

- 2** The frictional force F on a sphere falling through a fluid is given by the formula

$$F = 6\pi a\eta v$$

where a is the radius of the sphere, η is a constant relating to the fluid and v is the velocity of the sphere.

What are the units of η ?

- A** kg m s^{-1} **B** $\text{kg m}^{-1} \text{s}^{-1}$ **C** kg m s^{-3} **D** $\text{kg m}^3 \text{s}^{-3}$

- 3** What is the component of this displacement vector in the direction XY ?