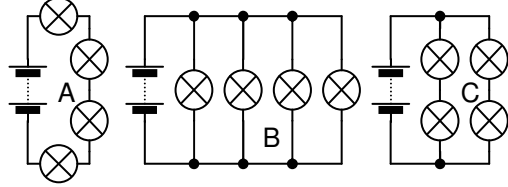


Questions on Basics

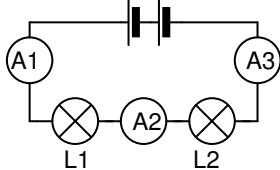
Q1

In the diagram, if one lamp fails, in which of the circuits A, B and C, will the total number of lamps going out be (a) one, (b) two, (c) four?

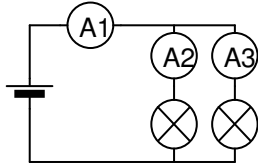


Q2

(a) In diagram (a), if A1 reads 0.2A, what are the readings of A2 and A3?



(b) In diagram (b), if A2 reads 0.3A and A3 reads 0.2A, what does A1 read?



Q3

What are the voltages of the batteries of 1.5v cells, connected as (a) and (b)?

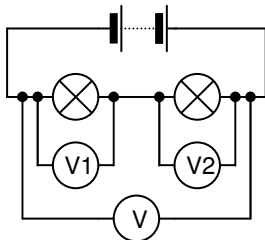


Q4

Three voltmeters are connected as shown below.

(a) If V reads 9v and V1 reads 6v, what does V2 read?

(b) Copy the diagram and mark the +ve terminals of all the voltmeters for correct connection.



Q5

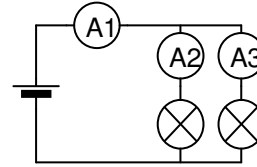
(a) What are the following in milliamps: (i) 1A, (ii) 0.5A, (iii) 0.02A?

(b) What are the following in Amps: (i) 1500mA, (ii) 300mA, (iii) 60mA?

(c) What are the following in microamps: (i) 2mA, (ii) 0.4mA, (iii) 0.005mA?

Q6

If the lamps are exactly the same as each other, what do A2 and A3 read if A1 reads 0.4A?



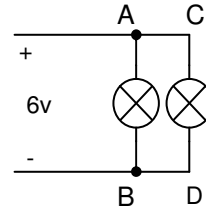
Q7

The table gives the voltmeter readings obtained with the circuit of Q4 when different batteries were used. What are the values of x, y and z?

Reading in volts		
V	V1	V2
X	12	6
6	4	Y
12	Z	4

Q8

In the diagram what is the voltage drop across (a) AB and (b) CD?



Q9

(a) Express in millivolts: (i) 1v, (ii) 0.7v, (iii) 0.02v.

(b) Express in volts: (i) 1600mV, (ii) 400mV, (iii) 50mV

Q10

In the diagram below, if the lamps all have the same resistance, what do the three voltmeters read?

