

Review for Exam 3 - Math 100, Spring 2005

March 29, 2005

1 General

Where and when: April 8, usual classroom, usual time - try to get there 5 minutes early

What you need: Pencil or pencils, Student ID. You will not be permitted to use a calculator or have anything else on your desk besides the exam, solution sheet, pencils, and your ID.

Form: Multiple choice, 20-25 problems

Coverage:

Gemignani: Sections 5.1-5.3

Stein: Chapters 4 and 16 (parts as indicate in the HW list)

Stewart: Chapter 11. You might also find the following pages useful or interesting: 26-28,46.

All lectures and lecture notes through April 1.

Breakdown: (Approximate)

Applications of Venn Diagrams(Gem 5): 2-3 problems

General number systems: what they are, why they are, axioms, logic: 3-5 problems

Natural Numbers: Peano axioms, von Neumann integers, etc: 1-3 problems

Rationals: square roots of primes, properties of rationals, irrationals, repeating decimals and rationals, famous irrational numbersetc: 4-6 problems

Polynomials: Algebraic and transcendental numbers, roots of polynomials, unsolvability, history: 5-7 problems

Complex numbers: Operations, significance: 3 problems

Miscellaneous: History, miscellaneous terms (zeta function, denseness, etc); one problem for people who looked at T.C. Mits: 3 problems

Note that there is overlap!

There are no supplemental problems at this time, sorry.