6.0 Ω
R_1
R_2 = 6.0 Ω
R_3 = 3.0 Ω