

The Almagest

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

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February 8, 2010

Alma College
Alma, MI 48801

Upcoming Mathematics Colloquium

What is a Mersenne prime, and how do I find one? Those questions, along with several others, will be answered by **Dr. Andrew Thall**, Assistant Professor of Mathematics and Computer Science, in a talk he'll be giving on **Tuesday, February 9th**.

*"How To Win \$100,000
By Being a Geek"*

Presenter: Dr. Andrew Thall
Date: **Tuesday, February 9th**
Time: 4:00
Place: SAC 216

Refreshments at 3:50.

Talented Soph. & Jr. Math Students

The Summer Undergraduate Mathematical Sciences Research Institute (SUMSRI) at Miami University in Oxford, Ohio is looking for talented math students to participate in its summer program. The goals of the 7-week program are: to provide students with a research experience in math or statistics; to improve students' ability to work in groups; to give participants an opportunity to write a technical paper and give a talk at a math conference; to make students aware of career opportunities in the mathematical sciences; and to prepare students for the GRE. The program is especially interested in, but not limited to, African-Americans and other underrepresented minorities and women. Participants receive a stipend of \$3,200 along with free room and board. The deadline for applying is **March 1, 2010**. For more info visit www.units.muohio.edu/sumsri/.

Math Help Center

Are you frustrated by factoring, perplexed by polynomials, dazed by derivatives, or mystified by matrices? If you have symptoms of these types, then you may find a cure at the **Math Help Center**,



our department's walk-in clinic for mathematical maladies. The Center is open at times that should be convenient for you. No appointment is necessary—just show up, and you'll be helped by one of our very own math mavens.

MATH HELP CENTER

Monday, Tuesday, & Thursday

7 – 10 p.m.

SAC 309

A Reminder to Senior Math Majors

By now all seniors should have submitted their topics for the senior presentations, which begin on **March 16th**. We'd like to remind you that all papers are due on **Friday, March 12th**. Please submit your papers to Ms. Smith, SAC 224.

More Math Anagrams

ALGEBRA = A GARBLE

DECIMAL POINT = I'M A PENCIL DOT

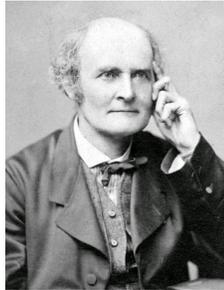
INTEGRAL CALCULUS = CALCULATING RULES

U.S. Census Bureau Job Opportunities

The U.S. Census Bureau has several opportunities for short or long-term employment in the Washington, DC area. Candidates are required to have completed 24 semester hours of mathematics and statistics (of which 15 hours must be in advanced math and 6 hours must be in calculus-based statistics), and all applicants must have U.S. citizenship. For more info visit www.census.gov.

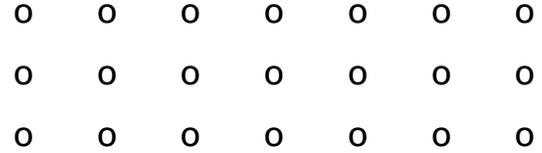
Around This Date

Arthur Cayley died near this date in 1895 at the age of seventy-three. At the age of seventeen, Cayley attended Trinity College, Cambridge where he did extensive work as a mathematician. He spent fourteen years working as a lawyer, a career that he saw as a way to finance his mathematical pursuits. Cayley was the first mathematician to define the concept of a *group* in the way we think of it today.



Puzzle of the Bi-Week

Each of the 21 dots in the array below is to be colored with one of two colors. *Prove* that, no matter how the coloring is done, there will be four dots of the same color that form the vertices of a rectangle.



The first student to submit a correct solution to Professor Sipka will receive a small (and I mean very small) prize.

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).

Answer to Integral Problem

Evaluate the following integral: $\int 3(ice)^2 d(ice)$

$$\begin{aligned} \int 3(ice)^2 d(ice) &= (ice)^3 + C \\ &= ice\ cube + sea \\ &= iceberg \end{aligned}$$

Solution to the last puzzle

The length of the shortest path the bug could take is $\sqrt{52}$. Here's the solution submitted by David Maniez.

