

- 6** A molecule of mass m travels with velocity $+u$ directly towards a stationary molecule of mass $4m$ and collides elastically with it.

What is the velocity of the molecule of mass m after the collision?

A $+\frac{u}{5}$

B $-\frac{3}{5}u$

C $-\frac{4}{5}u$

D $-u$