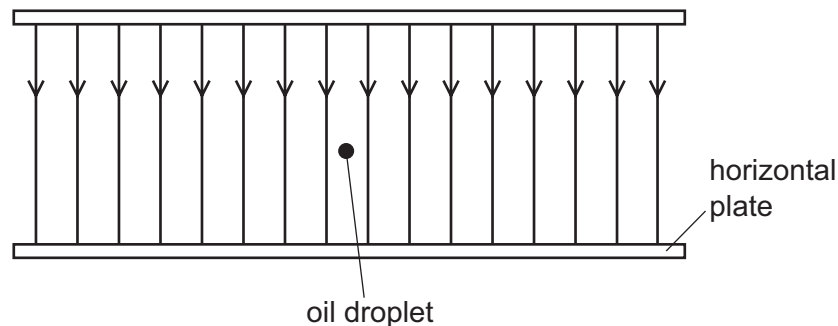


- 12** A tiny oil droplet with mass  $6.9 \times 10^{-13} \text{ kg}$  is at rest in an electric field of electric field strength  $2.1 \times 10^7 \text{ NC}^{-1}$ , as shown.



The weight of the droplet is exactly balanced by the electrical force on the droplet.

What is the charge on the droplet?

- A**  $3.3 \times 10^{-20} \text{ C}$
- B**  $-3.3 \times 10^{-20} \text{ C}$
- C**  $3.2 \times 10^{-19} \text{ C}$
- D**  $-3.2 \times 10^{-19} \text{ C}$

**Space for working**