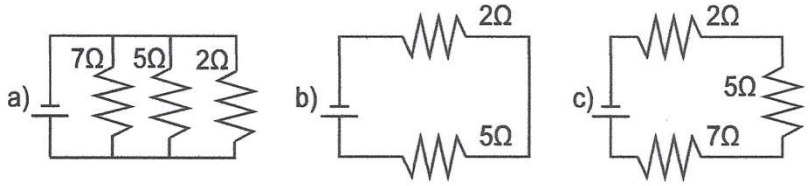
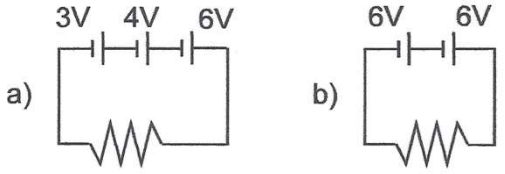
CIRCUITS WORKSHEET

1. Determine the equivalent (total) resistance for each of the following circuits below.

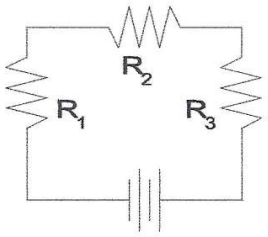


2. Determine the total voltage (electric potential) for each of the following circuits below.



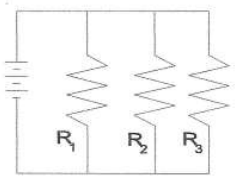
3. Fill out the table for the circuit diagramed at the right.

Circuit Position	Voltage (V)	Current (A)	Resistance (Ω)
1			10.0
2			20.0
3			30.0
Total	6.00		



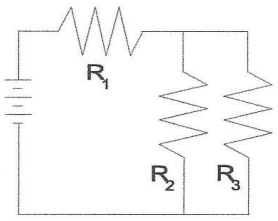
4. Fill out the table for the circuit diagramed at the right.

Circuit Position	Voltage (V)	Current (A)	Resistance (Ω)
1			10.0
2			20.0
3			30.0
Total	6.00		



5. Fill out the table for the circuit diagramed at the right.

Circuit Position	Voltage (V)	Current (A)	Resistance (Ω)
1			10.0
2			20.0
3			30.0
Total	6.00		



Answers
1a) 1.2 Ω 1b) 7 Ω 1c) 14 Ω
2a) 13 V 2b) 12 V
3)
R1: 1 V 0.1 A 10 Ω
R2: 2 V 0.1 A 20 Ω
R3: 3 V 0.1 A 30 Ω
T: 6 V 0.1 A 60 Ω
4)
R1: 6V 0.6A 10 Ω
R2: 6V 0.3A 20 Ω
R3: 6V 0.2A 30 Ω
T: 6V 1.1A 5.45Ω
5)
R1: 2.7V 0.27A 10 Ω
R2: 3.27V 0.16A 20 Ω
R3: 3.27V 0.109A 30 Ω
T: 6V 0.27A 22 Ω