

[mex267] Elastic collision on airtrack

Two blocks of masses $m_1 \geq m_2$ move with velocities v_0 and $-v_0$, respectively, toward each other on a frictionless airtrack and undergo an elastic collision.

(a) Find the velocity v_1 of the more massive block after the collision in units of v_0 and as a function of m_1 and m_2 .

(b) For what ratio m_1/m_2 does the more massive block stay at rest after the collision?



Solution: