Chapter C4: Center of Mass Practice

Physics I

College of the Atlantic

1. A 30 kg and a 50 kg object are 10 meters apart. What is the center of mass of the two-object system?

2. Determine the center of mass of the system shown in Fig. (1). Use the reference frame shown in the Figure. Express your answer in both coordinate and magnitude-direction form.

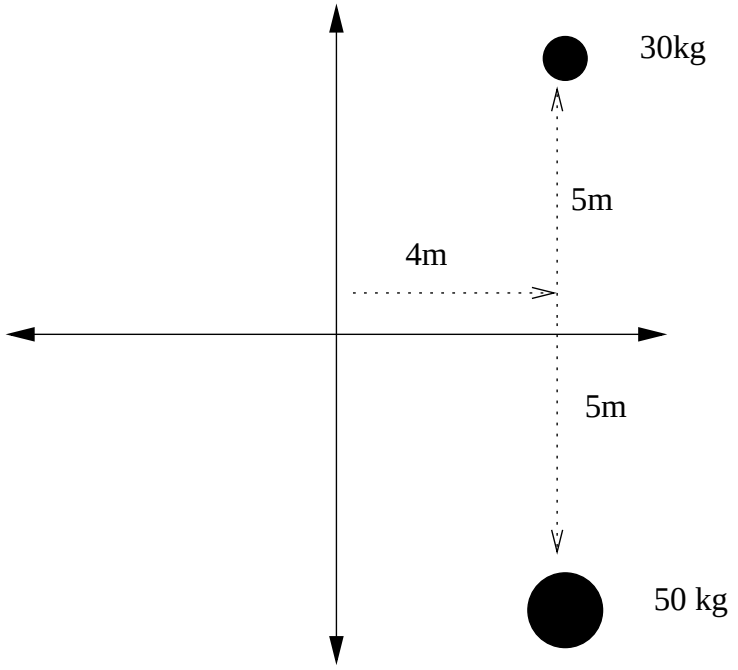

Figure 1:

3. Two objects, one of mass m_1 and the other of mass m_2 are a distance L apart. What is the center of mass of the two-object system? Your answer will be a formula involving m_1, m_2, and L.