

2 A metal sphere of radius r is dropped into a tank of water. As it sinks at speed v , it experiences a drag force F given by $F = krv$, where k is a constant.

What are the SI base units of k ?

A $\text{kg m}^2 \text{s}^{-1}$

B $\text{kg m}^{-2} \text{s}^{-2}$

C $\text{kg m}^{-1} \text{s}^{-1}$

D kg m s^{-2}

3 Which physical quantity would result from a calculation in which a potential difference is multiplied