

Important Dates!

EVENTS

Math Contest in Modeling (MCM)

Feb 14-18, 2008

MAA-NJ Section Spring Meeting/Garden State Undergraduate Math Conference (GSUMC)

Sat April 12, 2008

William Paterson University

NCTM Annual Meeting and Exposition: Becoming Certain About Uncertainty

April 9-12, 2008

Salt Lake City, UT

CLAS Spring Meeting

Wed Feb 13 10:50am

Boyd Recital Hall

DEPARTMENT MEETINGS

Spring 2008

Feb 6

Mar 5

Apr 9

May 14 (Retreat)

TUTORS

Bob Booth, Brian Ruberti

Tutoring Hours Spring 08

Mon 12-2pm, 5-6pm (BR)

Tue 11-1pm (BB)

Wed 11-12pm (BB), 1-3pm (BR)

Thu 12-1pm, 5-6pm (BB)

HOLIDAYS

Spring Break

March 17-21 (NO CLASSES)

Good Friday

March 21 (NO CLASSES)

Email newsletter comments to:

nquyen@rowan.edu



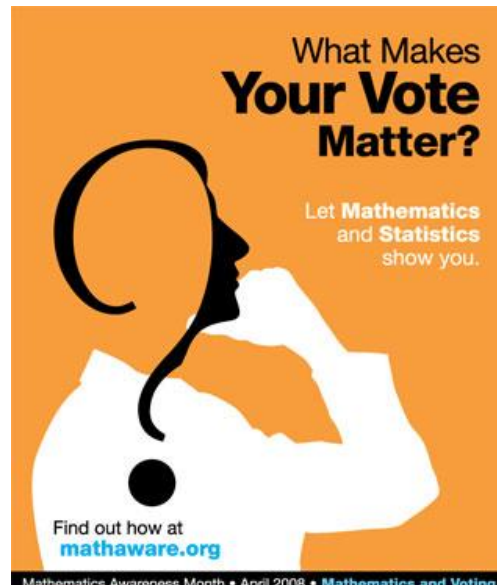
www.cs.berkeley.edu/~sequin/PAPERS/Isama03_WWW.pdf

Math Awareness Month April 2008

The theme for Mathematics Awareness Month 2008 is **Math and Voting**.

The Math Department will be sponsoring colloquium talks discussing this theme. Look out for further announcements.

Information about Math Awareness Month 2008 and its activities, including a contest where you can win \$500 by creating a video of what 'Math and Voting' means to you, can be found at www.mathaware.org.



Math students *Honored* with Research Awards

CONGRATULATIONS! Three Honors math students, **Robert Booth, Andrew Fabian, and Kathryn Robertson**, were awarded Research Assistantships for AY07-08 by the Thomas Bantivoglio Honors Program at Rowan. Each award consists of \$600 and Honors credit for doing faculty sponsored research. Robert is working with Dr. Abdul Hassen on a project involving a generalization of Bernoulli numbers; Andrew and Kathryn are working with Drs. Hieu Nguyen and

Abdul Hassen, respectively, to translate some papers of Leonard Euler into English (originally in French). Each student will be presenting their research at the annual Spring Honors Reception in April. Look out for a future announcement.

(Right) Excerpt from Euler's E236 paper, *Explanation of Certain Paradoxes in Integral Calculus* (1758), translated by Andrew Fabian, 2007. Full text available at:

http://www.rowan.edu/college/las/departments/math/faculty_staff/nguyen/euler/index.htm

EXPLANATION OF CERTAIN PARADOXES IN INTEGRAL CALCULUS

BY MR. EULER
Translation from the French: ANDREW FABIAN

The First Paradox I.

Here I intend to explain a paradox in integral calculus that will seem rather strange: this is that we sometimes encounter differential equations in which it would seem very difficult to find the integrals by the rules of integral calculus yet are still easily found, not by the method of integration, but rather in differentiating the proposed equation again: so in these cases, a repeated differentiation leads us to the sought integral. This is undoubtedly a very surprising accident, that differentiation can lead us to the same goal, to which we are accustomed to find by integration, which is an entirely opposite operation.

II. To get a better feel for the importance of this paradox, we only have to remember that integral calculus holds the natural method for finding integrals from differential quantities: and from this it seems that for a proposed differential equation, there is no other way to arrive at its integral than to attempt its integration. And if we would, instead of integrating this equation, differentiate it once more, we would need to believe that we would further distance ourselves from the proposed goal, considering that we would then have a differential equation of the second degree, it would need two integrations before we reach the proposed goal.

New Math Adjunct Instructors

William Osler

Welcome Bill!

Noteworthy Achievements

PUBLICATIONS

Janet Caldwell, *New Jersey's Math Standards and the NCTM Curriculum Focal Points*, The NJ Mathematics Teacher **65** (2007)#3, 7-12.

Thomas Osler and **Adam Hilburn** (student), *An unusual proof that F_m divides F_{mn} for Fibonacci numbers using hyperbolic functions*, Mathematical Gazette **91** (2007) 510-512.

Thomas Osler and **Andrew Robertson**

(student), *Euler's little summation formula and sums of powers*, Mathematical Spectrum, **40** (2007/2008) 73-76.

Thomas Osler, *A remarkable formula for approximating the sum of alternating series*, to appear in Mathematical Gazette.

Thomas Osler with **Tirupathi Chandrupatla**, *Visualizing Vandermonde's convolution on the extended Pascal's triangle*, to appear in Math. and Computer

Education; *Approximating an ellipse with four circular arcs*, to appear in Math. and Computer Education.

Thomas Osler and **Abdul Hassen**, *On generalizations of Lambert's series*, to appear in Intern. Journal of Pure and Applied Math.

PRESENTATIONS

Janet Caldwell, *Preparing the Next Generation of Teacher Leaders; Developing Proof-writing Skills in Geometry through Technology, Scaffolding, and Dialog Writing*, AMTE Annual Conf, Tulsa, OK, Jan 2008.

Abdul Hassen, *Error Zeta Function*, Joint Math Meetings, San Diego, CA, Jan 2008.

Chris Lacke, *Some (Fast) Food For Thought - Gathering and Using a Meaningful Data Set for College Students*; MAA Sessions on Great Activities for an Introductory Statistics Class (co-organizer); MAA Session on Mathlets and Web Resources for Mathematics and Statistics Education (co-organizer), Joint Math Meetings, San Diego, CA, Jan 2008.

Hieu Nguyen, *Translating Euler's works: How to get your students' feet wet in undergraduate research*, Joint Math Meetings, San Diego, CA, Jan 2008.

Thomas Osler, *Vieta like products involving Fibonacci and Lucas numbers*, Joint Math Meetings, San Diego, CA, Jan 2008.

Dexter Whittinghill, *A Team-Taught Biometry Course With Lectures and Labs*, Joint Math Meetings, San Diego, CA, Jan 2008.

LEADERSHIP

Chris Lacke, Past-Chair, SIGMAA Statistics Education.

Jay Schiffman, Member of Editorial Panel, AMTNJ Journal.

Sudoku

	5			7	4	9	
4					6		
	6		3	5			
		9					
3	1					4	5
					2		
			1	6		3	
	6						9
8	3	9				1	

Daily Sudoku: Wed 23-Jan-2008 medium