1 What is a unit for stress?
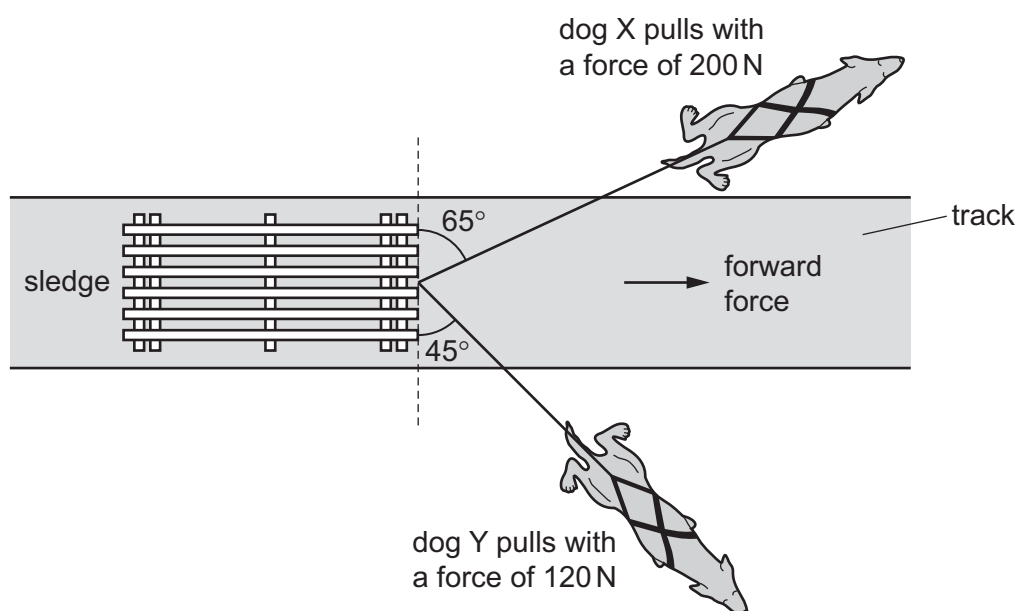
A $kg\,m^{-1}\,s^{-2}$ **B** $kg\,m^{-2}\,s^{-2}$ **C** $N\,m^{-1}$ **D** $N\,m$

2 Physical quantities can be classed as vectors or as scalars.

Which pair of quantities consists of two vectors?

A kinetic energy and force

B momentum and time

C velocity and electric field strength

D weight and temperature

3 Two dogs pull a sledge along an icy track, as shown.

Dog X pulls with a force of 200 N at an angle of 65° to the front edge of the sledge. Dog Y pulls with a force of 120 N at an angle of 45° to the front edge of the sledge.

What is the resultant forward force on the sledge exerted by the two dogs?

A 80 N   **B** 170 N   **C** 270 N   **D** 320 N