Homework 7 (Due to December 12, 2017).
Chapter 8. *Central Forces*

Problem 8.3 (J. Taylor "Classical Mechanics")   **(10 points)**

(Do it the way we did in class, but now it is a 1D problem: L in Cartesian coordinates; then switch to those "nice coordinates" to decouple L; then solve for new coordinates, and then go back to the original coordinates)

Problem 8.13. (J. Taylor "Classical Mechanics")   **(10 points)**

Problem 8.23 (a, b). (J. Taylor "Classical Mechanics")   **(10 points)**

Problem A   **(10 points)**
Find the force law for a central-force field that allows a particle to move in a spiral orbit given by $r = k\varphi^2$, where k is a constant.