1 Which unit is an SI base unit?

A ampere

B coulomb

C degree Celsius

D gram

2 Which of the following could have the same units as force?

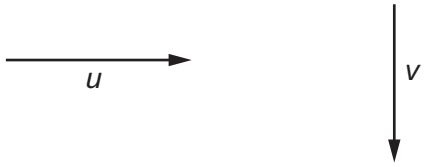
A $\frac{\text{energy}}{\text{distance}}$

B $\frac{\text{energy}}{\text{time}}$

C momentum × distance

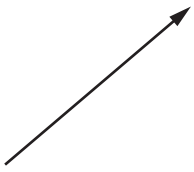
D momentum × time

3 The velocity of an object changes from an initial velocity u to a final velocity v. The vectors represent these velocities.

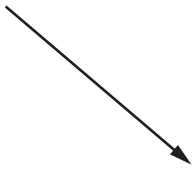


Which single vector represents the change in velocity of the object?

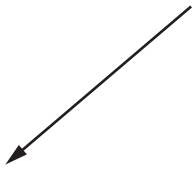
A



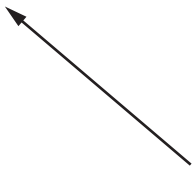
B



C



D



4 An object is moving with initial velocity u. The object then moves with uniform acceleration a for time t until it reaches final velocity v.

Which equation describes the motion of the object?

A $u = v - 2at$ **B** $u = v - at$ **C** $v = u + at^2$ **D** $v = u + 2at^2$