

UNDERGRADUATE MATH SEMINAR: On break this week!

[Give me a break from that seminar!](#) Have no fear: the seminar will return next week.

Connect with the Math Community!

Looking for a fun and relaxed way to connect with others in the Math community? Come join us for **The Math Mixer**, hosted by the Association for Women in Math (AWM), the Actuarial Science Club (ASC), and the Math Club!

It will be on **Tuesday, October 21, at 5:30 – 7:00 PM**, in **The Everest Lounge**. Come to enjoy some free **food and drinks** while meeting professors, chatting about next term's math courses, and connecting with members of AWM, ASC, and Math Club. Whether you're curious about math, planning your next classes, or just want to hang out with some great people this is a great opportunity to do so.

Bring your questions, ideas, and enthusiasm — we can't wait to see you there!

Need Help/Advice/Tips on Studying for Math? It's Not too Late ... or too Early

Are you working hard in your math class but not seeing the results you want? Or would you like extra some study tips [to ratchet things up to 11](#), to learn how to become a more effective and efficient studier? Then we have an event for you!

The Math Department and the Office of Student Success are co-sponsoring an event for you on **Wednesday, October 22, at 1:00-1:45 PM** in **ISEC 387**. Come hear Lesly Clay drop some wisdom on studying and time management, giving sound and concrete advice on how you can increase your wisdom!

While there are still some midterms to take, it's not too late to take advantage of this event. And, with finals not too far away (plan ahead!), it's not too early, either.

Association for Women in Math x Actuarial Science Club x Math Club

the Math mixer

Foods and drinks provided!

21 OCT	5:30 - 7:00 PM
Everest Lounge	

Thinking about next term's Math courses?
Come chat with professors!

Meet the people behind AWM, ASC,
and Math Club

Ask questions, share ideas, and get involved

**A relaxed way to connect with
the Math community!**



**Lets Tackle
the End of
the Term!**

*Join us for this lunch
chat to get a head start
on studying and time
management for finals*

Wednesday, October 22 at 1:00pm - 1:45pm

ISEC 387
Pizza will be served!

Sponsored by the Math Department and Office of Student Success
For questions contact Lesly Clay at clayl@union.edu

Winter Term Planning and Registration

It is that time of the current term when we start to look forward to next term and students plan their course schedule. Academic advising is underway with winter term registration running on Self Service from Monday, October 27 through Thursday, October 30.

Some Math and Statistics Courses: This winter, the math department will be offering several interesting courses beyond the calculus sequence that are suitable for math majors and minors.

- **Math 199** is the department's "bridge course," intended to help students make the transition from computationally oriented courses to more theoretical proof-writing courses. It is a **required** course for all math majors and minors that is *usually* taken *after* a student has taken Math 115. This is a WAC-R course, too! Two sections: **MTH 199-01: MWF 10:30-11:35, MTH-199-02: MWF 11:45-12:50.**

Beyond Math 199: There are several courses being offered that have a Math 199 prerequisite:

- **Math 224** (Geometry) studies selected topics in geometry. This course is wonderful for students looking to apply/ solidify the proof-writing skills they developed in Math 199. Students considering becoming math teachers might also want to consider taking this course. **MWF 10:30-11:35.**
- **Math 228** (Probability Theory) An introduction to the theory of probability. Discrete and continuous random variables. Jointly distributed random variables, sums of random variables and properties of Expectation. Moment generating functions, inequalities, and Limit Theorems. Focus will be on both the theoretical aspects of probability and problem solving. Discussion of some of the probability problems encountered in actuarial, financial, and scientific fields. This course takes a somewhat more theoretical approach to the study of probability than its 100-level counterpart, Math 128. Note that students may only take one of these two courses. **MWF 1:50-2:55.**
- **Math 340** (Linear Algebra). This is a foundational course in math that is **required** for math majors. The primary objects of study in this course are vector spaces, the linear maps between them, and the corresponding matrix theory. **MWF 9:15-10:20**
- **Math 437** (Real Analysis 2) A second course in real analysis, building on Math 336. Measure theory and much more! **MWF 10:30-11:35.**

There are also a couple of statistics courses being offered!

- **Statistics 104** (Introduction to Statistics) This course provides the conceptual foundations and analytical skills for students to be able to quantify uncertainty and to make rational decisions in the face of uncertainty. It addresses the collection of high-quality data the basic statistical analysis of such data. This course carries JDQR credit. **TuTh 9:00-10:45.**
- **Statistics 264** (Regression Analysis). In this course, both the theory and application of regression analysis to develop regression models to fit real-world data sets are studied. **MWF 9:15-10:20.**

Check the online course descriptions to see course prerequisites before registering!

Another Math Problem Seen on Social Media

Here is cute problem for you to wrestle with this week. And, the online author was kind enough to supply a clue. But how is that clue helpful? Take out your pencil and some paper ... ok, your stylus and tablet, and give this one a shot.

Calculus Help Center
Sun-Thurs, 7:30-10:00pm
Sorum House Seminar Room

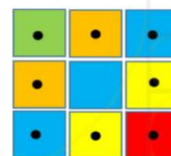
SQUARE TOROID

Prove that for any positive integer "x"

$$x^4 + 2x^3 + 2x^2 + 2x + 1$$

can never be a perfect square

Clue:



<https://www.globalmathproject.org>

<https://www.dhimath.com>