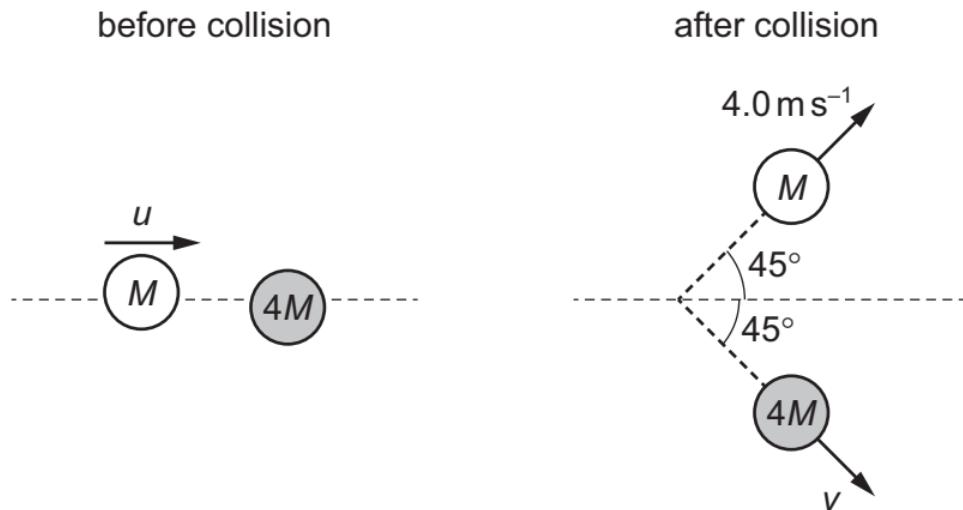


- 12 A disc of mass M is moving across a horizontal frictionless surface with constant velocity u . It collides with a stationary disc of mass $4M$.

The diagram shows the view from above of the motion of the two discs before and after the collision.



What is the initial velocity u of the disc of mass M ?

A 1.1 ms^{-1}

B 1.4 ms^{-1}

C 3.5 ms^{-1}

D 5.7 ms^{-1}