

- 1 When the brakes are applied on a vehicle moving at speed v , the distance d moved by the vehicle in coming to rest is given by the expression

$$d = kv^2$$

where k is a constant.

What is the unit of k expressed in SI base units?

- A** m^{-1}s^2 **B** ms^{-2} **C** m^2s^{-2} **D** m^{-1}s
- 2 Which list contains one vector quantity and two scalar quantities?
- A** displacement, weight, velocity
- B** force, acceleration, time
- C** momentum, mass, speed
- D** work, density, energy

Space for working