

- 19** Two point charges are separated by a distance of 200 mm. The force of attraction between them is $180 \mu\text{N}$.

The distance between the point charges is increased to 600 mm.

What is the new force of attraction?

A $20 \mu\text{N}$

B $45 \mu\text{N}$

C $60 \mu\text{N}$

D $90 \mu\text{N}$

- 20** An alpha particle is moving towards a stationary gold nucleus. The alpha particle has a kinetic energy