

Name _____

Homework Assignment #14 due in class Friday December 8.

Staple this cover sheet in front of your solutions.

Write the requested answers on this sheet, and do the detailed solutions on your own paper.

[77] Problem 8.19 ★★

Answer: What is the height when it crosses the y axis?

[78] Problem 8.25 ★★★

This is a computer problem. Turn in the programs and plots.

Answer: What is r_{\min} in part (b)?

[79] Problem 8.27 ★★★

Answer: What are c , ϵ and δ ?

[80] Problem 8.28 ★

Answer: No answer is required here.

[81] Problem 8.34 ★★

Answer: No answer is required here.

[82] NASA has sent satellites to the planet Mars. The method is to put the satellite into a Keplerian orbit whose perihelion is at the position of the Earth and whose aphelion is at the position of Mars. The satellite does not travel to Mars under rocket power; it just moves under the influence of the Sun's gravity. Calculate the number of days the trip to Mars will take.

Answer: The number of days is

Final Exam:
Tuesday December 12
Time: 12:45 to 2:45
Room 1420 Biomedical & Physical Sciences Building