Math 118. Exam 1 Study guide. Fall 2005. Professor Ahlgren

(1) The exam will be held on Friday, September 30 in class.
(2) The exam covers all of chapter 1 and sections 2.1, 2.2, 2.3, 2.6, 2.7, 3.1, and 3.2. Most of the questions will be from chapters 2 and 3.
(3) No calculators or notes.
(4) You should know **all** basic definitions and concepts. I.E. be ready to define what it means to be rational, or to explain what the pigeonhole principle says.
(5) You must be sure to understand the proof that there are infinitely many prime numbers, and the proof that $\sqrt{2}$ (or $\sqrt{3}$, or $\sqrt{15}$, etc.) are irrational.
(6) There will be a number of short-answer and/or true-false questions which test your understanding of basic concepts.
(7) You should study the book, the group work from class, and the assigned homework problems.
(8) Some additional suggested problems (lots!) for study. Use as necessary!
§2.1: 2, 3, 5, 12, 14
§2.2: 1, 3, 10, 16, 18, 21, 34, 36
§2.3: 1, 3, 8, 9, 11, 16, 21, 22, 23, 28, 29, 32
§2.6: 1, 4, 6, 9, 11, 12, 15, 16, 18, 19, 22, 23, 26, 27, 31, 32, 33, 34, 35.
§2.7: 3, 5,6, 8, 9, 11, 12, 13, 14, 15, 17-24, 27, 28, 30, 31, 32.
§3.1: 1, 2, 3, 4, 5, 7, 8, 9, 10, 11, 13, 16, 22
§3.2: 6, 7, 8, 9, 11, 12, 13, 15, 21, 22, 30.