HW #2 Due Thurs. Feb. 5

1. Plot the differential cross section of the Rutherford scattering as a function of the scattering angle θ for three sensible choices of the lower limit of the angle.

   (use Z_{Au}=79, Z_{he}=2, E=10keV).
2. Compute the total cross section of the Rutherford scattering in unit of barns for your cut-off angles.
3. Find a plot of a cross section from a current HEP experiment, and write a few sentences about what is being measured.
4. Book problem 1.10
5. Book problem 1.11 *OR* 1.12