1 Which pair of units are **not** the same when expressed in SI base units?

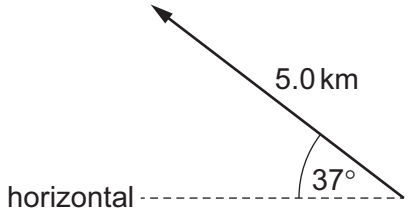
A $m\,s^{-2}$ and $N\,kg^{-1}$

B $N\,s$ and $kg\,m\,s^{-1}$

C Pa and $N\,m^{-2}$

D $V\,m^{-2}$ and $N\,C^{-1}$

2 What is the vertical component of this displacement vector?



A 3.0 km **B** 3.8 km **C** 4.0 km **D** 5.0 km

3 The units of specific heat capacity are $J\,kg^{-1}\,K^{-1}$.

What are the SI base units of specific heat capacity?

A $m\,s^{-2}\,K^{-1}$ **B** $m\,s^{-1}\,K^{-1}$ **C** $m^2\,s^{-2}\,K^{-1}$ **D** $m^2\,s^{-1}\,K^{-1}$

4 A quantity y is to be determined from the equation shown.

$$y = \frac{px}{q^2}$$

The percentage uncertainties in p, x and q are shown.

	percentage uncertainty
p	6%
x	2%
q	4%

What is the percentage uncertainty in y?

A 0.5% **B** 0.75% **C** 12% **D** 16%