

- 1 Which row shows a base quantity with its correct SI unit?

	quantity	unit
A	current	A
B	mass	g
C	temperature	°C
D	weight	N

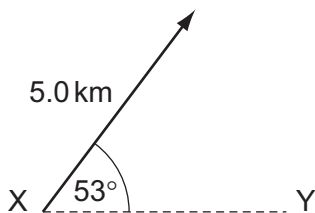
- 2 The frictional force F on a sphere falling through a fluid is given by the formula

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

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?



- A** 3.0 km **B** 4.0 km **C** 5.0 km **D** 6.6 km

Space for working