

Homework Assignment #6 Name_____

due in class Friday, October 14

Cover Sheet : Staple this page in front of your solutions.

Write the *answers* (without calculations) on this page;
write the detailed *solutions* on your own paper.

[27] Problem 3.16.*

Answer: The distance from the center of mass of the earth-sun system to the center of the sun is a fraction of the solar radius. The fraction is ...

[28] Problem 3.20.** *(There is no answer to report here.)*

[29] Problem 3.22.**

Answer: the coordinates (x,y,z) of the center.of mass are

[210] Problem 3.27.**

Answer: Let A = the area enclosed by the orbit and T = the period of revolution. The relation between A and T is

[211] Problem 3.32.** *The moment of inertia is*

[212] Problem 3.35.**

The acceleration of the center.of mass of the disk is