

- 3 The speed of an aeroplane in still air is  $200\text{ km h}^{-1}$ . The wind blows from the west at a speed of  $85.0\text{ km h}^{-1}$ .

In which direction must the pilot steer the aeroplane in order to fly due north?

- A  $23.0^\circ$  east of north
- B  $23.0^\circ$  west of north
- C  $25.2^\circ$  east of north
- D  $25.2^\circ$  west of north

- 4 A student is given a reel of wire of diameter less than  $0.2\text{ mm}$  and is asked to find the density of