Math 214 Spring 2006

Quiz **5** **Linear Systems**

Name: _____

Date: _____ **Friday February 24**
Time Begun: _____ Ron Buckmire
Time Ended: _____

Topic : TRUE OR FALSE: Inverse Matrices

The idea behind this quiz is for you to indicate your understanding of inverse matrices.

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. QUIZZES WITH UNSTAPLED SHEETS WILL NOT BE GRADED.
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 27**, 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 **Five**

1. TRUE or FALSE – put your answer in the box (1 point). To receive FULL credit, you must also give a brief, and correct, explanation in support of your answer! Remember if you think a statement is TRUE you must prove it is ALWAYS true. If you think a statement is FALSE then all you have to do is show there exists a counterexample which proves the statement is FALSE at least once.

(a) TRUE or FALSE? "A 4×4 matrix with a row of zeros is not invertible."

(b) TRUE or FALSE? "A matrix with 1's down the main diagonal is invertible."

(c) TRUE or FALSE? "If A is invertible, then A^{-1} is invertible."