Physics PHYS 251
Mechanics I

Problem Set #3

Topics Covered:
- velocity
- acceleration
- motion in a plane
- motion along a line
- relative motion
- normal and tangential coordinates
- rectangular coordinates
- polar coordinates
- spherical coordinates
- cylindrical coordinates


4. Derive the expression for the acceleration of a particle in spherical coordinates.

   (The content for this last problem will be discussed in class earlier – you may be able to do it around the time that you do the first several problems.)