

# The Almagest

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

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Alma College  
Alma, MI 48801

## Monday's Math Colloquium

**S**pencer Wideman, Fellow of the Casualty Actuarial Society and Alma College alum, will be on campus Monday, **October 5**, for an interactive presentation explaining actuarial methodologies through the use of playing cards. The focus of the presentation will be spent on actuarial concepts such as reserve variability, catastrophes and insurance profitability. Attendees will get to "play their own hands" in multiple card games to see how good they are at estimating future loss results while also learning about the actuarial profession.

*"Actuarial Methodology:  
Playing the Cards You're Dealt"*

Presenter: Spencer Wideman, FCAS

Date: **Monday, October 5<sup>th</sup>**

Time: 4:00

Place: SAC 216

*Refreshments at 3:50.*

## Taco Party

**A**ll computer science and mathematics students are invited to the annual taco party on **Thursday, October 15<sup>th</sup>** at Dr. Molina's house.



This is always a great time of fabulous food, perplexing puzzles, and deep dialogue. So, please make room in your schedule to attend this event. The party starts at 5:30 p.m., but feel free to come a bit later. Dr. Molina's house is a short walk from campus at **520 Woodworth Ave.** If you need directions, see Mrs. Smith in SAC 224.

## Career Focus: Actuary

**A**ctuaries are mathematicians who use statistics to construct probability tables that are used by insurance companies and government agencies. Sixty percent of all actuaries work for private insurance companies, performing risk assessment. Actuaries use probability and statistics to set premiums for private insurance companies. Actuaries also work for government agencies. Those who work for the federal government deal with social securities and life insurance for veterans. Those who work for state agencies are concerned with unemployment insurance or state retirement/pension plans. State employed actuaries also regulate the rates that are charged by private insurance companies. To become an actuary one needs a bachelor's degree with an extensive background in mathematics and statistics. Courses in business are also helpful. Before becoming a fully qualified actuary, one must pass a series of five tests over the course of five to ten years. The first two may be taken during college to increase the chances of obtaining an entry-level position after graduation. An actuary can expect to work between thirty-five and forty hours a week in a comfortable office setting and earn an average salary of \$76,300.

## Attention Computer Science Seniors

**A**uto Owner's Insurance has an Associate Programmer position available in the Lansing area and will be coming to campus to interview on **Tuesday, October 27**. The application deadline is October 20. For more information about the position and to sign up for an interview, please contact **Ms. Lou Ecken** in our Academic and Career Planning Center.

## MATH Challenge

**P**roblem-solvers: *Your department needs you!* You are invited to participate in the 15<sup>th</sup> annual MATH Challenge, held on **Saturday, October 31<sup>st</sup>**. The MATH Challenge is a 3-hour exam consisting of ten interesting problems. All teams will consist of 2 or 3 students, and they will take the exam from 9:30 to 12:30. Before the exam, you'll have a hearty breakfast of bagels, waffles, donuts, coffee, and juice, the true breakfast of champions. If you're interested, please contact Professor Sipka.



### Just for fun: Answer to Last Question

**C**an you translate the following mathematical expression into English?

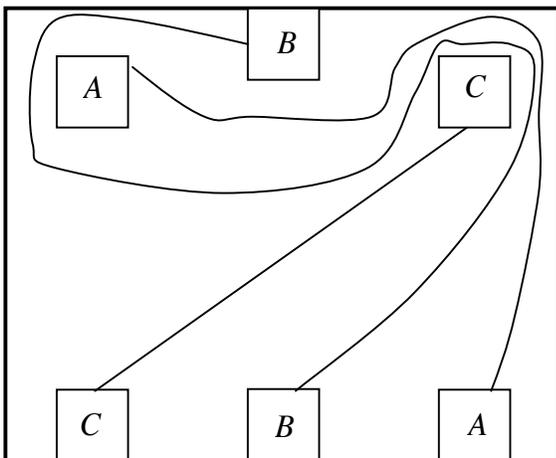
$f(g(\text{hung}))$  can be translated as:

*“hung in effigy”*

### Solution to the Last Puzzle

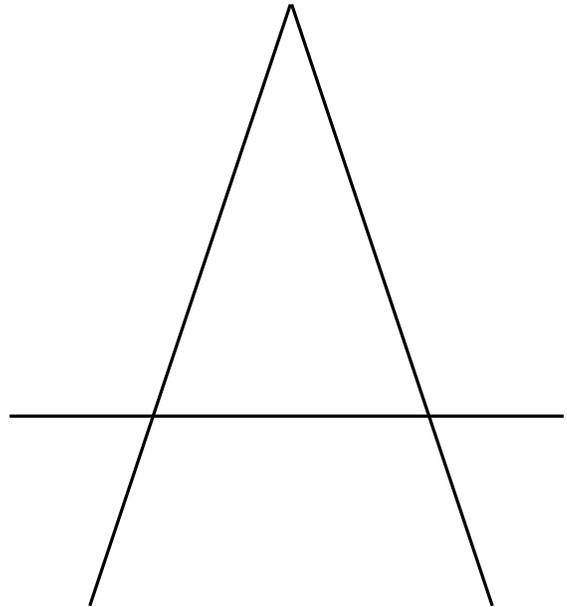
**C**onsider the following diagram. Can you connect each small box on the top with its same-letter mate on the bottom with paths (lines) that DO NOT cross or leave the boundaries of the large box?

Here's **Madison Behmlander's** solution.



## Puzzle of the Bi-week

**C**an you add two straight lines to the diagram below and produce 10 triangles?



Student assistant:	Matt Mansell
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 Matt Mansell (11mgmans) or Tim Sipka (sipka).*