

P #2

Ch 6 - pg 177

$$m = .06 \text{ kg}$$

$$v_1 = +50.0 \text{ m/s}$$

$$v_2 = -40.0 \text{ m/s}$$

$$\begin{array}{c} \xrightarrow{v_1 = +50} \\ \xleftarrow{v_2 = -40} \end{array}$$

$$\begin{aligned} \text{a) } \Delta p &= m \cdot \Delta v \\ &= m (v_2 - v_1) \\ &= (.06 \text{ kg})(-40 \text{ m/s} - +50 \text{ m/s}) \end{aligned}$$

$$\Delta p = -5.4 \text{ kg m/s}$$