Quiz - Le 02   Name: _____

1. What is the rate form of conservation of linear momentum for a closed system?

2. What is the rate form of conservation of angular momentum for a closed system?

3. What is the finite time form of conservation of energy for an adiabatic, closed system?

4. What is the finite time form of conservation of linear momentum for a closed system subjected to impulsive loads?

5. The velocity of object A is 3 m/s in the positive x-direction and the velocity of object B is 4 m/s in the negative y direction. What is the velocity of B with respect to A? (Express your answer in terms of $\hat{i}$ and $\hat{j}$ components).