MOMENTUM :

$$\vec{p} = m \cdot \vec{v} \qquad \left[kg \cdot \frac{m}{s} \right]$$
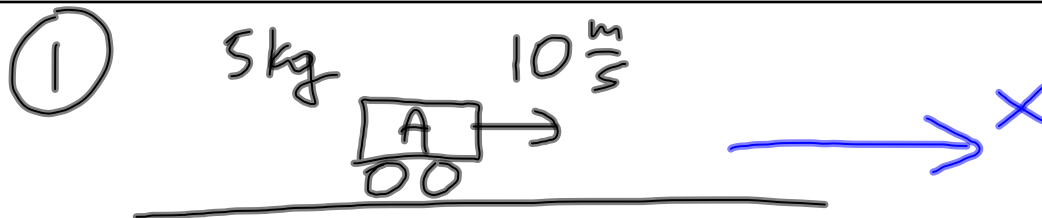
Jan 28-7:51 AM

Conservation of momentum.

The momentum of an isolated system is conserved.

$$P_i = P_F$$

$$m_1 V_{i_1} + m_2 V_{i_2} + \ldots = m_1 V_{F_1} + m_2 V_{F_2} + \ldots$$
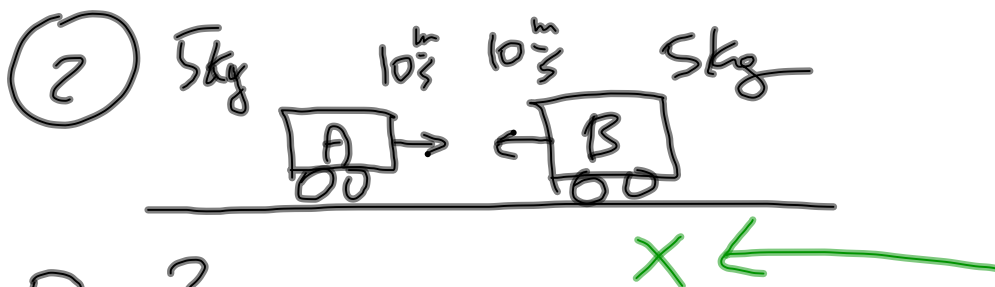
Jan 28-8:03 AM

① 5kg   10 $\frac{m}{s}$

[A] →

$P_A = ?$

$P_A = (5)(10)$

$P_A = 50 \, kg \cdot \frac{m}{s}$

Jan 28-8:10 AM

② 5kg   10 $\frac{m}{s}$ 10 $\frac{m}{s}$ 5kg

[A] → ← [B]

$P_{A+B} = ?$

$P_{A+B} = 0$

HW # 5.4.1

Jan 28-8:15 AM