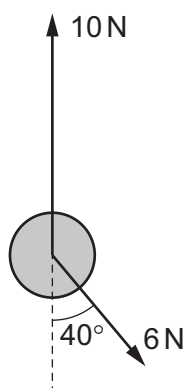


- 1 What is **not** a reasonable estimate of the physical property indicated?
- A  $2 \times 10^3 \text{ W}$  for the power dissipated by the heating element of an electric kettle
  - B  $4 \times 10^2 \text{ m}^3$  for the volume of water in a swimming pool
  - C  $5 \times 10^5 \text{ N s}$  for the momentum of a lorry moving along a road
  - D  $6 \times 10^2 \text{ N}$  for the weight of a fully grown racehorse
- 2 Which quantity could have units of  $\text{N m V}^{-1}$ ?
- A acceleration
  - B charge
  - C current
  - D resistance
- 3 An object is acted upon by two forces, 10 N in the vertical direction and 6 N at  $40^\circ$  to the vertical, as shown.



What is the resultant force acting on the object?

