Math 312 Spring 2004

BONUS QUIZ 11A

Complex Analysis

Name: _____

Date: _____ **Friday April 16**
Time Begun: _____ Ron Buckmire
Time Ended: _____

Topic : Cauchy Principal Value

The point of this bonus quiz is to provide you with another opportunity to demonstrate your ability to apply contour integration to another application.

Reality Check:

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

Instructions:

0. Please look for a hint on this quiz posted to `blackboard.oxy.edu`
1. Once you open the quiz, you have **30 minutes** to complete, please record your start time and end time at the top of this sheet.
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. Rclax and cnjoy...
7. **This quiz is due on Monday, April 19**, 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. *10 points.* **Math 312 Spring 1998 Final Exam, Question 7**. Find the Cauchy Principal Value of $\int_0^\infty \frac{dx}{(x^2+c^2)^2}$ (where $c > 0$ and Real) by evaluating a contour integral.