

The Almagest

The bi-weekly newsletter of the Department of Mathematics and Computer Science. Your trusted source for news.

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September 28, 2015

Alma College
Alma, MI 48801

Math Colloquium – October 8th

Our second colloquium of the year will be a presentation by three of our majors, **Krystle Reiss**, **Christine Wiersma**, and **Jacob Blazejewski**. This talented trio spent part of their summer doing research in mathematics.

Krystle and Jacob were in Tennessee at Oak Ridge National Laboratory working on separate projects in computational chemistry. Christine spent her time in New Jersey at Rutgers University, working on a project in mathematical biology. They will talk about their individual projects and provide you with a wealth of information about their experiences. Don't miss this opportunity to find out about summer Research Experiences for Undergraduates (REU).



The Rutgers University logo, consisting of the word "RUTGERS" in white capital letters on a red rectangular background.

“Our Summer Research Experiences”

Date: **Thursday, October 8th**

Time: 4:00

Place: SAC 113

Refreshments at 3:50.

The Putnam

The 2015 William Lowell Putnam exam is scheduled for **Saturday, December 5th**. If you're interested in taking this exam, please contact Prof. Sipka by **Friday, October 2nd**.



William Lowell Putnam

Math Anxiety: An Antsy Subject

With a new semester well underway many of us are now starting to feel all the pressures of classes, clubs, homework, etc. One stress that many are probably experiencing is some math anxiety of your pre-algebra, algebra or even calculus class. If you are thinking you are alone in this phobia, you may be surprised to know it's quite common. Jan Hoffman, author for the *New York Times* has written multiple articles on the subject. One of her most recent being “*Square Root of Kids' Math Anxiety: Their Parents' Help*,” where she discusses what effects parents can have on their attitudes toward math. Now the article is not saying all students who suffer some sort of math anxiety can blame it on their parents. Instead it shows that the attitude in which students are presented math can have enormous repercussions on how they perceive their math capabilities.

If you are interested in finding out a little rating for how anxious math makes you or if you are just looking for a quick study break feel free to try this quick test:

<http://www.nytimes.com/interactive/2015/08/24/science/math-anxiety-quiz.html>

Also if you are interested in fully examining Jan Hoffman's discussion you can find it here:

<http://well.blogs.nytimes.com/2015/08/24/square-root-of-kids-math-anxiety-their-parents-help/>

Jacob Blazejewski

Important Meeting for Seniors

All senior math and computer science majors, who intend to graduate this year, are required to attend a meeting on **Thursday, October 15th** at 4:00 in SAC 216. At this meeting we'll provide details about the MFAT as well as the written and oral components of the senior comprehensive.

Math Help Center is OPEN

Tutors are available in Dow L2, Monday through Thursday, from 7 to 10 pm to help you with the following courses at the times listed.

MTH 112 Monday - Thursday
MTH 121 7:00 – 10:00 pm
MTH 122

SAVE the Date - November 5th

You are invited to participate in the 21st annual MATH Challenge, held on Saturday, November 5th. The MATH Challenge is a team-oriented, 3-hour exam consisting of ten interesting problems dealing with topics found in the undergraduate math curriculum. Teams consist of 2 or 3 students, and you'll take the exam on campus from 9:30 am to 12:30. You may form your own team or you can simply be placed on a team. Before the exam, you'll be provided with a "hearty breakfast" of waffles, bagels, donuts, and juice. If you're interested, contact Professor Sipka.

The Math Club is Back

The Math Club meets EVERY TUESDAY at 9:00 pm in Dow 132. The group has a variety of fun activities planned for the term, such as movie night, designing a logo for the math club t-shirt, making plans for Science Blowout, and of course the Ugly Sweater Christmas Party. Please come. *Everyone is welcome!*

Soultion to the Previous Puzzle

Mr. Matt Amatics leaves for school every morning at 6:28. If he drives an average speed of 30 miles per hour, he is 10 minutes late. If he drives an average speed of 60 miles per hour, he is 10 minutes early. What speed should he average in order to arrive at school exactly on time?

In a manner befitting a true math student, Jason McKelvey submitted a correct solution written on a paper napkin. He wrote: let t be the length of time (in minutes) required to arrive at school on time. Then we know:

$$d = 30 \cdot \frac{t+10}{60} = \frac{1}{2}t + 5, \text{ and}$$

$$d = 60 \cdot \frac{t-10}{60} = t - 10$$

This gives us $0 = \frac{1}{2}t - 15$, which implies $t = 30$. So, we have $d = 20$. Thus, $20 = v \cdot \frac{30}{60}$, so $v = 40$ mph.

Puzzle of the Bi-week

Say you have three sacks. Two contain gold coins. The third contains fake coins. Each real coin weighs one ounce. The fakes weigh 1.1 ounces. You have a digital scale. With ONE weighing, how can you tell which sack has the fake coins?



A prize of \$2.00 will be awarded to the 1st student who submits a correct solution to Prof. Sipka.

Student assistants: Christine Wiersma/Jacob Blazejewski
Faculty advisor: Tim Sipka
Distribution: Deb Smith

If you would like to submit an announcement or a short article, please send it via e-mail to Tim Sipka (sipka@alma.edu).