Homework 9 – due 11/21/03

Math 340

Problems for practice (highly recommended, but not to be handed in):

From Marsden/Tromba/Weinstein (handout):
Section 3.4: Problems 3, 8, 13, 18, 22, 23.
Review exercises for Chapter 3: Problems 17, 20, 31.

Problems to be handed in:

1. Handout, Sec. 3.3, Problem 15 (Assume that the three numbers are non-negative; explain why you have found the maximum value.)

2. Handout, Sec. 3.4, Problem 10, Problem 21

3. Handout, Sec. 3.4, Problem 19, Problem 24

4. Handout, Review exercises for Chapt. 3, Problem 19.

5. Find the tangent plane and a non-zero normal vector to the surface $\cos(xy) = e^z - 2$ at $(1, \pi, 0)$.