

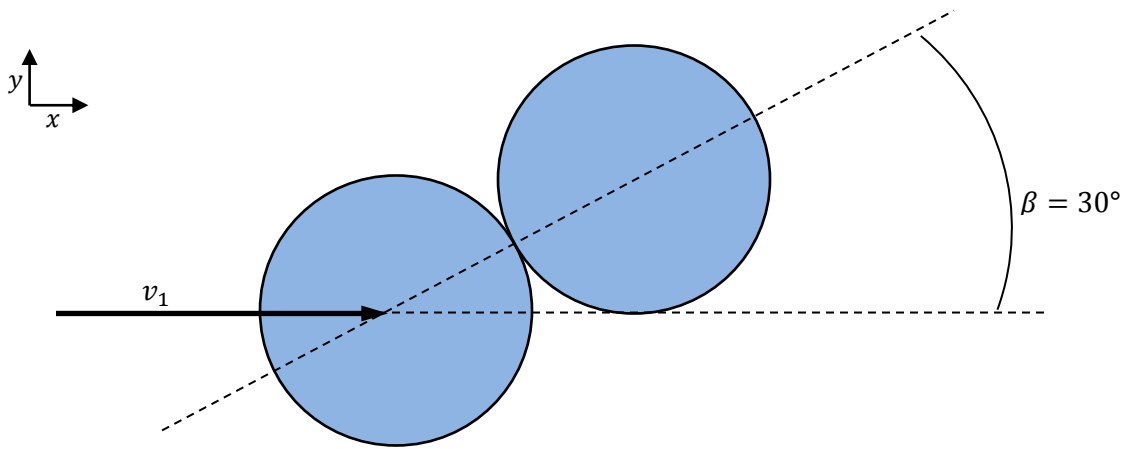
INFOMGP - GAME PHYSICS

EXERCISES LECTURE 7

EXERCISE 7.1

Assuming the following objects, in which direction and with what speed do the two balls move after the collision?

The left ball speed is 10 m/s, the coefficients of restitution are 0.5, and the two masses are 1 kg.



EXERCISE 7.2

Assume the following objects moving toward each other with the second box rotating around its center of mass. At what linear and angular velocities will the boxes move after the collision?

The speed of the boxes is 10 m/s, the angular speed of the second box is 5 rad/s, the coefficients of restitution are 0.5, the size of the boxes is 2x2x2, the two masses are 1 kg, the velocity of the second box is at 45 degrees and the second box hits the first one at a quarter of its height.

