**Math 106 Finite Mathematics Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Final Examination: Spring, 2012 Instructor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Answer Sheet**

**Instructions:**

This is an open-book exam. You may refer to your text and other course materials as you work on the exam, and you may use a calculator.

Record your answers and work in this document.

There are 25 problems.

Problems #1-12 are multiple choice. Record your choice for each problem.

Problems #13-15 are short answer. Record your answer for each problem.

Problems #16-25 are short answer with work required. When requested, show all work and write all answers in the spaces allotted on the following pages. You may type your work using plain-text formatting or an equation editor, or you may hand-write your work and scan it. In either case, show work neatly and correctly, following standard mathematical conventions. Each step should follow clearly and completely from the previous step. If necessary, you may attach extra pages.

**You must complete the exam individually. Neither collaboration nor consultation with others is allowed. Your exam will receive a zero grade unless you complete the following honor statement.**

Please sign (or type) your name below the following honor statement:

I have completed this final examination myself, working independently and not consulting anyone except the instructor. I have neither given nor received help on this final examination.

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**MULTIPLE CHOICE. Record your answer choices.**

1. 7.

2. 8.

3. 9.

4. 10.

5. 11.

6. 12.

**SHORT ANSWER. Record your answers below.**

13.

14. (a)

(b)

(c)

(d)

(e)

15. (a)

(b)

(c)

**SHORT ANSWER with Work Shown. Record your answers and work.**

|  |  |
| --- | --- |
| **Problem Number** | **Solution** |
| 16 | Answers:  (a)  (b)  (c)  (d)  Work for (a), (b), (c), and (d): |
| 17 | Answer:  Work: |
| 18 | Answers:  (a)  (b)  (c)  Work for (a), (b), and (c): |
| 19 | Answers:  (a)  (b)  (c)  Work for (a) and (b): |
| 20 | Answer:  Work: |
| 21 | Answer:  Work: |
| 22 | Answers:  (a)  (b) Region I:  Region II:  Region III:  Region IV:  Work for (a): |
| 23 | Answers:  (a)  (b)  (c)  (d)  Work for (b) and (d): |
| 24 | Answer:  Work: |
| 25 | Answer:  Work: |