Math 214 Spring 2007

BONUS QUIZ 1

Linear Systems

Name: _____

Date: _____

Friday February 2
Ron Buckmire

Topic : Analytic Geometry with Planes and Lines

The idea behind this quiz is for you to indicate your advanced understanding of the material from Section 1.1, 1.2 and 1.3.

Reality Check:

EXPECTED SCORE : _____/**10** ACTUAL SCORE : _____/**10**

Instructions:

1. Please look for a hint on this quiz posted to `faculty.oxy.edu/ron/math/214/07/`
2. You may use the book or any of your class notes. You must work alone.
3. If you use your own paper, please staple it to the quiz before coming to class. If you don't have a stapler, buy one.
4. After completing the quiz, sign the pledge below stating on your honor that you have adhered to these rules.
5. Your solutions must have enough details such that an impartial observer can read your work and determine HOW you came up with your solution.
6. Relax and enjoy...
7. **This quiz is due on Monday February 5**, in class. NO LATE QUIZZES WILL BE ACCEPTED.

Pledge: I, _____, pledge my honor as a human being and Occidental student, that I have followed all the rules above to the letter and in spirit.

EXPLAIN YOUR ANSWERS & SHOW ALL WORK

1. (a) Show that the plane given by $4x-y-z=6$ and the line given by $x=t, y=1+2t, z=2+3t$ intersect.

(b) Find the acute angle of intersection between the line and the plane given in part (a).