

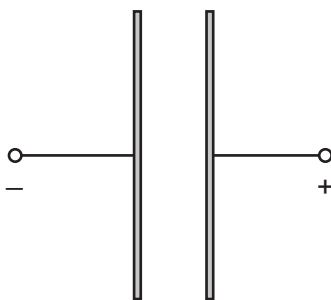
- 25 Using monochromatic light, interference fringes are produced on a screen placed a distance  $D$  from a pair of slits of separation  $a$ . The separation of the fringes is  $x$ .

Both  $a$  and  $D$  are now doubled.

What is the new fringe separation?

- A  $\frac{x}{2}$                       B  $x$                       C  $2x$                       D  $4x$

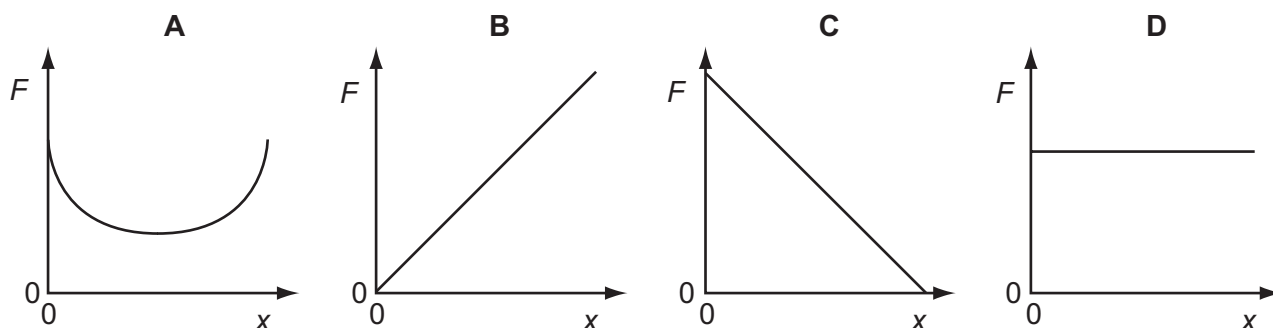
- 26 Two oppositely-charged parallel plates are arranged as shown.



An electron is released from rest from the surface of the negatively-charged plate.

The electron travels from the negatively-charged plate towards the positively-charged plate.

Which graph shows how the force  $F$  on the electron varies with its distance  $x$  from the negative plate?



Space for working