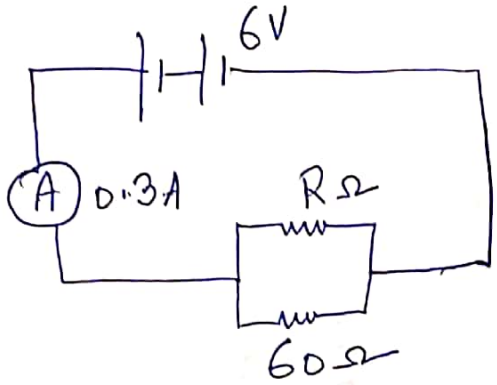
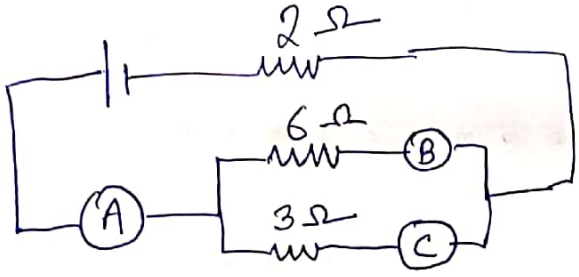
1)



a) Find total resistance of the circuit
b) The value of R
c) Current through R.

[20 Ω, 30 Ω, 0·2A]

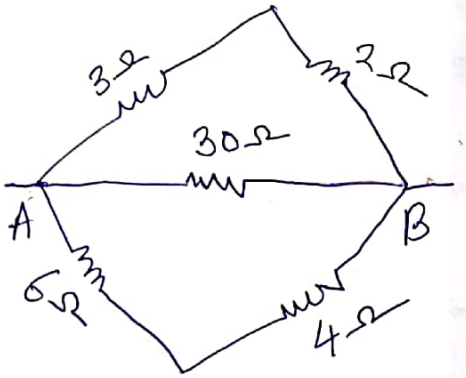
2)



A, B, C are ammeters.
B reads 0·5 A.
a) Find readings of A & C
b) Total R of the circuit

[1·5A, 1A, 4 Ω]

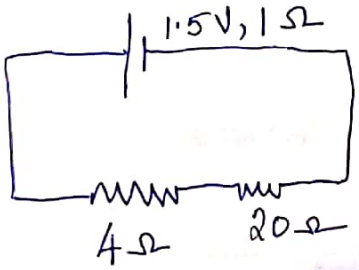
3)



Find equivalent R

[3 Ω]

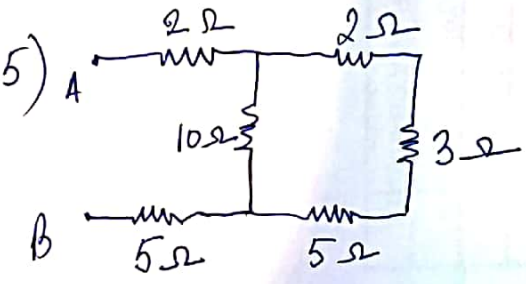
4)



a) current in the circuit
b) p.d. across 4 Ω
c) voltage drop when current is flowing
d) p.d. across the terminals of the cell.

[0·06A, 0·24V, 0·06V, 1·44V]

5)



Find equivalent R between A & B

[12 Ω]

4. An electric heater is rated 1000 W 200 V. Calculate its resistance and current thru' it.

5. Calculate the value of the resistance which must be connected to a 15 Ω resistance to provide an effective resistance of 6 Ω ?

6. A family uses a light of 100 W, a fan of 100 W and a heater of 1000 W, each for 8 hours a day. If the cost of electricity is ₹ 2 per unit, what is the electricity bill for a month of 30 days?

7. The equivalent R is 4 Ω. Find x