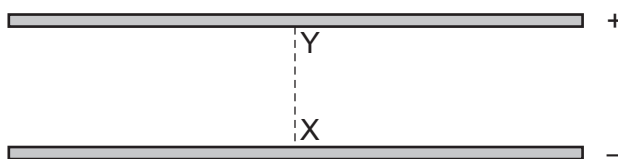
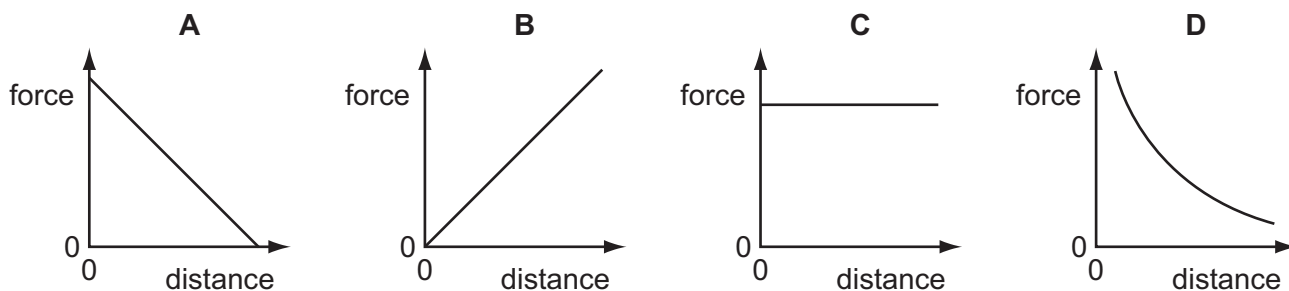


- 30 Two charged parallel metal plates produce an electric field.



A charged particle moves from X to Y.

Which graph shows the variation of the force on the particle with distance from X along the line XY?



- 31 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  $\frac{F}{q}$

- 32 The current in a component is reduced uniformly from 100 mA to 20 mA over a period of 8.0 s.

What is the charge that flows during this time?

- A 160 mC      B 320 mC      C 480 mC      D 640 mC

**Space for working**