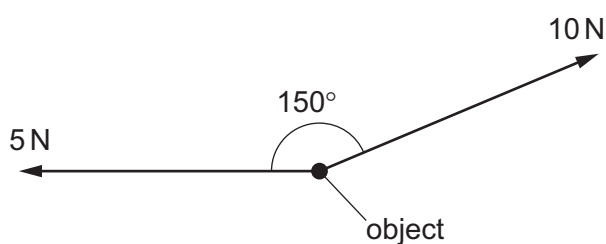


- 1 What is a reasonable estimate of the volume of an adult person?
- A 0.10 m^3 B 0.50 m^3 C 1.0 m^3 D 2.0 m^3
- 2 Which combination of units could be used for expressing the power dissipated in a resistor?
- A newton per second (N s^{-1})
- B newton second (N s)
- C newton metre (N m)
- D newton metre per second (N m s^{-1})
- 3 A force of 10 N and a force of 5 N act on an object.



The angle between the forces is 150° .

The resultant force on the object can be resolved into a pair of perpendicular components.

Which row shows numerical expressions for a possible pair of perpendicular components?

| | force component / N | force component / N |
|----------|------------------------|---------------------|
| A | $10 \cos 30^\circ - 5$ | $10 \cos 30^\circ$ |
| B | $10 \sin 30^\circ - 5$ | $10 \cos 30^\circ$ |
| C | $10 - 5 \cos 30^\circ$ | $5 \sin 30^\circ$ |
| D | $10 - 5 \sin 30^\circ$ | $5 \cos 30^\circ$ |