

QUIZ # 6. Chapter 7. Linear Momentum PHYS 203

NAME:

Two chunks of ice are sliding on a frictionless frozen pond. Chunk A, with mass $m_A = 5.0$ kg, moves with initial velocity $v_{A1} = 2.0$ m/s parallel to the x-axis. It collides with chunk B, which has mass $m_B = 3.0$ kg and is initially at rest. After the collision, the velocity of chunk A is found to be $v_{A2} = 1.0$ m/s in a direction making an angle $\alpha = 30^\circ$ with the initial direction. What is the final velocity of chunk B?