## $M{\rm ath}~312~S{\rm pring}~98$

## Quiz $\mathbf{2}$

Name:	_
Date:	
Time Begun: .	
Time Ended:	

Complex Analysis Friday January 23, 1998 Ron Buckmire

**Topic** : Solutions of Equations of a Complex Numbers

The point of this quiz is to test your ability to solve equations which involve complex variables, and to understand the multiple forms of complex numbers.

## Instructions:

- 1. Once you open the quiz, you have 60 minutes to complete it.
- 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, January 26, 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.

## SHOW ALL YOUR WORK

1. Find all the solutions of  $z^2 + (2i - 3)z + 5 - i = 0$  and write them in rectangular form.

2. Show that  $z_1 = 2 - 3i$  and  $z_2 = 1 + i$  solve the above equation and write them in exponential form.