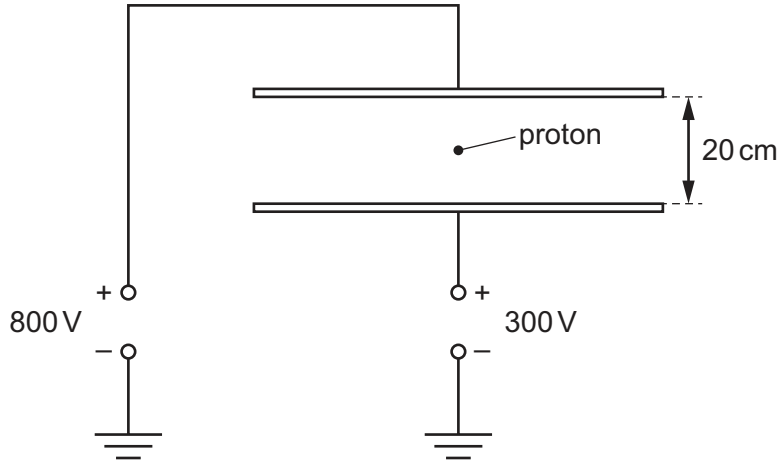
27 Two parallel metal plates are situated 20 cm apart in a vacuum. They are connected to two sources of potential difference as shown.



A proton is released in the space between the plates.

What is the magnitude and direction of the acceleration of the proton?

A $2.4 \times 10^{11}\,\text{m s}^{-2}$ downwards

B $2.4 \times 10^{11}\,\text{m s}^{-2}$ upwards

C $5.3 \times 10^{11}\,\text{m s}^{-2}$ downwards

D $5.3 \times 10^{11}\,\text{m s}^{-2}$ upwards