Homework 1 (Due to February 1, 2018).

Chapter 1. *Survey of the Elementary Principles*

Problem 1.8　　(H. Goldstein "Classical Mechanics")　　(10 points)

Problem 1.11a. (H. Goldstein "Classical Mechanics")　　(10 points)

Problem A (10 points) A stick of length l and mass m, ($I_{CM} = \frac{1}{12}ml^2$), initially upright on a frictionless table, starts falling. Find the speed of the center of mass as a function of position.

Problem B (10 points) A Yo-Yo (mass m and radius R) suspended from the ceiling by a string of negligible mass. Find the acceleration of the center of the Yo-Yo and the tension of the string.