

MATH 210-001
Test #2 - Spring 2003

Name _____

Directions Work on this test without the aid of any other person, and provide no aid to any other person. You may refer to your notes, textbook, internet sources, or any other books you care to consult. Attach this cover sheet to your solutions and submit it with your completed test no later than 10:00 AM on Friday, April 4.

Do these proofs in the form and spirit of the approach to proofs used in this course. Pay particular attention to clearly communicating your thoughts, justifying your steps, and stating your conclusions. Start each proof on a new page and place your name at the top of each page. Neatness, organization, and style, along with correctness, will count in the evaluation of your proofs.

Sign one of the following two statements.

Statement: I worked this test in compliance with the above directions.

(Signature)

Statement: I am unable to sign the statement above due to the exception(s) listed below.

(Signature)

Prove each of the following propositions by the method prescribed, if a method is prescribed.

1. Exercise Set 3.4: 26
2. Exercise Set 3.4: 28
3. Exercise Set 3.6: 22
4. Exercise Set 4.2: 8 (Use mathematical induction.)
5. Exercise Set 4.3: 15 (Use mathematical induction.)