

- 27** An electron is accelerated from rest through a potential difference to achieve a final kinetic energy of $9.3 \times 10^{-16} \text{ J}$.

What is the de Broglie wavelength of the electron after being accelerated through this potential difference?

A $5.1 \times 10^{-10} \text{ m}$

B $1.6 \times 10^{-11} \text{ m}$

C $5.1 \times 10^{-12} \text{ m}$

D $3.6 \times 10^{-19} \text{ m}$

