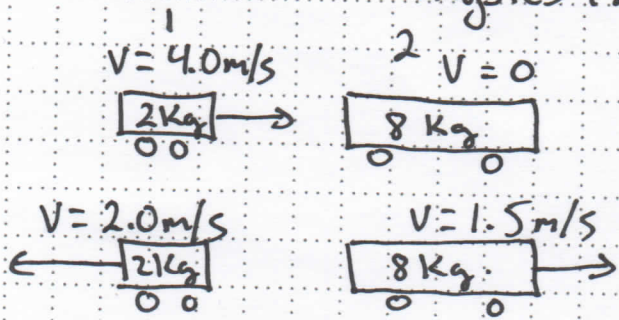


From the workbench of:
Date:

Physics 12 Review #28



West is -
East is +

$$\Delta P_1 = -\Delta P_2 \quad \text{from } \Delta P_1 + \Delta P_2 = 0$$

$$\Delta P_1 = P_1' - P_1$$

$$= m_1 v_1' - m_1 v_1$$

$$= 2 \times -2 - 2 \times 4$$

$$\Delta P_1 = -4 - 8 = -12 \text{ Kg m/s}$$

west

$$\therefore \Delta P_1 = -\Delta P_2$$

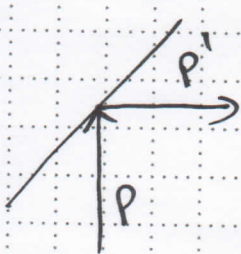
$$-12 = -\Delta P_2$$

$$12 = \Delta P_2 = +12 \text{ Kg m/s}$$

East

(D)

#2 Impulse = $\Delta P = P' - P$



$$\Delta P = \vec{P}' + \downarrow -P =$$

$$\Delta P = \sqrt{(0.25 \times 7.7)^2 + (0.25 \times 7.7)^2}$$

$$= 2.7 \text{ N}\cdot\text{s} \quad 45^\circ \text{ S of E}$$

(D)