

The Almagest

The bi-weekly newsletter of the Department of Mathematics and Computer Science. Your trusted source for news.

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Alma College
Alma, MI 48801

Deadlines for Math REU's

There is still time to apply for a summer R.E.U. Below I've provided a brief summary of five programs along with their application **deadlines**. Don't delay.

James Madison University **March 1, 2010**

The projects will be in the areas of Gröbner bases and Sudoku; Gröbner bases and NP-complete problems; and computational statistics.

College of William & Mary **March 3, 2010**

The summer program is entitled, "Matrix Analysis and its Applications."

University of Illinois **March 15, 2010**

There are two REU programs: one on geometric visualization in virtual environments and a second program on evolutionary games and social networks.

Iowa State University **March 19, 2010**

Projects will be in the areas of game theory, dynamical systems and Markov chains, and matrix theory.

George Mason University **April 2, 2010**

This is a multidisciplinary REU program in computational mathematics and nonlinear dynamics of biological, bio-inspired and engineering systems.

Senior Papers & Presentations

A reminder to all senior math majors that your papers must be submitted to Mrs. Smith (SAC 224) by **Friday, March 12th**. The senior presentations begin the following week with talks on Tuesday and Thursday at 4:00 in SAC 216. Please make an effort to attend the talks and support your classmates.

Tuesday, March 16th

4:00 Lacey Best-Rowden
4:30 Adam Meininger

Thursday, March 18th

4:00 Cody Stripling
4:30 Dan Seals

Looking Ahead: Fall 2010 Courses

Registration for fall classes is just a few weeks away, and we thought you might be interested in knowing what upper-level courses will be offered next fall.

Mathematics

MTH 210 Multivariable Calculus (2 sections)
MTH 221 Cryptography
MTH 310 Linear Algebra
MTH 336 Numerical Analysis

Computer Science

CSC 180 Medical Image Analysis (*new course*)
CSC 230 Software Engineering
CSC 345 Artificial Intelligence
CSC 410 Database Management

MATH HELP CENTER

Monday, Tuesday, & Thursday

7 – 10 p.m.

SAC 309

Mathematical Humor

Here are a few definitions you won't find in Webster's dictionary.

A *mathematician* is a blind man in a dark room looking for a black cat that isn't there. (Charles Darwin)

A *statistician* is someone who is good with numbers but lacks the personality to be an accountant.

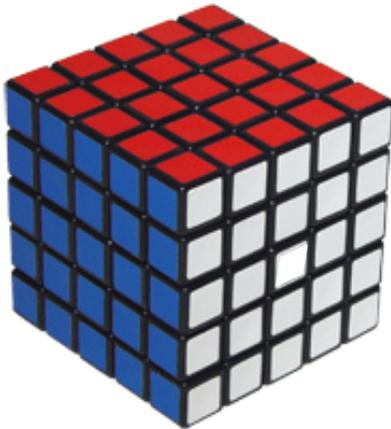
A *math professor* is one who talks in someone else's sleep.

If you'd like to see some other humorous definitions as well as some mathematical puns, limericks, and jokes, then visit the following website.

www.math.utah.edu/~cherk/mathjokes.html

Problem of the Bi-Week

Is it possible to paint the 750 faces of 125 unit cubes using five colors, say red, white, blue, green, and yellow, in such a way that for each color c , a $5 \times 5 \times 5$ cube can be built whose entire surface is color c ?



This problem was taken from the Pi Mu Epsilon Journal. If you solve it, we can send your solution to the journal's editor with the possibility of having it published. Bring your solution to Professor Sipka if you're interested in submitting it to the PME Journal. The deadline for solving the problem is **March 1, 2010**.

The Fecundity of Four Fours

It has been proven that one can express every integer from 0 to 100 using exactly four 4's along with our basic mathematical operators. For example:

$$0 = 44 - 44$$

$$1 = (4 + 4 - 4) / 4$$

$$2 = (4 \cdot 4) / (4 + 4)$$

$$3 = 4 - 4^{4-4}$$

$$4 = \left[\sqrt[4]{444} \right]$$

$$69 = \frac{4! + \sqrt{4}}{.4} + 4$$

For a complete list of ways to write all these numbers as combinations of fours, visit: <http://mathforum.org/ruth/four4s.puzzle.html>. If you are bored over spring break, try to find some of them on your own.

Student assistant: Matt Mansell

Faculty advisor: Tim Sipka

Distribution: Deb Smith

If you would like to submit an announcement or a short article, please send it via e-mail to Matt Mansell (11mgmans) or Tim Sipka (sipka).