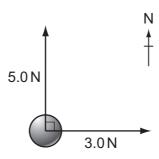
1 A force of 5.0 N pushes a ball due north and another force of 3.0 N pushes it due east.



What is the magnitude of the net force acting on the ball?

- **A** 2.8 N
- **B** 4.0 N
- **C** 5.8 N
- **D** 8.0 N
- **2** Decimal sub-multiples and multiples of units are indicated using a prefix to the unit. For example, the prefix milli (m) represents 10^{-3} .

Which row gives the sub-multiples or multiples represented by pico (p) and giga (G)?

| | pico (p) | giga (G) |
|---|-------------------|------------------|
| Α | 10 ⁻⁹ | 10 ⁹ |
| В | 10 ⁻⁹ | 10 ¹² |
| С | 10 ⁻¹² | 10 ⁹ |
| D | 10^{-12} | 10 ¹² |

- 3 Which definition is correct and uses only quantities rather than units?
 - A Density is mass per cubic metre.
 - **B** Potential difference is energy per unit current.
 - **C** Pressure is force per unit area.
 - **D** Speed is distance travelled per second.

Space for working