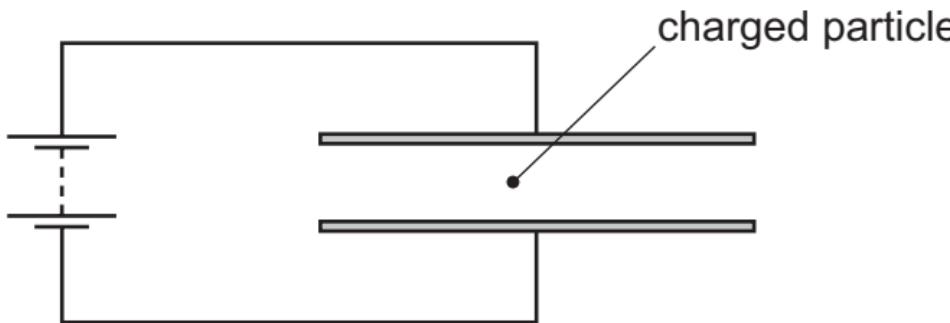


- 31 A charged particle is in the electric field between two horizontal metal plates connected to a source of constant potential difference, as shown.



There is a force  $F$  on the particle due to the electric field.

The separation of the plates is doubled.

What will be the new force on the particle?

**A**  $\frac{F}{4}$

**B**  $\frac{F}{2}$

**C**  $F$

**D**  $2F$

- 32 The potential difference between point X and point Y in a circuit is 20V. The time taken for charge