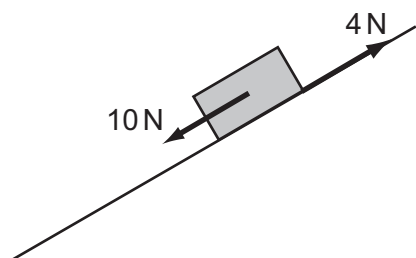


- 10 Two equal masses travel towards each other on a frictionless air track at speeds of 60 cm s^{-1} and 40 cm s^{-1} . They stick together on impact.



What is the speed of the masses after impact?

- A 10 cm s^{-1} B 20 cm s^{-1} C 40 cm s^{-1} D 50 cm s^{-1}
- 11 A brick weighing 20 N rests on an inclined plane. The weight of the brick has a component of 10 N parallel with the plane. The brick also experiences a frictional force of 4 N .



What is the acceleration of the brick down the plane? Assume that the acceleration of free fall g is equal to 10 ms^{-2} .

- A 0.3 ms^{-2} B 0.8 ms^{-2} C 3.0 ms^{-2} D 8.0 ms^{-2}

Space for working