UNDERGRADUATE MATH SEMINAR

The next math seminar is back! And, be on the lookout for even more talks as the winter term winds down:

DATE: THURSDAY, February 29

Time &   **UPDATED!** 2:00 Seminar in **Bailey 207**

Location: **UPDATED!** Light refreshments **afterward** in **Bailey 204**

In this seminar, **Union College alumnus, Mark Mortensen '85**, will give the following presentation:

Title: How to Prepare for an Actuarial Career

Abstract: Actuaries are well-trained and highly respected risk management professionals who use a lot of math and statistics to solve problems in many industries and government. I will provide examples of the types of risk analysis an Actuary might perform and the tools an Actuary might use. I will give an overview of the education and examination process and talk about ways that large insurance companies help recent college graduates to complete the requirements. I will provide steps you can take now to prepare for your actuarial career.

Union Competes in the MCM

In early February, over four grueling days, four brave Union students came together as a team to compete in this year's Mathematical Contest in Modeling (MCM). From 5pm on Thursday, February 1 through 8pm Monday, February 5, **Young Jun Chun '25, Jiayu Tian '25**, and **Zihan Wang '24** had to choose one of three applied math/modeling questions to address, research the underlying topic thoroughly, develop a model, and submit a fully-reasoned approach and solution to the problem of at most 25 pages.

From left to right: Young Jun Chun, Jiayu Tian, and Zihan Wang.

The team chose to work on "Problem A: Resource Availability and Sex Ratios" which focused on questions about the male:female ratio at birth of *sea lampreys* and their dependence on local conditions. If you see any of the team members, be sure to ask them about this intense experience!

Sea lampreys

Reminders

- Sign-up for the Hudson River Undergraduate Mathematics Conference (HRUMC), being held on Saturday, April 6 at Keene State College: contact **Professor Paul Friedman** (friedmap@union.edu) by **March 15.**

- The Calculus Help Center (CHC) is still open: Sunday through Thursday nights, 7:30-10:00pm in the Sorum House seminar room. The CHC's last night is on the last day of classes: March 12.

Problem of the Newsletter

This week's problem: Of the 2025 terms in the expansion of $\left(x\sqrt[3]{2} + y\sqrt{3}\right)^{2024}$, how many are rational?

Professor Paul Friedman (friedmap@union.edu) will accept solutions until noon on **Friday, March 1**.