

2-19. Two balls A and B collide with independent initial velocities $(v_A)_1 \sim N(4, 0.4^2)$ m/s and $(v_B)_1 \sim N(6, 0.6^2)$ m/s. If $m_A = 5$ kg and $m_B = 4$ kg, and the coefficient of restitution between the two balls is $e = 0.8$, determine the velocity of A just after collision. Assume the floor is smooth. **Solution:** $(v_A)_2 \sim N(4, 0.49^2)$ m/s

