

## **CHAPTER 8 - MOMENTUM REVIEW SHEET**

### **Physics**

- 1) Definitions
  - a) Momentum
  - b) Impulse
  - c) Conservation of Momentum
  - d) Inelastic Collision
  - e) Elastic Collision
- 2) Problems
  - a) Simple momentum of an object (Problem # 1)
  - b) Collision: Conservation of momentum:
    - (1) Finding the average Force or duration (t) of impact using impulse  
 $Ft = \Delta mv$  (Chapter 5 , Section 1)
    - (2) Solving for a single variable using momentum equation  
 $(m_1 v_{1i} + m_2 v_{2i} = m_1 v_{1f} + m_2 v_{2f})$   
(Chapter 5 , Section 2)
    - (3) Elastic Collisions: Solving for two variables using combined momentum and kinetic energy eq.  
 $(v_{1i} - v_{2i} = v_{2f} - v_{1f} = -(v_{f1} - v_{f2}))$   
(We'll do this at the end of next Chapter.)
    - (4) Collision of equal mass objects.
  - 3) Theory Essays