

1 Which list contains only SI base units?

- A ampere, kelvin, joule, gram
- B kilogram, newton, metre, ampere
- C metre, coulomb, second, kelvin
- D second, kelvin, ampere, kilogram

2 The stress σ needed to fracture a particular solid is given by the equation

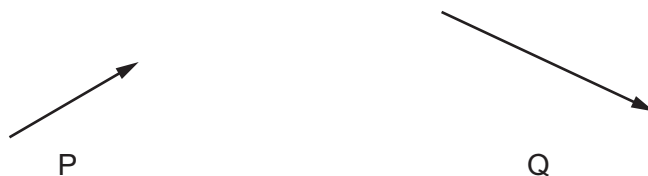
$$\sigma = k \sqrt{\frac{\gamma E}{d}}$$

where E is the Young modulus, d is the distance between planes of atoms, and k is a constant with no units.

What are the SI base units of γ ?

- A kg m s^{-2} B kg s^{-2} C kg m s^{-1} D kg s^{-1}

3 Vectors P and Q are drawn to scale.



Which diagram represents the vector $(P - Q)$?

