Augarithms

The new fall schedule is revealed...

Mathematics Colloquium Series

Unless otherwise indicated, colloquia are held Wednesdays from 3:40 - 4:40. Refreshments are provided.

Sept.	14	Kenneth Kaminsky, Augsburg College
➔	**28**	**Stephen Willson, Iowa State University**
Oct.	12	Juan Pablo Trelles, Univesity of Minnesota
	26	TBA
Nov.	9	Jennifer Geis, Augsburg College
	30	TBA

This week's talk...

...Some mathematical issues in reconstructing evolutionary history from DNA

Stephen Willson

This week's speaker is **Professor Stephen Willson** of the Department of Mathematics at Iowa State University. Here is the abstract of his talk:

"Recent technological breakthroughs have made large portions of the DNA from many different species available to researchers. If we assume that homologous DNA for a collection of species is known, then a major problem is to reconstruct the historical relationship among those species using that DNA. The mathematical answer will be a "phylogenetic tree"--a graph that indicates how current species are related to ancestral species. This talk will indicate some different criteria that are used to build phylogenetic trees from DNA. Several criteria will be described, and various strengths and weaknesses of the methods will be indicated."

The public is welcome. Refreshmens will be served.

The talk will he be held in Science Hall 108, Wednesday, September 28, 3:40 - 4:40 p.m.

Problem of the week...

Suppose that n is a positive integer and that $2n + 1$ is a perfect square. Show that $n + 1$ is the sum of squares of two integers.*

We have not yet received any solutions to last week's problem. This could be the result of the unfortunate misprint that occurred? See the *correction* on the other side of this page.

Send solutions to the editor at kaminsky@ augsburg.edu, or slip them under his door at Science Hall 137E.

*This weeks problem of the week is reproduced from the Bradley University potw page <bradley.bradley.edu/~delgado/>

Puzzle of the week...

Starting anywhere, and without crossing any lines, draw the figure at right in one continuous movement, without lifting your pen or pencil from the page.

As of press time, we have received one solution to last week's puzzle. Congratulations go to the solver, **Paul Bjorkstrand.**

Send solutions to the editor at kaminsky@ augsburg.edu, or slip them under his door at Science Hall 137E.
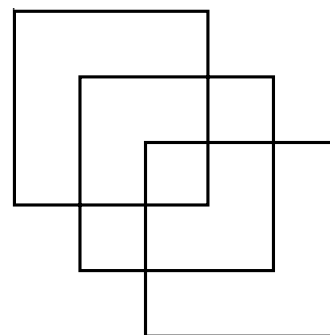
Cartoon Corner
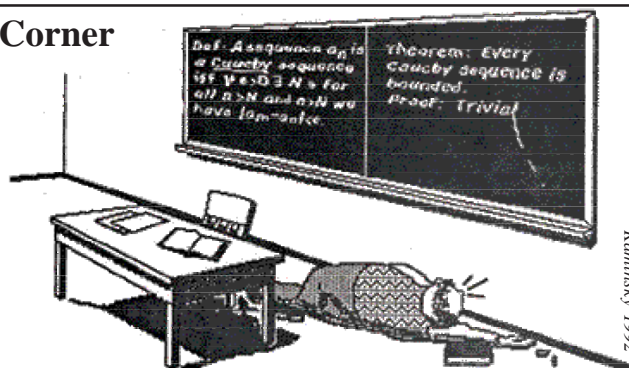
Professor Fogelfroe tells his class that a proof is "trivial" just once too often.

The Biostatistics Graduate Program Open House at U. of M.

The Biostatistics Graduate Program at the U. of M. is sponsoring an Open House for students interested in graduate study in biostatistics. Here are the particulars:

Friday, October 7, 2005
Coffman Memorial Union
Mississippi Room-3rd Floor
10:10 a.m. - 2:30 p.m.

Learn about:

Curriculum
Financial Aid
Hands-On Research
Career Opportunities

For more information, see Rebekah, or go to
biostat.umn.edu/openhouse.html

Unbounded is looking for a new look!!!

Unbounded, the Augsburg Math Club, is hosting a logo/design contest. The winning logo designer will be awarded a prize (TBD).
Contest Rules:

1. The logo can be no more than three colors and must be digital (we need to be able to use it on a computer!)
2. The logo must include Unbounded – Augsburg Math Club somewhere on/in it.
3. All entries must be received by Wednesday, October 5th
4. Drafts will be accepted, and can be polished after submission.

When finished with your design, please email it to Heather Nystrom via attachment at nystrom@augsburg.edu and include the following in the email:

Your name
Your email address
Your phone number

Thinking about Graduate School?

Consider attending:

Writing Effective Personal Statements, presented by Dal Liddle

October 5, 12 noon - 1 p.m. in the Riverside Room

and repeated

October 12, 12 noon - 1 p.m. in the Cedar Room

and

November 3, 3:30 - 4:30 p.m. in the Cedar Room

Correction:

Last week's Problem of the week contained an error. We intended the problem to read "Find all positive solutions *b* such that

$\log_b 531{,}441 - (\log_b 3)(\log_b 9) = 16$,

and show your solution." Unfortunately, 531,441 came out as 531,541. The errant typist, whose name is being withheld, has been reassigned to another campus.

New Face of 2005-2006

Joining the mathematics department this year is **Jody Sorensen**. Originally from Roseville, Minnesota, Jody attended Kellogg High School, where she played clarinet in the marching band.

On entering St. Olaf College for undergraduate study, Jody was undecided on a major. She considered pre-medical, physics, and mathematics, finally choosing mathematics. At first she thought there was no way she would pursue graduate study, but after spending a semester in Budapest studing mathematics her choice became clear.

Jody Sorensen

Jody earned a Ph.D. in mathematics at Northwestern University, specializing in Dynamical Systems. Her dissertation was directed by Clark Robinson. While a graduate student, Jody realized that she wanted to teach undergraduates, who often seem invisible at large research institutions.

Jody's teaching career has taken her to Bates College in Maine, Gettysburg College in Pennsylvania, Grand Valley State University in Michigan, and now to Augsburg. She is currently working with students Dan Wolf and Missy Larson on undergraduate projects in dynamical systems.

In her spare time, Jody enjoys working with stained glass, yoga, and biking.