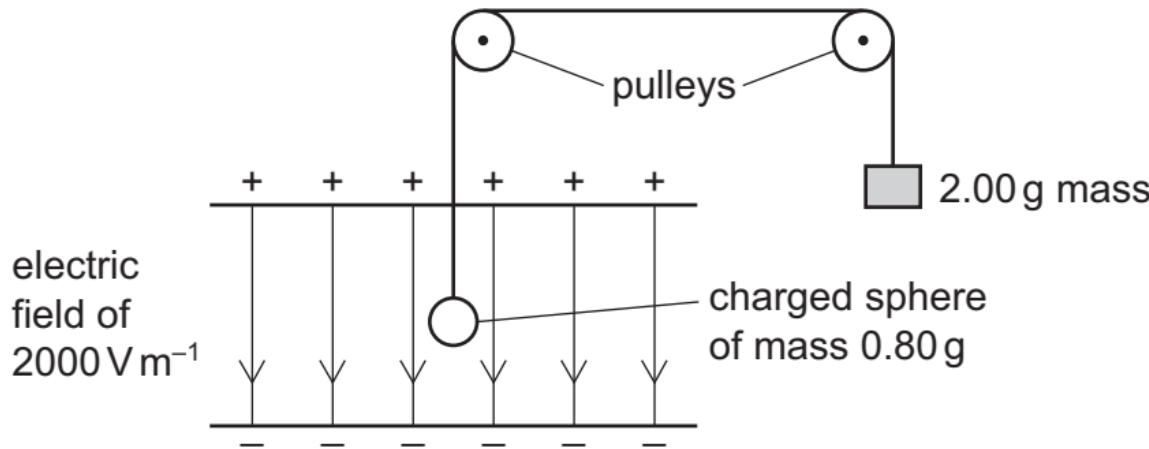


- 31 A small charged sphere of mass 0.80 g hangs from a light thread inside a vertical uniform electric field of strength  $2000 \text{ V m}^{-1}$ . The thread passes over two frictionless pulleys and a mass of 2.00 g hangs on the other end.



The sphere is in equilibrium.

What is the charge on the sphere?

A  $-5.9 \mu\text{C}$

B  $+0.60 \mu\text{C}$

C  $+5.9 \mu\text{C}$

D  $+9.8 \mu\text{C}$