

13 An object of mass m travelling with speed v has a head-on collision with another object of mass m travelling with speed v in the opposite direction. The two objects stick together after the collision.

What is the total loss of kinetic energy in the collision?

A 0

B $\frac{1}{2}mv^2$

C mv^2

D $2mv^2$

14 Two identical spheres X and Y approach each other with the speeds shown and undergo a head-on