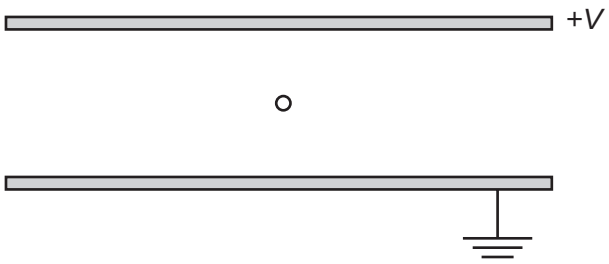
26 A small charge q is placed in the electric field of a large charge Q.

Both charges experience a force F.

What is the electric field strength of the charge Q at the position of the charge q?

A $\frac{F}{Qq}$ **B** $\frac{F}{Q}$ **C** FqQ **D** $\frac{F}{q}$

27 The diagram shows two parallel horizontal metal plates held at a potential difference V.



A small charged liquid drop, midway between the plates, is held in equilibrium by the combination of its weight and the electric force acting on it.

The acceleration of free fall is g and the electric field strength is E.

What is the ratio of the charge to mass of the drop, and the polarity of the charge on the drop?

	$\frac{\text{charge}}{\text{mass}}$	polarity
A	$\frac{g}{E}$	positive
B	$\frac{g}{E}$	negative
C	$\frac{E}{g}$	positive
D	$\frac{E}{g}$	negative

Space for working