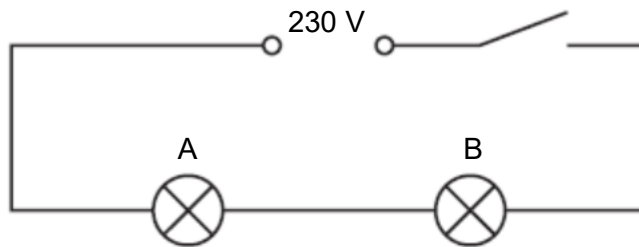


- 22** In the circuit shown, lamp A is rated 230 V, 10 W and lamp B is rated 230 V, 40 W. The two lamps are connected in series to a 230 V power supply.



Assume that the resistance of each lamp remains constant at all temperatures.

Which statement most accurately describes what happens when the switch is closed?

- A** Lamp A emits twice as much power as lamp B.
- B** Lamp A emits four times as much power as lamp B.
- C** Lamp B emits twice as much power as lamp A.
- D** Lamp B emits four times as much power as lamp A.