St. Olaf Mathematics Department



Department of Mathematics St. Olaf College Northfield, MN 55057 September 16, 2002 Volume 31, No. 2

This Week's Mathematics Colloquium

Title: St. Olaf Students at Target; Math in the Marketplace Speaker: Kevin Casson Time: Tuesday, September 17th, 1:30 pm Place: SC 182

This Week's Colloquium

After graduating from St. Olaf with degrees in Math and Art ('89), Kevin Casson joined IBM as a Systems Engineer in the Fall of '89. He then moved on to Target in 1993, where he has held postions as: Capacity Planning Analyst, Operations Manager, Host Computer Manager, Client Service Manger, Enterprise Monitoring Group Manager, Director of Database and Technical Services. Director of Applications Development, and Director of Network Services. In addition to holding all of these positions (not simultaneously), Kevin has served as the Chair of the Target Technology Leadership Council, sits on the Target Technology Review Board, and is involved in the Target Internship, New Team-member, and New Manager training programs.

Kevin will discuss how to prepare yourself for life in the real world. The discussion will focus on such questions as "Will non-Euclidean Geometry ever be used in the business world? How do I get a job without experience and viceversa? What are the opportunities for a collegegrad at Target?" In addition, Kevin will overview his path to his current position as Director of Network Services, and also describe Target's efforts to interest St. Olaf students in positions at the company.

OMH 200 Grand Opening:

After Kevin finishes his talk and the function f: popcorn B our stomachs becomes onto, the department will officially inaugurate OMH 200 as the new student lounge. The ceremony will be short, but not so short to preclude an opportunity for food: cake and beverages will be served. If all this food makes the codomain of f feel like a dense interval, feel free to rest for a while on the new couches in the lounge.

Problem Solving Contest

The St. Olaf Math Department's annual Carlson contest will be held this year on Tues and Wed, Sept. 24, 25. This is a team competition, with CASH PRIZES up to \$35 for each member of the two winning teams. Teams consist of up to three students. First-year students compete in a separate category and receive a slightly different test. Eight to ten problems are selected from a variety of areas of Mathematics, similar to problems from the Math Mess. Teams should find a block of two hours when they can work on problems together on either the evening of the 24th or 25th. If you are interested, please email molnar@stolaf.edu (subject: Carlson) with the names and classes of your team members.

Sabbaticals and Newcomers

Our faculty has seen considerable going and coming in the last year. **Ted Vessey** is back this fall from a sabbatical, divided among Massachusetts, Minnesota, and Thailand. **Richard Allen** spent last fall semester co-leading Saint Olaf's Term in the Middle East with his wife Wendy. Setting off on sabbatical this year are **Jill Dietz** (visiting New Zealand, among other places) and **Paul Humke** (visiting in Scotland).

Newcomers to the department this year are **Steve Hamilton**, **Matthew Bloss**, **Jim Halvorson**, and **Craig Solid**. Watch for more about these folks in future issues of the Mess.

Wall of Fame

Not only does St. Olaf have a number of impressive math majors, but the number of math majors itself is impressive. However, a positive derivative for the number-of-math-majors function usually means a negative derivative for the percentage-of-math-majors-I-can-identify function. In an attempt at making this latter

function. In an attempt at making this latter

function at least non-decreasing, we'd like to encourage each math major (and statistics and CS concentrator) to have a picture taken for the Mathematics Department Wall of Fame (just outside of SC 182).

If you fit the criteria above, please contact Peder Bolstad in the ASC (x3288) to be shot (with a camera). He'll make sure there is always a camera nearby for the next week or so.

Last Week's Problem

Brian Peters '05 and Jason Saccomano '05 solved last week's problem. The two rings which make flowers with the same number of petals are those with 868 and 714 teeth. The Babe Ruth wheel, for example, will reach its minimum distance to the outer ring every 714/2002 of the way around. This reduces to 51/143. Looking at multiples of 51/143, one can see that 143 turns out to be the number of petals (this is easier to see with smaller numbers). Brian and Jason's prize is the nice weather we had over the weekend. Hope they enjoyed it.

Problem of the Week

There are 25 stones in a heap. The heap is divided into two subheaps; then each subheap is divided in two again, et cetera, until we have 25 separate stones. After each division of a heap we write the *product* of the numbers of stones in the two new subheaps on the board. Prove that at the end of this process, the *sum* of the numbers on the board is 300.

** Please submit all solutions to David Molnar (molnar@stolaf.edu) by noon on Sunday.

If you would like to receive a copy of the Math Mess in your P.O. Box weekly, please e-mail Donna Brakke at <u>brakke@stolaf.edu</u>.

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