

- 19** An oil drop, carrying a charge of $-3.2 \times 10^{-19} \text{ C}$, is stationary in the region between two horizontal plates when the potential difference between the two plates is $5.0 \times 10^3 \text{ V}$. The separation of the plates is 16 mm.

What is the initial acceleration of the oil drop when the potential difference is decreased to $4.0 \times 10^3 \text{ V}$?

- A** 0.20 m s^{-2} **B** 2.0 m s^{-2} **C** 7.8 m s^{-2} **D** 18 m s^{-2}

