

Ex 10 What is the voltage?

- 1 The circuit in Fig. 1 is set up like that of an ordinary torch. A voltmeter can be connected between various points in the circuit.

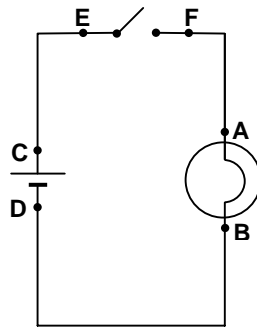
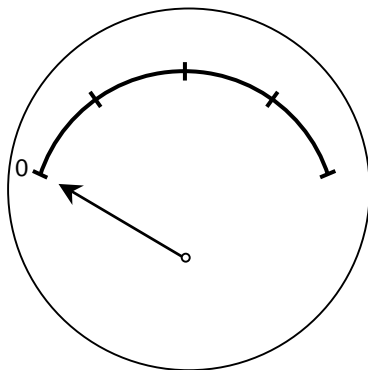


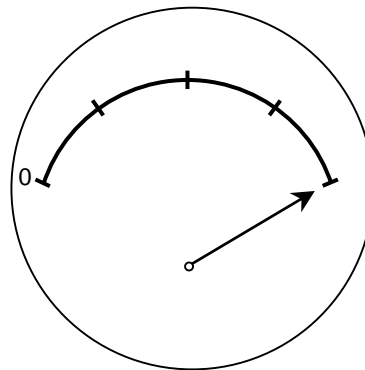
Fig. 1

When the voltmeter is connected between **points A and B** it appears as shown below:

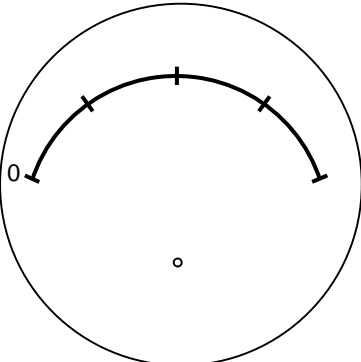
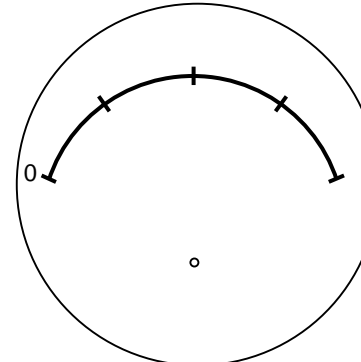
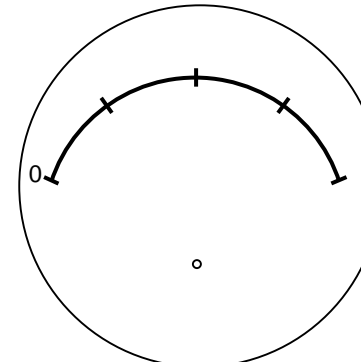
(i) before the switch is closed



(ii) after the switch is closed



Mark in the approximate position of the **needle** when the voltmeter is connected in the circuit in Fig. 1 between points -

<p>(a) C and D <u>before</u> the switch is closed</p> 	<p>(b) E and F <u>before</u> the switch is closed</p> 	<p>(c) E and F <u>after</u> the switch is closed</p> 
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2 The torch circuit of Fig. 1 is modified by adding a second **identical** globe to give the circuits of Figs 2 and 3.

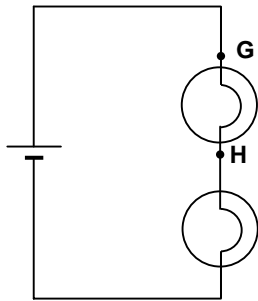


Fig. 2

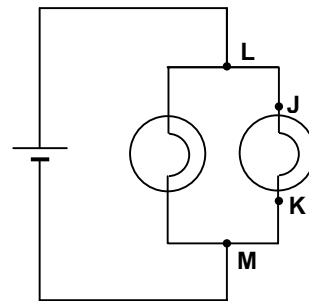


Fig. 3

Mark in the approximate position of the **needle** when the voltmeter is connected in the circuits in Figs 2 and 3 between points -

<p>(a) G and H</p>	<p>(b) J and K</p>	<p>(c) L and M</p>
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Ex 10

3 The circuit of Figure 3 is modified by adding three more **identical** globes to give the circuit of Figure 4.

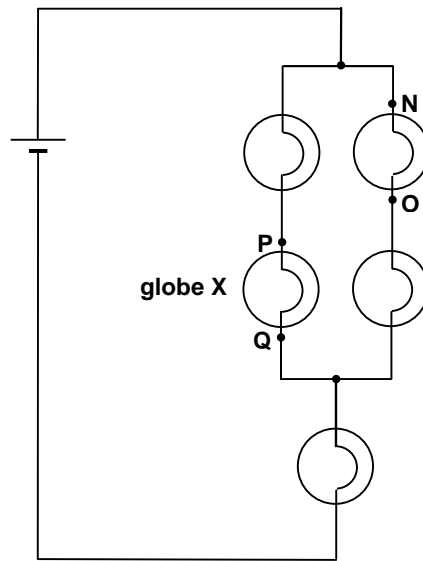


Fig. 4

Mark in the approximate position of the **needle** when the voltmeter is connected between points -

<p>(a) N and O</p>	<p>(b) N and O after globe X is removed from its socket</p>	<p>(c) P and Q with globe X still removed from its socket</p>
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