

Quiz 2

Linear Systems

Name: _____

Date: _____

Time Begun: _____

Time Ended: _____

Friday February 2

Ron Buckmire

Topic : Solutions of linear systems

The idea behind this quiz is for you to indicate your understanding of the basic natures of linear systems.

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.

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

$$ax + 3y = -3$$

$$4x + 6y = 6.$$

(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.