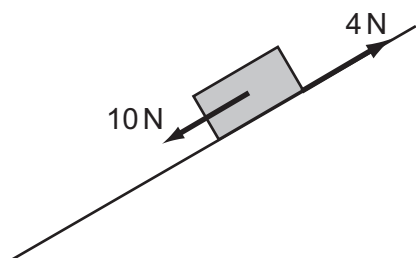
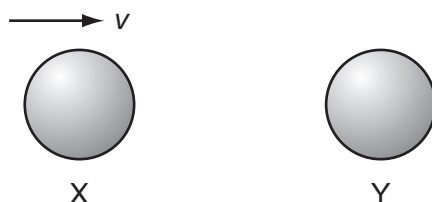


- 8 A brick weighing 20 N rests on an inclined plane. The weight of the brick has a component of 10 N parallel with the plane. The brick also experiences a frictional force of 4 N.



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}
- 9 The diagram shows two identical spheres X and Y.



Initially, X moves with speed v directly towards Y. Y is stationary. The spheres collide elastically.

What happens?

	X	Y
A	moves with speed $\frac{1}{2}v$ to the right	moves with speed $\frac{1}{2}v$ to the right
B	moves with speed v to the left	remains stationary
C	moves with speed $\frac{1}{2}v$ to the left	moves with speed $\frac{1}{2}v$ to the right
D	stops	moves with speed v to the right

Space for working