Written Assignment 6

1. A mover is located at (20.0, -30.0) and a mover with a sensor is located at (-40.0, -20.0) with a range of 40.0. At time 0.0, the mover starts moving to destination (-10.0, 50.0) at a speed of 30.0 and the sensor starts moving to destination (30.0, 30.0) at speed 20.0.
2. Write the equation of motion for the two movers.
3. When does the first mover enter the range of the sensor (if it does)?
4. When does the first mover exit the range of the sensor (if it does)?
5. What are the locations of the first mover and second mover when the first mover enters the range of the sensor?