Mathematics As A Liberal Art

Class 15: Monday March 4

Review For the Midterm Exam

Here are the Topics of the First 14 Worksheets of the class

Worksheet 1   *Introduction: Why Know Mathematics?*

Worksheet 2   *What Is Mathematics?*

Worksheet 3   *The Poison Game and Introduction to Modular Arithmetic*

Worksheet 4   *Looking For Patterns In Numbers*

Worksheet 5   *Mathematical Induction*

Worksheet 6   *Looking For Numbers in Patterns: UPC Codes and Modular Arithmetic*

Worksheet 7   *Introduction to Algorithm: Many Multiplications*

Worksheet 8   *Prime Time: The Fundamental Theorem of Arithmetic*

Worksheet 9 *All Numbers Are Not Rational!*

Worksheet 10 *All About That Base: Binary, Quinary and Septenary Numbers*

Worksheet 11 *Everything You Ever Wanted To Know About Hex*

Worksheet 12 *Mathematical Logic: Introduction*

Worksheet 13 *Mathematical Logic: Implications*

Worksheet 14 *Mathematical Logic: Conclusions*

Here are the topics covered by the Problem Set(s)

Homework Set #1 Induction, Gauss' Formula, Perfect Numbers, Multiplication Algorithms, Modular Arithmetic

Here are the topics covered by the Problems of the Day

POTD 1 The Poison Game

POTD 2 Triangular Numbers

POTD 3 UPC and ISBN: Applications of Modular Arithmetic

POTD 4 Prime Numbers, Composite Numbers, Deficient Numbers and Abundant Numbers

POTD 5 Base 5 Addition and Multiplication Tables

POTD 5 BONUS Base 7 Arithmetic Problems

POTD 6 Knights and Knaves: Introduction to Logic

POTD 7 *Modus Ponens* and Tautological Truth Tables

POTD 8 Truth Tables and Venn Diagrams

EXAMPLE
Let's review the Spring 2015 Midterm Exam

GroupWork
What topic(s) are the most unclear right now?

Which topic(s) do you have the most confidence in answering questions on?