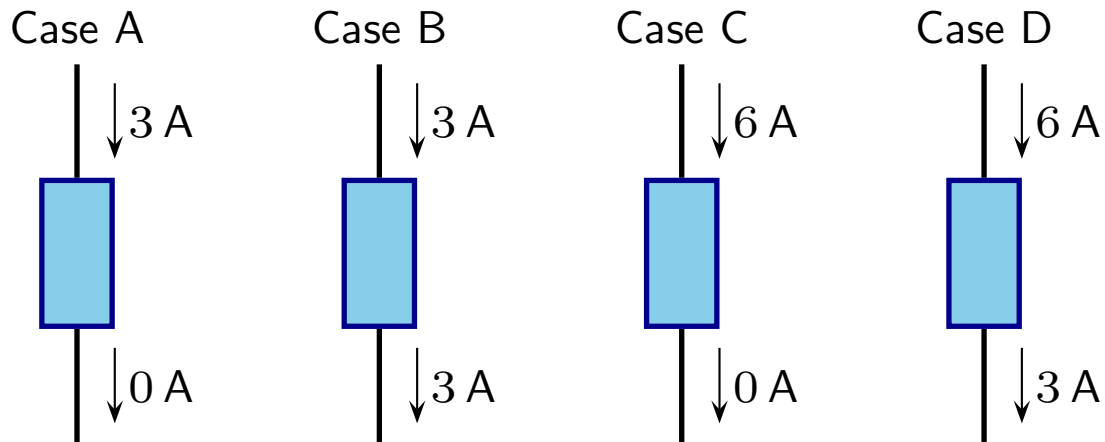


Question 1

Consider an Ohmic circuit device with two connecting ends. The resistance of the device is 2Ω and the potential difference across the device is 6 V . Several conceivable current flow scenarios are illustrated.

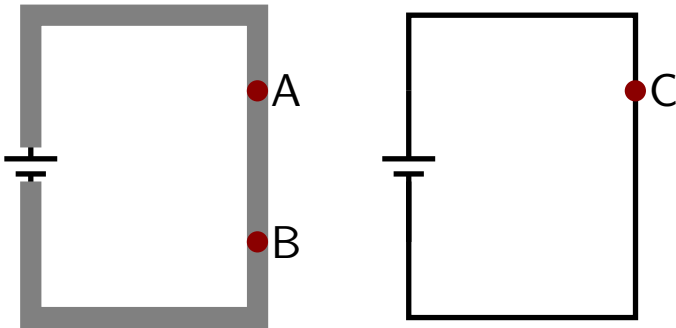


Which are correct?

1. Only A.
2. Only B.
3. Only C.
4. Only D.
5. Only A and C.
6. Only B and D.

Question 2

Two identical batteries are connected in two different scenarios as illustrated. In the scenario on the left a thicker wires (smaller resistance) are used.

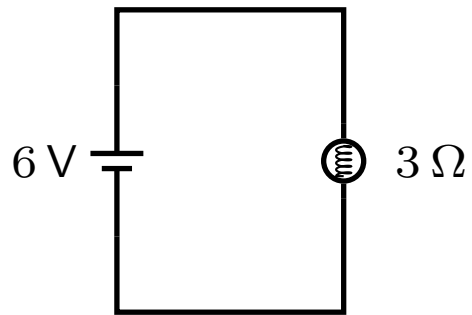


Which of the following represents the rank of the magnitude of the currents?

1. $I_A = I_B = I_C$
2. $I_A = I_B > I_C$
3. $I_C > I_A = I_B$
4. $I_B > I_A = I_C$
5. $I_C = I_A > I_B$

Question 3

A bulb is connected to a battery as illustrated.



The wires offer negligible resistance.

Which of the following represents the power produced by the bulb?

1. 0 W
2. 0.5 W
3. 2 W
4. 6 W
5. 12 W