

10 What is a statement of the principle of conservation of momentum?

A In an elastic collision momentum is constant.

B Momentum is the product of mass and velocity.

C The force acting on a body is proportional to its rate of change of momentum.

D The momentum of an isolated system is constant.

11 The displacement of a particle is given by $s = 2t^3 - 3t^2 + 4t$, where s is in metres and t is in seconds. Find the displacement of the particle at $t = 1$ s.