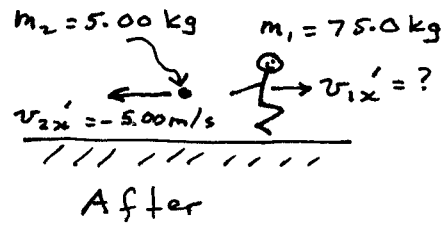
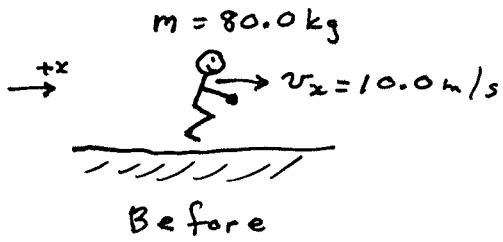


Exercise 8-22



Linear momentum is conserved.

$$\therefore m v_x = m_1 v_{1x}' + m_2 v_{2x}'$$

$$\therefore (80.0)(10.0) = 75.0 v_{1x}' + (5.00)(-5.00)$$

$$\therefore v_{1x}' = 11.0 \text{ m/s}$$