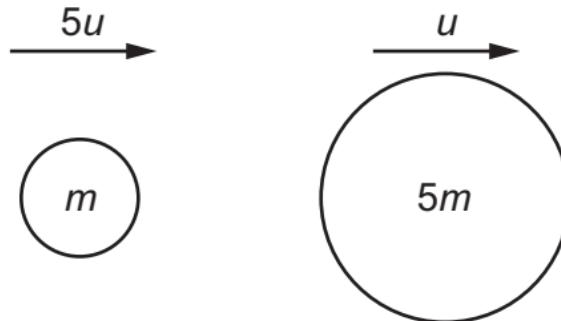


- 10 An object of mass  $m$  travelling with speed  $5u$  collides with, and sticks to, an object of mass  $5m$  travelling in the same direction with speed  $u$ .



What is the speed with which the two objects travel together in the original direction?

A  $\frac{3}{10}u$

B  $u$

C  $\frac{6}{5}u$

D  $\frac{10}{6}u$