

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

	quantity	unit
<b>A</b>	current	A
<b>B</b>	mass	g
<b>C</b>	temperature	°C
<b>D</b>	weight	N

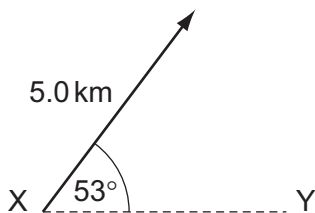
- 2 The frictional force  $F$  on a sphere falling through a fluid is given by the formula

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

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

What are the units of  $\eta$ ?

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