

## 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.

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!



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



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](mailto: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  $(x^3\sqrt{2} + y\sqrt{3})^{2024}$ , how many are rational?

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