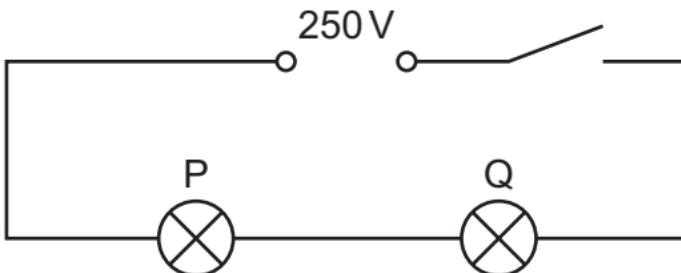


- 31 In the circuit shown, lamp P is rated 250V, 50W and lamp Q is rated 250V, 200W. The two lamps are connected in series to a 250V power supply.



Assume that the resistance of each lamp remains constant.

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

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