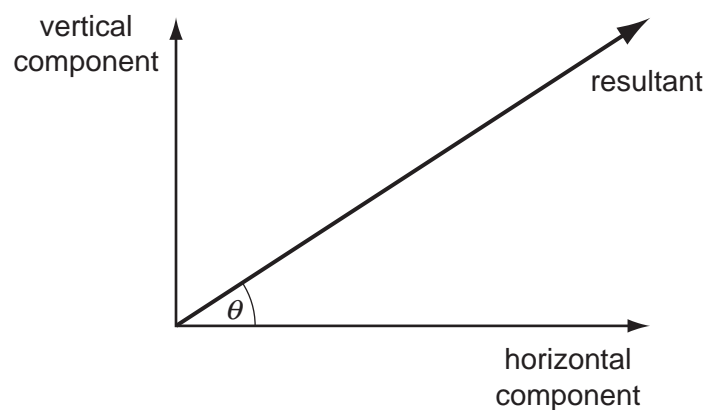


1 Which statement, involving multiples and sub-multiples of the base unit metre (m), is correct?

- A $1 \text{ pm} = 10^{-9} \text{ m}$
- B $1 \text{ nm} = 10^{-6} \text{ m}$
- C $1 \text{ mm} = 10^6 \mu\text{m}$
- D $1 \text{ km} = 10^6 \text{ mm}$

2 The diagram shows a resultant force and its horizontal and vertical components.



The horizontal component is 20.0 N and $\theta = 30^\circ$. What is the vertical component?

- A 8.7 N
- B 10.0 N
- C 11.5 N
- D 17.3 N

Space for working