Name	ID	Section		
-			1	/25
MATH 253	Maple Quiz	Spring 2003	2	/25
Sections 502		P. Yasskin	2	/25

## TO BEGIN THE EXAM:

- 1. WRITE your NAME, ID and SECTION at the top of this paper.
- 2. TYPE your NAME, ID and SECTION at the top of the Maple Worksheet.
- 3. EXECUTE with (VecCalc): VCalias:
- 4. SAVE your worksheet as yourlastname.mws NOW and AFTER EACH PROBLEM.
- 5. NUMBER EACH PROBLEM.
- 6. Decimal values are OK.

## THE EXAM:

- **1.** Find the point on the ellipsoid  $36x^2 + 9y^2 + 4z^2 = 108$  which is closest to the point (7,5,5). Find its distance from (7,5,5).
- **2.** Plot the cardioid  $r = 1 + \cos \theta$ . Compute the mass and *x*-component of the center of mass of this region if the density is  $\delta = 2 + x$ . (Be sure to display your integrals first.)

## TO TURN IN YOUR EXAM:

- 1. Reduce the font to the first magnifying glass. Reduce any plots to about 1.5 inches high.
- **2.** SAVE your file again.
- 3. EXECUTE: File + Print + Output to File + Print to make a postscript file in your home directory.
- **4.** PRINT your file using **X-Print**.
  - Open a terminal window. (The monitor with a seashell on the bottom toolbar)
  - TYPE: xprint -J holdout -C Yasskin -d blocker yourlastname.ps (or the eXaCt name of your postscript file)
  - Press RETURN
  - The system will ask for your xprint userid and password.
- 5. EXECUTE: Edit + Remove Output + From Worksheet
- 6. SAVE your file again.
- 7. EMAIL your file as follows:
  - To: yasskin@calclab.math.tamu.edu
  - Attachment: **yourlastname.mws** (or the **exact** name of your Maple file)
  - Subject: Sec 502
  - Call Dr. Yasskin or your TA over to check your mailing.
  - Send the mail.
- 8. Turn in this paper, with your name on it, as a grading sheet.
- 9. Before you leave, check that Dr. Yasskin has received your printout and your email.