Monday's Math Colloquium

Get to know Auto-Owners Insurance and how your math and computer science degrees can work in the real world! Learn how Auto-Owners, a Fortune 500 insurance company, overhauls an existing web application to offer new functionality and streamlined processing to its agents. The challenges presented in this project include overhauling the existing data access layer, updating the user interface to add more functionality, and integrating a back office legacy system into the modern web application. *Erin McLaughlin*, IT Recruiter for Auto-Owners, and *Michelle Stahl*, Assistant Manager of BOP Systems at Auto-Owners, will be giving the presentation.

"*Job Opportunities for Math & C.S. Majors at Auto-Owners Insurance*"

> Date: **Monday, November 18th**
> Time: 4:00
> Place: SAC 113
>
> *Refreshments at 3:50*

International Year of Statistics

Did you know that 2013 has been designated as the International Year of Statistics? A special website has been created, www.statistics2013.org, providing a wealth of information about such things as: how to become a statistician, career opportunities in statistics, and what fields employ statisticians. Take time to check it out!

Here's an interesting statistic: *There are 600 million views of YouTube videos a day from mobile devices.*

Is it Time to Practice Math Appreciation?

Imagine a world where a mathematical idea is regarded with the same awe and admiration as a beautiful painting or spine-tingling sonata. In his opinion piece published by *The New York Times* earlier this year, **Manil Suri**, a mathematics professor at the University of Maryland, Baltimore challenges his readers to envision this world, where math is lauded not just for what can be accomplished by arithmetic manipulations and calculations, but for its inherent beauty and elegance.
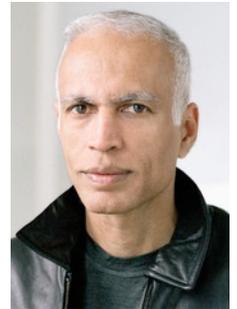
The modern math classroom, however, denies many students the opportunity to explore the intriguing and fascinating concepts of mathematics, favoring rote memorization of formulas in preparation for annual waves of standardized testing. The modern math classroom is comparable to an English class boiled down to nothing more than grammatical rules and structures: leaving all but the most fortunate students completely unaware of the power of the written word. It is no wonder that so many people today possess a lukewarm, if not outright hostile, regard for mathematics.

Fortunately, the door to mathematics' wonders remains open to all. Suri argues that rather than valuing math based exclusively on its application in our daily lives, we should value math for its own sake. The best part: one does not need to possess a vast knowledge of complex mathematics to appreciate many profound math concepts. Read more at http://nyti.ms/19HP5k6. *Katie Krauss*

What Can I Do with a Major in Math?

Please take a few minutes and check out a great website, **weusemath.org**. You can watch a 7-minute video highlighting all the different ways people are using mathematics in the workplace. Take a look, you might find a career path you would never have imagined.

MATH Challenge held on November 2nd

Twelve brave souls participated in the 19th annual MATH Challenge, a team-oriented math competition sponsored by Alma College. 64 teams from 24 different institutions entered this year's competition; Alma entered 4 teams. Pictured below are: **Chris McDonald**, **Jeremy Weber**, **Joanna Delpaz**, **Katie Krauss**, **Jacob Blazejewski**, **Alex Hegedus**, **Jeremy Pawlowski**, **Austin Bryan**, **Jason McKelvey**, **Luke Bent**, **Ben Brow**, & **Dalton Potter**.

Solution to Previous Problem

Using one straight line we can divide a crescent (a.k.a. lune) into a maximum of 3 regions. Using two straight lines we can divide a crescent into a maximum of 6 regions. *Find a formula* giving the maximum number of regions one can create when *n* straight lines are used.
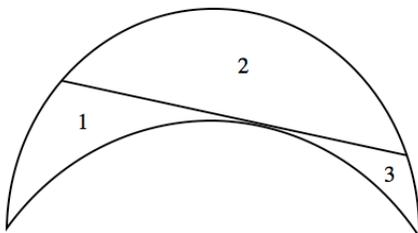
Dalton Potter was the first student to submit the correct formula: $\frac{n^2}{2} + \frac{3n}{2} + 1$. **Dr. Nick Piccolo**, VP of Student Life and former math major, also submitted a correct solution,

Puzzle of the Bi-week

Without the aid of any type of calculating device, find the sum of the *DIGITS* of all the numbers in the sequence

$$1, 2, 3, 4, 5, 6, 7, 8, ... , 10000.$$

For example, the sum of the *DIGITS* in the sequence 11, 12, 13 is 9.

A prize of **$2.00** will be awarded to the FIRST student who submits a correct solution to Prof. Sipka.

Student assistant:	Katie Krauss
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).