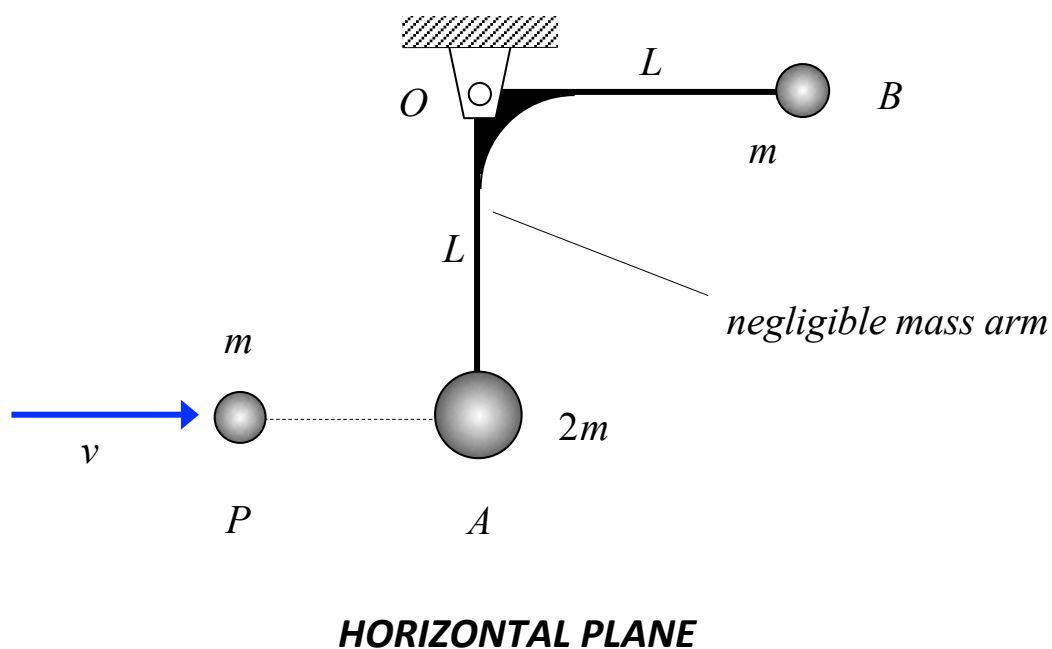


Homework H4.V

Given: Particles A and B (having masses of $2m$ and m , respectively) are attached to a rigid L-shaped arm, with the arm having negligible mass. With A and B being initially at rest, a third particle P (having a mass of m) impacts A with a speed of v , with the velocity of P before impact being perpendicular to OA. The coefficient of restitution for this impact is e . All motion of the system is in a horizontal plane.

Find: Determine the angular speed of the arm after impact.



Leave your answers in terms of, at most: m , L , v and e .