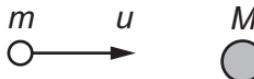
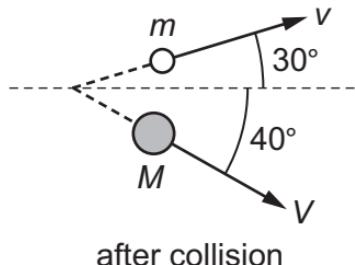


- 11 A ball of mass m travelling at velocity u collides with a stationary ball of mass M . After collision the two balls travel at velocities v and V respectively, in the directions shown.



before collision

not to scale



A student writes three equations relating to the collision.

Which row in the table indicates the correct and incorrect equations?

	$mu = MV + mv$	$mv \sin 30^\circ = MV \sin 40^\circ$	$mu = mv \cos 30^\circ + MV \cos 40^\circ$
A	correct	correct	correct
B	incorrect	correct	incorrect
C	correct	incorrect	incorrect
D	incorrect	correct	correct

- 12 A light rigid rod XY has an object of weight W fixed at one end. The rod is in equilibrium, resting