Math 214 Spring 2006

Quiz **2** **Linear Systems**

Name: _____

Date: _____ **Friday February 3**
Time Begun: _____ Ron Buckmire
Time Ended: _____

Topic : Solving linear systems by elimination

The idea behind this quiz is for you to indicate your understanding of the basic natures of linear systems, and your abiity to execute the Gaussian elimination process.

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/214/06/`
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 6**, 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.

Math 214 Spring 2006 **SHOW ALL YOUR WORK** Quiz **Two**

1. Consider the following system of equations where a is an unknown parameter,

$$\begin{aligned} ax + 3y &= -3 \\ 4x + 6y &= 6. \end{aligned}$$

(a) *4 points.* Can you find a value of a for which the linear system has one solution? If so, give the value of a and solve the system. EXPLAIN YOUR ANSWER.

(b) *4 points.* Can you find a value of a for which the linear system has no solution? If so, give the value of a. EXPLAIN YOUR ANSWER.

(c) *2 points.* Can you find a value of a for which the linear system has more than one solution? If so, give the value of a. EXPLAIN YOUR ANSWER.