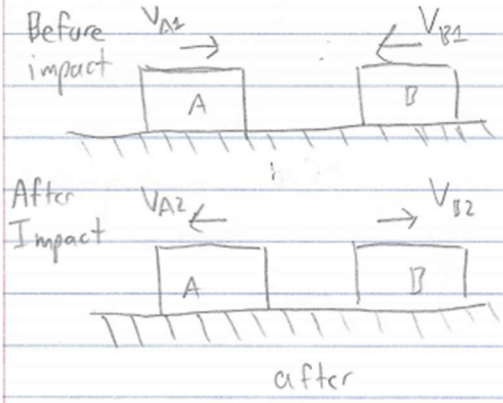
20-P-MOM-D4-4 8



Two blocks of equal mass are sliding towards each other on a frictionless floor. The speeds of block A and B were 5 m/s and 4 m/s before the impact. After the impact, the speeds of block A and B are 2 m/s and 6 m/s respectively. Determine the coefficient of restitution, e, between block A and B.

$$e = \frac{(v_B)_2 - (v_A)_2}{(v_A)_1 - (v_B)_1} = \frac{(6) - (-2)}{(5) - (-4)} = 0.88$$