Math 46, Wtr 08 Updated final exam study guide

20 multiple choice questions (bring Scantron):

- (1) Egyptian fractions and division of circles
- (2) Measurement using proportions (as in problem about tree height)
- (3) Alternative multiplication/ addition methods, e.g. Russian Peasant multiplication
- (4) Pigeonhole principle problem
- (5) Extending patterns throughout the plane, as on first day of class
- (6) Using divisibility rules
- (7) Ancient mathematical systems
- (8) Changing to and from base ten
- (9) Venn diagrams and counting numbers of elements
- (10) Expressing fractions as decimals
- (11) Addition algorithm problem, as in take-home "cryptarithm" problem
- (12) History of mathematics and mathematical sequences question
- (13) Greatest common divisor, least common multiple, and factors of numbers
- (14) Converting decimals to fractions and vice versa
- (15) How to use manipulatives to teach simple calculations
- (16) Modular arithmetic calculations
- (17) Rules for mathematical systems, like commutativity, closure, etc.
- (18) Calculating numbers of elements in unions, intersections, complements of sets
- (19) Logic problem like Fido or Arc, Barc, and Carc.
- (20) Converting to and understanding meaning of percents.

Show work problems:

(21)-(23) Alternative explanations for fraction calculations and comparisons

Essay question: see web site.