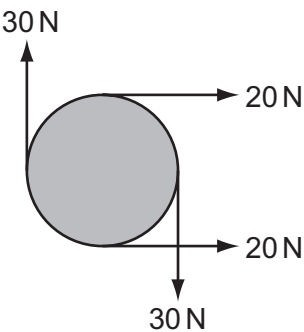


- 10 A body of mass  $m$ , moving at velocity  $v$ , collides with a stationary body of the same mass and sticks to it.

Which row describes the momentum and kinetic energy of the two bodies after the collision?

	momentum	kinetic energy
A	$mv$	$\frac{1}{4}mv^2$
B	$mv$	$\frac{1}{8}mv^2$
C	$2mv$	$\frac{1}{2}mv^2$
D	$2mv$	$mv^2$

- 11 The diagram shows four forces applied to a circular object.



Which row describes the resultant force and resultant torque on the object?

	resultant force	resultant torque
A	zero	zero
B	zero	non-zero
C	non-zero	zero
D	non-zero	non-zero

Space for working