Department of Mathematics

April 22, 2011

UNDERGRADUATE MATHEMATICS SEMINAR

The next seminar of the term will be:

DATE: **TUESDAY, April 26th**

Time & **4:15pm –** Refreshments in the Math Common Room, **Bailey 204**

Location: **4:30pm –** Seminar in **Bailey 100**

In this seminar, the Union College Math Department's own **Professor Karl Zimmermann** will present the following talk:

TITLE: Constructions With Straightedge and Compass: Doubling the Cube

ABSTRACT: The ancient Greeks were interested in constructing geometric figures using only a straightedge (a ruler with no markings), and a compass. However with these tools, they were unable to double a cube, that is, construct a cube with twice the volume of a given cube. The object of this talk is to describe these geometric ideas algebraically and show that doubling the cube, using only a straightedge and a compass, is actually impossible.

Math Club Event: Meet the Majors

The Math Club will be holding a "Meet the Majors" event directly after Week 6's math seminar on **Monday, May 2** from **5:30-6:30pm**. It will include short talks from juniors and seniors about their post-graduate plans, their thesis experiences, various internship opportunities, and the general logistics of completing a math major. Following will be an informal question and answer session and then a *pizza dinner* provided by the Math Department! It will be a great opportunity for underclass math majors and minors, as well as those considering these possibilities, to meet your fellow math students and to get your general questions answered by the people who are completing the major themselves.

Kudos, Part I

Congratulations to **Professor Kim Plofker**, who was awarded the very prestigious ***Brouwer Medal*** at the 47th Dutch Mathematical Congress in Twente, The Netherlands, on April 14. According to the event's website, "L.E.J. Brouwer was perhaps The Netherlands' most distinguished mathematician. Shortly after his death in 1966, the Royal Dutch Mathematical Society (KWG) and the Royal Netherlands Academy of Sciences (KNAW) established a tri-annual event referred to as the Brouwer Prize. To that purpose, once every three years the KWG chooses a sub-field of mathematics and an expert committee then selects a lecturer from that field. If the selected person agrees to give this lecture, on that occasion he or she receives the Brouwer memorial medal.

The Brouwer lecture with the Brouwer medal is The Netherlands' most prestigious award in mathematics and it also enjoys great international prestige."

This honor further emphasizes Prof. Plofker's position as one of the world's leading experts in the History of Science in Antiquity and in the Middle Ages. Congratulations!

Kudos, Part II

Several math majors and minors from the class of 2011 were elected recently to become members of the academic honor society Phi Beta Kappa. Please congratulate math majors **Emily LaCroix**, **Steven Neier**, and **Evan Ryan**, and math minors **Annora Brennan, Alyssa Simeone, Clancy Slack,** and **Sam Yoon** for their achievement. These students are joining previously elected class of 2011 math majors **Kristina Csaplar**, and **Peter Bonventre**, and math minor **Kseniya Zhuzha** in this society. Congratulations!

Coming Attraction

Look for an article by math major Keilah Creedon '14 (pictured to the right) about her experience attending last weekend's HRUMC XVIII at Skidmore College.

Hey Math Students!

Have ideas for the math newsletters? Want to contribute an article, a picture, a problem of the newsletter, a comic, a puzzle, or something else? Contact Professor Paul Friedman with your ideas: friedmap@union.edu.

Part of the Union College Contingent at HRUMC at Skidmore College, April 16

Pictured (from L to R): Jordan Hirsh, Lorry Xie, Andrea Marois, Courtney Phillips, Keilah Creedon, Kate Weeks, Wei Yu, and Prof. Chris Hardin. Students attending HRUMC but not pictured: Becca Robinson and Erin Whitney

Problem of the Newsletter: April 22, 2011

Congratulations to **Schuyler Smith**, who both suggested and solved last week's problem. A solution to the problem has been posted on the bulletin boards around Bailey Hall.

This week's problem: The arithmetic mean of two distinct positive integers x and y is a two-digit integer. The geometric mean of x and y is obtained by reversing the digit of the arithmetic mean. First, what is $|x-y|$? Second, what are x and y?

If you are interested in sharing your thoughts on this problem, or working with others to solve it, stop by the Math Common Room (Bailey 204) on **Tuesday** during **common lunch** and join the **Math Club's** nascent **Problem Solving Group**.

Professor Friedman will accept solutions to this problem until noon Thursday, April 28th. Email your solution to him (friedmap@union.edu) or put it in his mailbox in the Math Department's office on the second floor of Bailey Hall.