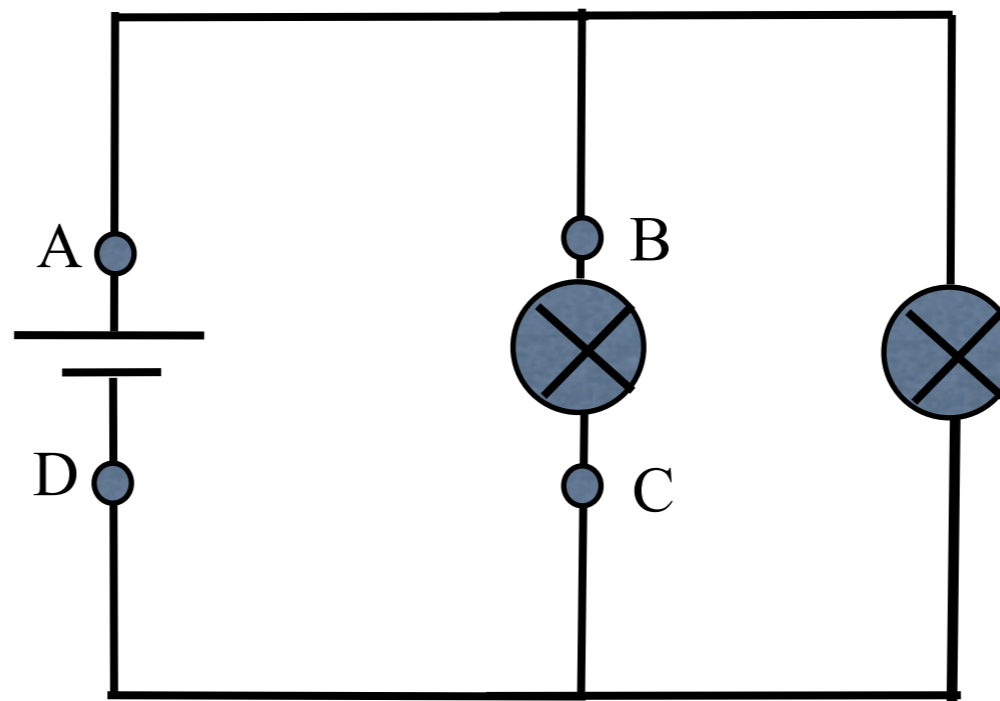


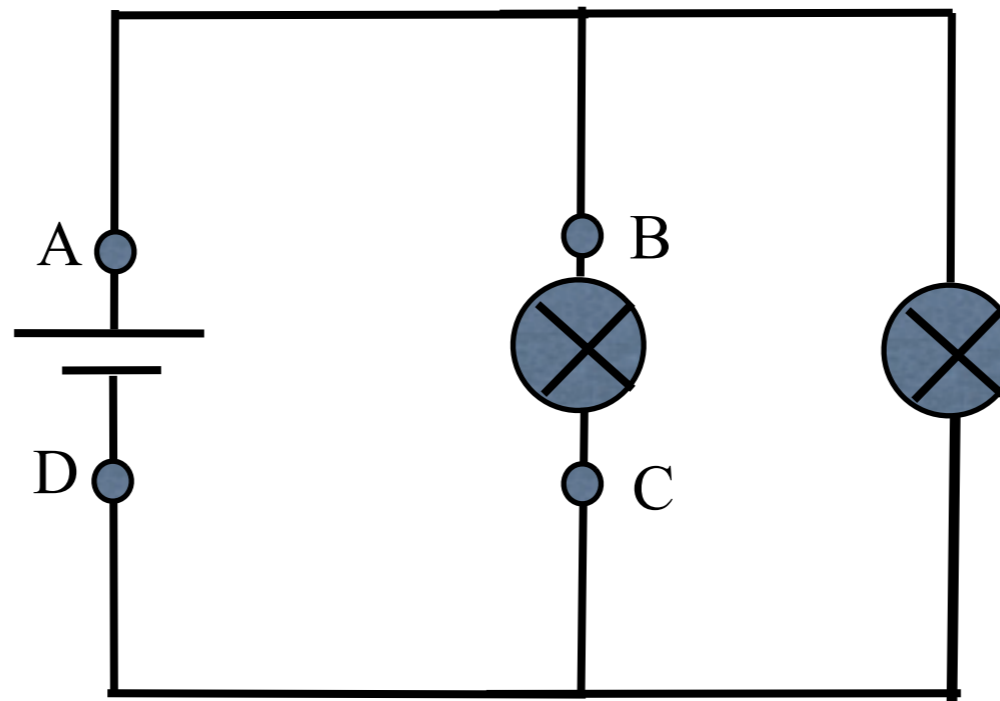
A second identical bulb is added to the circuit on the left, as shown.

- A. The current at A is now twice as large as before.
- B. The current at A is now larger than before but not twice as large.
- C. The current at A is the same as before.
- D. The current at A is now half as large as before.
- E. The current at A is now smaller than before but not half as large.



Compare the current through the bulb connected between B and C now to the current through it before when there was only one bulb.

- A. The current is larger than it was before.
- B. The current is the same as before.
- C. The current is smaller than it was before.

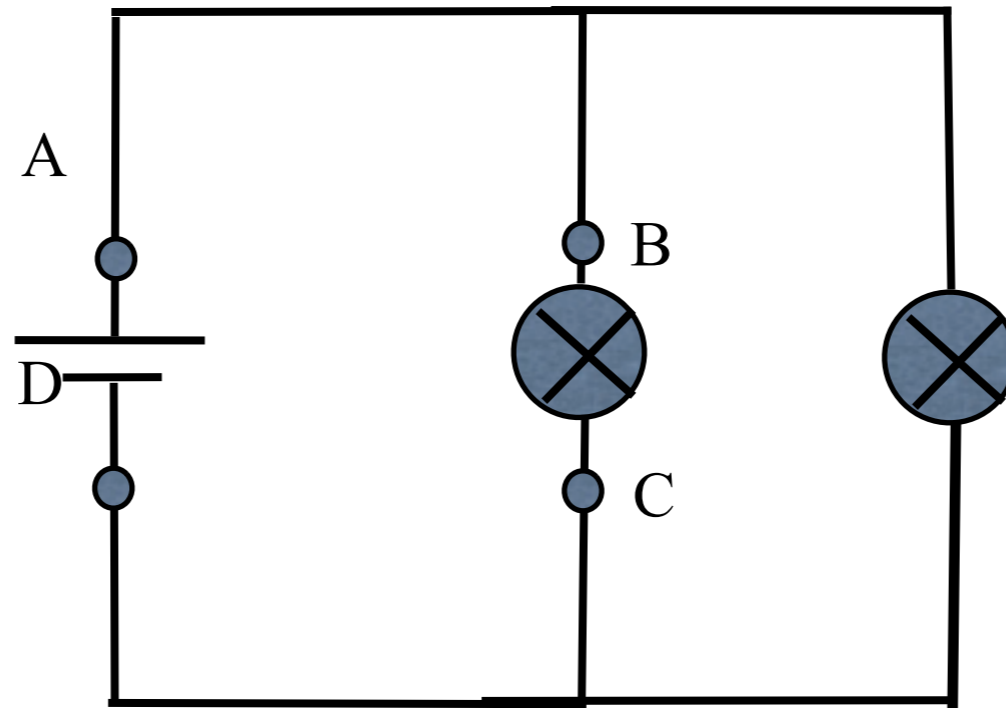


Compare the brightness of the bulb connected between B and C now to its brightness before when there was only one bulb.

A. The bulb is brighter than it was before.

B. The bulb is just as bright as before.

C. The bulb is dimmer than it was before.

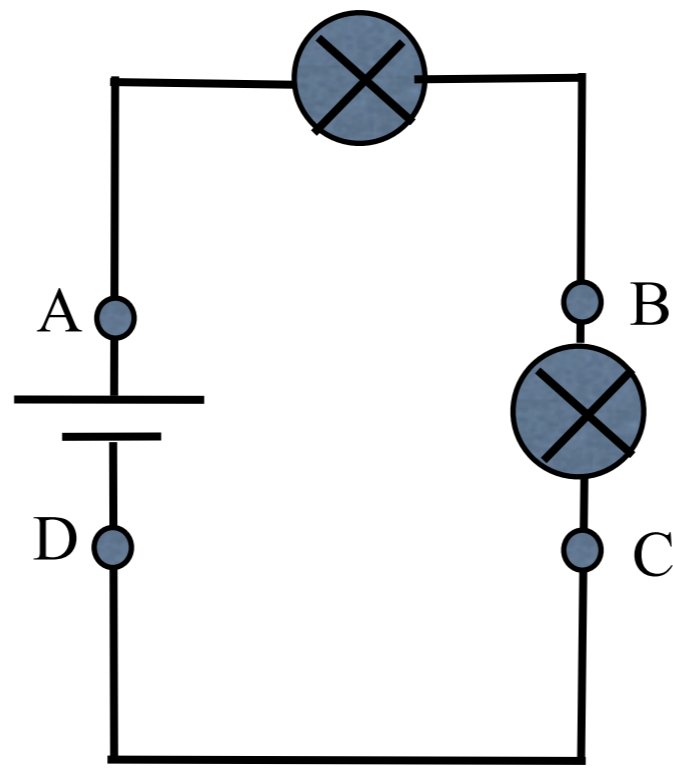


Compare the potential difference,  $V$ , across the bulb now to what it was before when there was only one bulb.

- A. The potential difference is now twice as large as before.
- B. The potential difference is now larger than before but not twice as large.
- C. The potential difference is the same as before.
- D. The potential difference is now half as large as before.
- E. The potential difference is now smaller than before but not half as large.

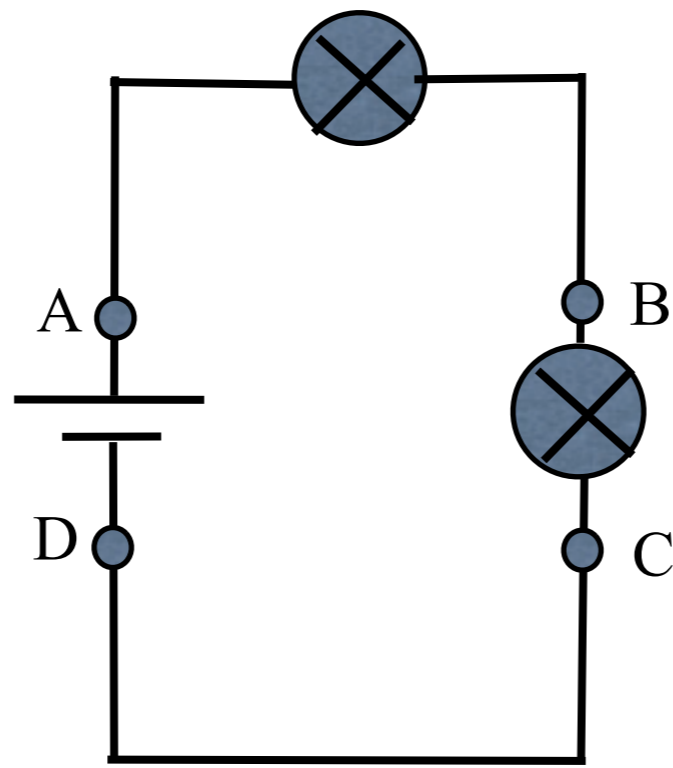
Phet

<https://phet.colorado.edu/en/simulations/category/physics>



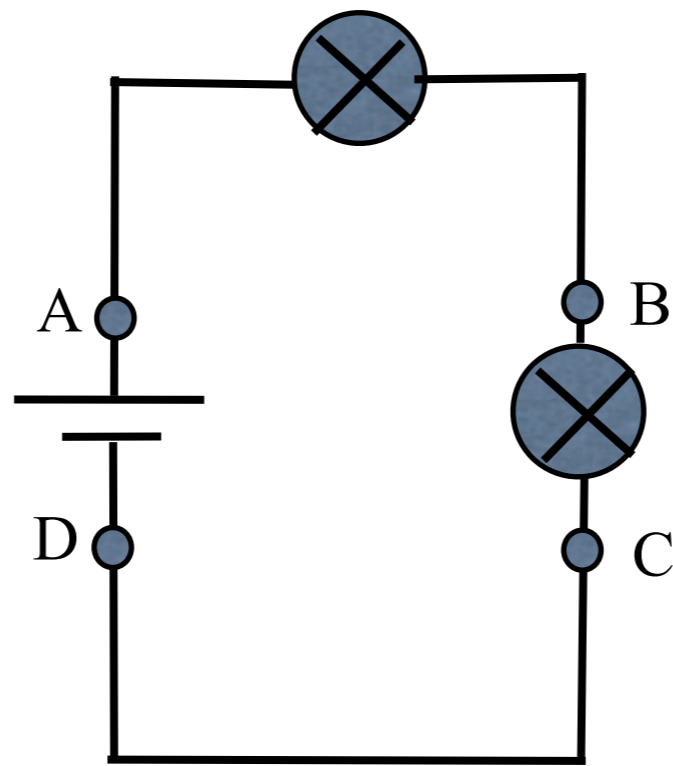
A second identical bulb is added to the circuit in the question above, as shown.

- A. The current at A is now twice as large as before.
- B. The current at A is now larger than before but not twice as large.
- C. The current at A is the same as before.
- D. The current at A is now half as large as before.
- E. The current at A is now smaller than before but not half as large.



Compare the current through the bulb connected between B and C now to the current through it before when there was only one bulb.

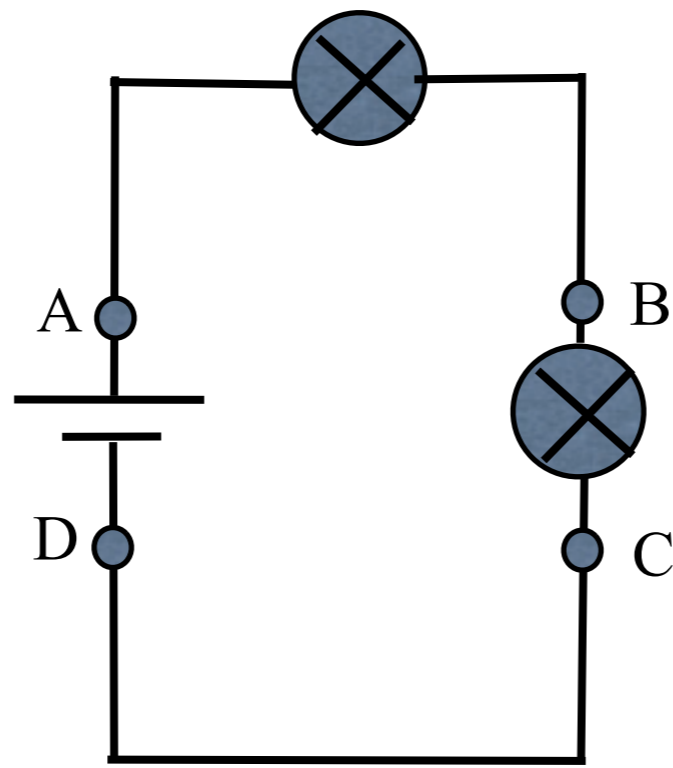
- A. The current is larger than it was before.
- B. The current is the same as before.
- C. The current is smaller than it was before.



Compare the brightness of the bulb connected between B and C now to its brightness before when there was only one bulb.

- A. The bulb is brighter than it was before.
- B. The bulb is just as bright as before.
- C. The bulb is dimmer than it was before.





Compare the potential difference  $V$  across the bulb now to what it was before when there was only one bulb.

- A. The potential difference is now twice as large as before.
- B. The potential difference is now larger than before but not twice as large.
- C. The potential difference is the same as before.
- D. The potential difference is now half as large as before.
- E. The potential difference is now smaller than before but not half as large.