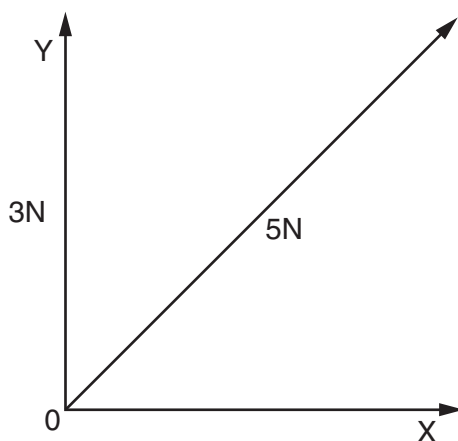


- 1 A student measures a current as 0.5 A.

Which of the following correctly expresses this result?

**A** 50 mA      **B** 50 MA      **C** 500 mA      **D** 500 MA

- 2 A force of 5 N may be represented by two perpendicular components OY and OX as shown in the diagram, which is **not** drawn to scale.



OY is of magnitude 3 N.

What is the magnitude of OX?

**A** 2 N      **B** 3 N      **C** 4 N      **D** 5 N

- 3 The momentum of an object of mass  $m$  is  $p$ .

Which quantity has the same base units as  $\frac{p^2}{m}$ ?

**A** energy  
**B** force  
**C** power  
**D** velocity

- 4 A thermometer can be read to an accuracy of  $\pm 0.5^\circ\text{C}$ . This thermometer is used to measure a temperature rise from  $40^\circ\text{C}$  to  $100^\circ\text{C}$ .

What is the percentage uncertainty in the measurement of the temperature rise?

**A** 0.5 %      **B** 0.8 %      **C** 1.3 %      **D** 1.7 %