Friday, June 16, 1995


The doctors were baffled, completely stumped over Wayne's apparently incurable case of Bad Hair Life.


## mastHEAD

Another mathNEWS production night and everything seems to be going well so far. Right now its 1:30am, we're working on page 6 and we might be done before sun up. At least the network hasn't gone down yet. Loser of the year award goes to the jerk on Sunday afternoon who swamped Descartes with 100 perl scripts and prevented everyone else from working. Its a real bummer when you type logout and it takes 5 minutes for the word to appear on screen.

On a positive note, its summer outside and generally beautiful. I love school in the summer-it seems more relaxed. Except for the fact that I seem to have no free time, that is. Hopefully midterms are over, or almost over, for everyone. Best of luck to everyone in co-op-ranking forms come out on the $22^{\text {nd }}$ ! May you all be offered your job of choice.

By the time you read this we should hopefully have got mathNEWS on the WWW. mathNEWS will likely not be updated on gopher - we'll try and keep everything on the web from now on. Thanks to Tâm for all his help.

Thanks to all those who came out tonight. mathNEWS slaves for the evening (and their favourite summer activities) are: Manal Katerji (Scoops!), Arsenyk Ustaris (Solving PDE's), Eric Sutherland (Playing squash in Bali), Timmy Haynes (setting up Linux/X-Windows, configuring PPP and getting addicted to Dark Forces. And passing courses), David Swart (going to the beach), Stuart Pollock (Ultimate \& bagpipes on the Village Green), Tim Howie (Cruisin' on city transit, listening to Sloan...), Kael Lizak (Ultimate frisbee), Darren Morby (Doing absolutely nothing!), Sarah Kamal (Whistling a gay tune while puttering innocently about my petunia gardenwhat else?) and Stephen Johnston (Walking outside the CC on sunny days and enjoying the view), Kevin "Lord $\}$ " Hartmann (Random acts of creative genius), Dave Low (Wet banana'ing from $3^{\text {rd }}$ floor MC to Bomber patio), Trevor Trodd (eating a nice pasta dinner), Viet Tâm Lau (Doing a summer term at $U(W)$ and putting mathNEWS on WWW - check out at http://www.undergrad.math.uwaterloo.ca/-mathnews), and Chris Buchanan (Anything but coding at 3:00 a.m.)
Thanks, as always, goes to Marion at Graphic Services for the wonderful job she does of putting up with us crazy people, and everyone at Mega Pizza for providing us with much needed pizza.

## Enjoy the issue!

Stephen "Pepper" Johnston and Stuart "Jean-Guy" Pollock

## ISSN 0705-0410

mathNEWS is normally a fortnightly publication funded by and responsible to, but otherwise independent of, the Mathematics Society at the University of Waterloo. Content is the responsibility of the mathNEWS editors; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or mathNEWS. Produced with $\mathrm{p} I \mathrm{~T} 4 \mathrm{mN}$, including the new on-line layout facility. Send your correspondence to: mathNEWS, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid mathnews@undergrad.math.uwaterloo.ca on the Internet.
Your Wonderful Editors: Steve Johnston and Stuart Pollock

## lookAHEAD



## Thinking about graduate school?

The Faculty of Mathematics is holding an Information Meeting on graduate work in the mathematical sciences:

Wednesday June 28, 1995
3:30 p.m. - MC 5158

- Why undertake a graduate program?
- How do you know if you are suited for graduate work?
- Where can you obtain information on programs?
- What financial assistance is available?

Departmental representatives from Applied Mathematics, Combinatorics and Optimization, Computer Science, Pure Mathematics, and Statistics \& Actuarial Science will be available with specific information about their programs.

All students are welcome. Refreshments will be available.
Betty Jacobs, Math Graduate Office
MC 5090, ext. 3294

## Am I in the Right Place Here?

## gradNEWS

Y'know, I really like Math students. Of the 50 people who have already committed to volunteering on Canada Day, 20 of them are Math students. It seems that Math has a ton of spirit when it comes to wanting to help out.

There are still plenty of opportunities for you to volunteer for Canada Day. You can flip burgers, play with the kids, keep an eye on things; whatever would suit you best. And you can do it for 3 hours, or for all 3 days. It's up to you.

To thank those that come out, we provide some food and refreshments, as well as a classic party at the end of the day. For those who sign up in advance, there will also be a volunteer T-shirt to identify themselves on the day of the event and to keep as a memento of the day.

You can sign up in the MathSoc office (look for the pink forms), or talk directly to Jon Cressman or Eric Sutherland. In addition, you can mail Eric at esutherland@jeeves, or visit the Canada Day homepage (http://barrow.uwaterloo.ca/-esutherl/canada_day /canadaday.html).

So, if you're going to be around the July $1^{\text {st }}$ weekend, then don't delay. Sign up to be a volunteer and be sure to attend the all-volunteers meeting on June $\mathbf{2 7}^{\text {th }}$ at 4:30 in DC1350.

We need your help to pull this day off. We need you.
Eric Sutherland and Sarah van den Enden Canada Day Volunteer Co-ordinators

Hi kids. I hope midterms are treating you better than the Fed Hall bouncers (Sorry Brad). Things with the MGC are fairly quiet, but there are a couple of announcements. .

1. The MGC has given birth to its own news group called 'uw.math.mgc'. Subscribe to get grad related info without all the noise of the other newsgroups. It would be appreciated if you could peer pressure your friends into subscribing as well.
2. Grad photos ended Tuesday, June 13. If you are a Mathie in the Class of ' 96 who didn't get you grad photo taken, email the MGC committee at mgc@descartes for further instructions.
3. Yearbook Blurb sheets are being distributed from the MGC office. If you haven't already received yours, stop by and pick one up. Please return your completed Blurb to the MGC office by July $10^{\text {th }}$.
4. The MGC is planning to schedule a weekend of camping, tubing, and related activities in Elora. If you have any preferences as to the weekend, please e-mail the MGC.

Good luck on your midterms.
Mike Vanderkaden MGC Chair

## Letters to the Editor

I am writing this letter in response to the article vapidFIRE written by Mike Hammond (mathNEWS June 2, 1995). I must admit, it is very sad that "a pain in the rear" [the Bosnian situation] is all that a student from one of the best universities in North America can say about the biggest genocide since World War Two. The fact the 17,000 children were killed since April $6^{\text {th }}, 1992$ is not something to laugh about, but something that the whole world should be ashamed of. It is a shame that even the intellectuals of Canadian society cannot see the tragedy that is occurring in the middle of Europe at the beginning of the $21^{s t}$ century.

As the world sits back and writes comments such as this, thousands of Bosnians are being killed in the concentration camps, equal to those of Nazi Germany. The deaths of my two cousins and my grandmother, as victims of this war, did not cause for me "pain in the rear," but deep sorrow in my heart.

The next time you decide to write comments such as this, the least you can do is show some respect, if not for the Bosnians still living, then for the 200,000 who died as the victims of Serbian aggression and world's indifference.

Amila Jamak
[mathNEWS and the author of vapidFIRE did not intend to belittle the Bosnian situation in any way. We realise in retrospect that this attempt at humour was in poor taste. We apologise to all those that we may have offended. - Ed.]

## Faculty of Mathematics

## Dean's Honour List

In recoginition of outstanding academic achievement throughout their undergraduate careers the following students will "GRADUATE ON THE DEAN'S HONOUR LIST" at Spring convocation, May 27, 1995 and have their names displayed in gold on the walls of the Faculty Colloquium room (MC 5158).

| ANDRESS Margaret Christine | HC C\&O |
| :--- | :--- |
| ASTLEY Derek John | HC STAT |
| BAIRD Warren James | HC C\&O\&CS |
| BEARDWOOD Fiona Nicole | HC AM\&CS |
| BENDER Lorraine Joyce | HC M/BA(I) |
| BOSLAND Marcus Jomo | H ACTS\&ECN |
| BOURDON Sean Eric | H AM/PHYS |
| BOWMAN Ivan Thomas | HC CSCI |
| BRANDOW David John | HC CSCI |
| BRISEBOIS Michael A. | HC ACT\&STA |
| BURTON Paul Kenneth | HC CSCI |
| CARRIERE Jeromy | HC CSCI |
| CHAN Kai-Chung Petrus | H CS/INF |
| FARELL Cesar Edward | H AMATH |
| FARRELL Alana Christina | HC ACT SCI |
| FUNG Chi Wai | H AM\&ECON |
| GAMMAGE Simon David Hedley | H COMP SCI |
| GOLDBERG Ian Avrum | H CS\&PMATH |
| HAMM David | HC C\&O\&CS |
| HO Kai Fai | HC STAT |
| HUI Joshua Wai-Ho | H C\&O\&CS |
| KENNEDY John Adam | HC C\&O/TCH |
| LAPENSEE Roxane Gisele | HC C\&O/TCH |
| LAW John Wing Hong | H ACT\&STA |
| LOU Jie Jay | H CS\&PMATH |
| MAENHAUT Barbara Marguerite | HC C\&O/TCH |
| MAXWELL David Aquilla | HC AM\&PMTH |
| MOMOH Oshoma | HC CSCI |
| MOSCA Michele | H C\&O\&PMTH |
| NG Ho Lai Leo | H ACTS\&STA |
| NGUYEN Minh Duc | H CS\&STAT |
| ROHLF Katrin | HAMATH |
| SILGARDO Sebastian F. | HC C\&O\&CS |
| STASTNA Mark | H AMATH |
| SUM Poon Kay Thomas | HC CS/INF |
| TESSIER Joelle Florence M. | HC CSINF |
| ULLRICH Christopher J. | H AMATH |
| VASIGA Troy Michael John | H C\&O\&CS |
| WONG Victor | HC ACT\&STA |
| YEUNG Ka Yee | HACTSC\&CS |
| YEUNG Kin Pong | HC CSCI |
| YUEN Hamilton | HC ACT SCI |
| ZHANG Hao | HCS |
| ZINIUK Carly Cherly | HC TCHNG |
|  |  |
|  |  |

CHOU Pui Kei
CHOW George
CHU Kenneth Chung-Kan
COLES L. Michelle
COUCKUYT Jeffrey Darren
DIMITRIOU Eugene T.
DUNN Gregory Lewis
FAST Paul G.
GEDDIE Kevin Leonnard
GOLOMBEK Eric
HOLMES David C.
HUEBERT Jodi Marie
KHERAJ Naheed
LAW Nancy Ho Man
LEE Tai Keunng Gary
LUGOMIRSKI Lily
MARLATT Megan Jennnifer
MCHARDY Ian Roger
MECH Karleen Marie
MULLIGAN Marc Edward
OGRYZEK Steven Walter
PACE Clare
RAZAK Shaloub
ROONEY Monica L.
STAHELI Dan
TSANG Frankie Sai Lok
WHITE Casey
WIEBE Jonathan
YANG Peter Shawn
YU Ka Wah Anglea
YU Rok
ZHANG Connie
ZHOU Kathleen Yi

H OP RES
HC ACT SCI
H AM/PHYS
H M/BA(IN)
HC CSCI
3 YR GENERAL
H ACT SCI
HC CS
HC CSCI
HC MTH/TCH
HC CS/EL E
HC TCHING
HC ACT SCI
HC C\&O\&CS
H CS\&ECON
HC CSCI
HC OP RES
HC CSCI
H STAT
HC CSCI
HC CSCI
HC ACT SCI H AM\&PMATH H C\&O
HC CS/EL E
HC CS\&OR
HC M/BA(I)
HC AMATH
HC AM/CS
HC M/B/CS
H CS/EL E
HC CSCI
H COMP SCI

In recognition of outstanding academic achievement during the Winter 1995 term, the followinng students qualified for the Dean's Honours List:

ANDRESS Margaret Christine
BANKS Steven Richard BAUMAN Shane Brendon BECKER Matthew William BENDER Lorraine Joyce BORISOV Nikita
BRANDOW David John BRIDSON Robert Edward BRUCE Aaron Theodore CHENG Chi Hang Henry CRERAR Michael Cameron EISEN Philip Allan
FARRELL Alana Christina
FOK King Yin Kennnny FUNG Serena Cheuk-Ling GMACH Frances Christine HANCOCK Matthew James
HO Jackie Cheukkin
HO Carole Kay Lock HUI Kevin
INGRAM Christopher
IP Jeffrey Tsz-Yue
JOANIS Eric Jean Sylvain
KAMINSKY Kirk Eldon
KAPUR Rishi
KETTLE Steven C.
LAM Cheuk Ying
LYNCH Gerard Thomas

BABINEAU Denise
BARCLAY Sheila Kristine BEARDWOOD Fiona Nicole BELL Jason BLANEY R. Kyle BOURDON Sean Eric BRELSFORD Stephanie Annne BRISEBOIS Michael A.
CHEN Wing Yee Anne
COLES L. Michelle
DUNN Gregory Lewis
FARELL Cesar Edward
FLOYD Janice
FUNG Pui Yin Grace
GAMMAGE Simon David Hedley
GOLDBERG Ian Avrun
HILL Lorri Anne
HO Kai Fai
HUANG Po-Chih George
HUI Joshua Wai-Ho
IP Kee Wai
IRVING John Charles
JOHNSTONE Sidney Rennders
KAPLAN Craig Steven
KENNEDY David John
LAKOTA Hrvoje
LEE Alex Yuen-To
MA Vincent

## Prez Sez volunteer volunteer volunteer...

How's it going, boys and girls? I'm sure you're all very busy with midterms and assignments. I'd like to wish you all good luck.

Canada Day is fast approaching. The committee organising the KW Canada day celebration is looking for people to volunteer. MathSoc has traditionally taken care of children's activities. Jonathan Cressman, Danger Boy, has taken on the exciting job of organising for the little kids, and is looking for volunteers. Other volunteer opportunities include security, setup, tear down, food preparation, and more stuff. Come to the Soc office to pick up an information sheet if you're interested.
Saturday July $8^{\text {th }}$ is the first annual "Critical Massing" rally in support of environmentally friendly methods of transportation. Show your support by tagging along with your bike, your blades, or boots, down to Kitchener and back in a friendly rally, demonstrating viable alternatives to the automobile. For more information, call Dave, at 886-5599.
And finally for those of you who actually read this column, the news you've all been waiting for: The comfy lounges couches are coming! Yes, that's right, those beautiful, plush, new, comfortable, intact, not-quite-sinking-yet couches are almost here! Keep your fingers crossed and your eyes open, for a brand new look.
Until next time, adios, sayonara, ciao, see ya (wouldn't wanna be ya), hasta la vista,

Poesy "Prez" Chen c/o "Couch Potatoe" Kael Lizak
continued from page 5
MACPHAIL John Revan MILLEY Peter
MISHNA Marni Julie
NG Angrew Yue Hang
PARSONS Todd Lawrence
PILKEY Steve
PUN Christopher M.
QUAH Boon Hong Jun
REYNOLDS Franklin Wesley
SABOURIN Lousindi Rose
SHADDICK Scott Allen
SRI-SKANDA-RAJAJ Anya Kanmani
STACKHOUSE Shawn Michael
STICKNEY Laura Louise
TEH Yee Whye
THORSLEY Michael D.
VASIGA Troy Michael John
WAI Hanny Chi-Hang
WONG Kwok Chung
YEUNG Min Min Winnie
ZHANG Hao
In recognition of outstanding academic achievement during the Fall 1994 term, the following student has been added retroactively to the Dean's Honours List.
RAZAK Shaloub

## Wade's Word

It's the middle of June and that means it's Midterm Timemy most favourite time of the semester! (and if you believe that then I'm sure that you also believe that it really was a lemon on that Canada's Wonderland sign and not a yellow football-if you don't know what I'm referring to, ask Sarah Kamal about it!) Hopefully everyone has recovered from SummerFest and isn't TOO stressed out over midterms.

Since it is midterm time I know that (at least some) people are looking for places to study. Why do I bring this up? Well as you (should) know, traditionally group study rooms have been available through MathSoc. Currently they aren't. This is due to problems encountered in the past such as keys going missing and people "camping out" in the rooms during exam times. I am part of a committee charged with examining this problem and either coming up with a solution or deciding to alter/terminate the use of the room. If you have suggestions regarding this or would like to be part of this committee PLEASE come by MathSoc and leave me a message. We NEED ideas! Aside from that, hopefully you've noticed something's new in the Comfy lounge (at least they should be there by the time this is published). If you haven't, stop in and check it out!

Wow, this is a long article for me! I'd better stop writing and get back to studying! (I really need it!)

## The Other Side

Wade

This weekend, I was fortunate enough to attend a party in Toronto where I met the president of the Computer Science Club of $u(t)$ Okie, first of all, one big difference. She did take a shower that day. Though it was a party, she assured me that this was a regular occurrence.

After talking for a while, she told me about how their club works. First of all, they have no members. People can come and go as they please. Their office is small, like our own, but surprisingly clean.
They were actually offended when a group of engineers broke into the office and peed into the garbage container. From what I hear, $\mathrm{U}(\mathrm{W})$ engineers are frustrated because the local CSC chapter at $u(t)$ has yet to notice.

Ok, scary incident. Right now, as I am typing this, I see a real life photographer. Hold on a sec. Oh, it is just Ian. Never mind.

Anyway, our CSC has some real nice things about it. Calum is a great little machine and the $u(t)$ prez did sort of drool over $i t$. The couches, which drooled on the $u(t)$ prez, leave a lot to be desired. A CSC member was quick to analyze the chemical decomposition of the couch drool, and started writing a perl script which would measure the amount of the substance excreted daily and report the results on the CSC home page. The couch should be interfaced to the Web by the time you read this.
Although the $u(t)$ prez didn't appreciate our couches, local CSC members enjoy them immensely. At least, so I am told. I've never wanted to be around the CSC when the couches are being "enjoyed."

# Cos Science Club 

A Student Chapter of the ACM

## CSC Flash

Greetings once again, humble bipeds! The fact that this is a Spring term seems to offer a convenient excuse for CSC members who want to take it easy this term, but nevertheless, my CSC's membership count is (at time of writing) 331. Evidently at least that many people think that the CSC has at least one useful service to offer.

This past week, the CSC held an introduction to debugging (have you tried ddd yet?), went on an outing to I Hate Hamlet, and featured Prof. Ragde speaking on the Web as a Cultural Phenomenon.

Scheduled to come up this week are two talks on the operating system ever-growing in popularity amongst CS geeks/hackers/hobbyists (no, not Window $\$ 9 n$ ), Linux. Watch for version 1.3 soon at an ftp site near you!

## Programming Contest

It's not too late to sign up for the Spring practices of the ACMStyle Programming Contest. This is a practice contest (although prizes will likely be available) for the Waterloo team tryouts in the Fall. At the Fall tryouts, Waterloo will be selecting two teams to represent the University in the Regional level of the ACM International Scholastic Programming Competition (or whatever specific name they decided to give it this year).

Waterloo teams have won the regional competition for the past three years, and gone on to the International Finals, taking first place overall two years ago, and top-ten finishes in the other years. You, too, can have a chance to try your hand at this fame and fortune (read: thousands of dollars in prize money). Drop by the CSC today to sign up.

## $T$-shirts and buttons

The new CSC T-shirts are still on sale (assuming we have a few left by now). You can see the design in the CSC office, or on our WWW site. Also, in case you're not thrilled with some policy (food and drink) put forth by the University powers that be, the CSC has buttons for sale that read, "It doesn't have to make sense; it's University policy."

## Other things

As usual, you should read the newsgroup uw.csc for the latest news from my illustrious club, and check out their home page at http://csclub.uwaterloo.ca/.

Net.tip of the week: Use kerberos and shun NFS, because network security sucks!
I'll see you on the net (if you have my public key),

Calum T. Dalek Chairbeing

## From the Desk of The Business

Just to keep everyone up to date, we have the following confirmed upcoming events:

1. Stock Market Competition

From NOW until July 28, 1995
Anyone can join anytime... must be a member
2. Seminar for up-and-coming Entrepreneurs given by Empix Imaging
Date: July 21, 1995
Time: Yet to be determined
As of right now, we are working on the following:

1. Eagles Flight Business Simulation

For those who want to develop some important business skills...
2. TSE Trip

For those who are interested in checking out the Trading Floors on Bay Street.
3. More seminars

For more information, come visit us in MC 3030, call us at x 3564 , or email us at:
business@calum.csclub.uwaterloo.ca

## ultraCLASSIFIEDS

Sam Cheng
"Women \& children first!"

> Eris of Gwythmere

To all concerned, July $13^{\text {th }}, 1996$.
Eric and Charlene
Hello, Colleen! Next article may well be dedicated to you, unless sufficient bribes/threats prevail. Be warned.

Lord Nullset
Please include your full name on all submissions to mathNEWS. We can't print an article unless we know the source.

The Editors
Dear Grumpy:
I object to the political incorrectness in your mathNEWS article. By singling out the Tall_Skinny_Chicken_Boys as a distinct societal entity, you have excluded the rest of of Tall_Chicken_Boys, namely, the fat ones. You should attempt to be inclusive of all cultural groups in subsequent articles, or you may lose readership among Tall Fat Chicken Boys (Not to mention Short Skinny Chicken Boys, Tall Skinny Ostrich Boys, and Short Abusive Women, who also feel ostracized by your article.)

Tall Fat Chicken-Ostrich Mutation Boy with Skinny Legs

## prof QUOTES

"If you've had calculus and not seen polynomials then you should sue your calculus professor."

Reid, C\&O 350
"If you don't get that, I can't help you. You'll have to sue someone more fundamental than your calculus teacher."

Reid, C\&O 350
"By the way, I don't want any nerds piping up and saying that this could be complex."

Reid, C\&O 350
"Shows you how my brain works-not very well sometimes."
Reid, C\&O 350
"I'm in a happy state. I get my CS241 assignment back. Then I'm in a depressed state."

Becker, CS 241
"I feel really stupid holding this thing. [Waves wooden pointer.] At least with that thing [points at laser pointer] I can zap!!!! people."

Shallit, CS 340
"If you can't solve the problem you want to solve, solve the problem you can solve."

Shallit, CS 340
"It's like going to Etobicoke. . . you don't know until you get there that there's nothing there to do."

Shallit, CS 340
"Yes, it's true this grammar will produce 'ABBA', which further decreases my respect for it."

Shallit, CS 134
"There's nothing worse that newlyweds eating egg McMuffins. . . trust me, I know. That's not what I meant to say."

Smith, ECON 102
"Cars and cdrs are a bit of a pain in the ass-sorry I'm not supposed to say things like that-cars and cdrs are a bit tricky."

Cormack, CS 442
"Pascal, the most restrictions, lobotomized language unleashed on the world."

Cormack, CS 442
Prof: "What's your favourite language?" Student: "Let's see that in BASIC." Prof laughs.
"Nothing's greater than positive infinity, except maybe a ham sandwich. That reminds me of a joke..."

Shallit, CS 340
"So 1 is going to be very oomphful if $x$ is very small. I'm sorry. I'm sorry I used the word 'oomphful.'"

Reid, C\&O 350
Student: "I don't understand what you just did." Prof: "That's right, you don't."

Thompson, STAT 332
" $1,2,3,4,5,6,7 \ldots$ it's a good thing I watched Sesame Street."

Farell, STAT 231
"I'm good with these two numbers."
Farell, STAT 231
"What the heck was I thinking here?"
Kunze, AM 353
"I don't know why I was out of it."
Kunze, AM 353
"We'll have to sketch these things of course. They're brutal!"
Kunze, AM 353
"This may be the first thing you see that looks silly in this course, which means that you haven't been paying much attention."

Bennett, STAT 231
"Execute's perhaps an ill-chosen word."
Bennett, STAT 231
"Basically kind of different, sort of."
Astels, PMATH 336
"That's why I chose something annoying like that to work with."
Astels, PMATH 336
"It wouldn't be a function, it would be totally... CRAP!"
Astels, PMATH 336
"Oh, you're the narc!"
Astels, PMATH 336
"I think we've found the first failure of the class."
Astels, PMATH 336
continued on page 8
continued from page 7
"Do you want to go now?"
Collins, MATH 138
"Who here thinks this series absolutely converges? Who here thinks it doesn't? Who here would rather not go to the midterm tonight?"

Collins, MATH 138
"I can't make this any more complex..."
Godsil, MATH 136
"I realized you wanted to come here (to $\mathrm{U}(\mathrm{W})$ ) to come to my class..."

Shallit, CS 134
"You were lucky. You got me. Others weren't as fortunate."
Shallit, CS 134
"You can't make bazookas in your basement and sell them in your local K-Mart. It turns out that you can in the States. .."

Smith, ECON 102
"Right now, someone in Japan is dying."
Smith, ECON 102
"Threatening someone you're trying to sell stuff to is a bad idea."

Smith, ECON 102
"There's a time for reality, but this isn't it."
Smith, ECON 102
"I'm going to start singing here in a minute."
Smith, ECON 102
"I have such a big ego that I don't need to defend it..."
Smith, ECON 102
"I should be hugging him..."
Smith, ECON 102
(speaking about women) "I know why the women listen; because they're interested in themselves. .."

Smith, ECON 102
(on Jacques Parizeau) "He does want an army. To do what, I'm not sure. They could salute..."

Smith, ECON 102

## Top 9 Ways to Insult Sarah Kamal and SURVIVE

9. Have a more convenient target than yourself nearby when you commit the "offense."
10. Call her Fräulein. Leave. Have a friend give her the literal translation.
11. Play Ultimate. She'll never catch you.
12. Hand an innocent bystander a lemon. Then mention the word football.
13. Choose a victim at random. Ask that person why they said that they think she's bitter.
14. Start to insult her. After she starts reacting, have a friend say "Don't you write for mathNEWS?"
15. Smile. Laugh. Then run.
16. Have a team of people call her Smiley. Eventually she'll get tired of hitting people, and then you can join in.
17. Write an article like this for mathNEWS, and then go into hiding. Permanently.

Lord Nullset
Chris "oh well...my life was fun" Buchanan

## Places to Hang Out

Ever look for a place to go? Want somewhere to hang out and have a good time. Over the past couple of years I have found that the C\&D is packed full of crammers getting ready for that midterm that is a few weeks away. The Comfy Lounge is now known as the gaming room.

Where to go, where to go? A really cool and interesting place is the MathSoc Office. Seriously. First, there are daily shows featuring Grumpy and May pretending to do work. You can peer out the door and gaze into Poesy's world of the exec office. Or you can turn a little and watch the CSC play with a new toy.
Other things in the MathSoc office. Those photocopiers are a world of fun. Sit back and copy. Well, I heard someone in the states got fired for that. But it is surprising what other body parts you can copy and not get arrested.
Freebies... Companies think that the Math C\&D is a major competitor in the students stomach market, so there are samples to be had in the Soc office for all takers. Today there is a variety of juices. Maybe we can get the Mint to give us some samples too.
Another thing I realize, is that you will start to understand the jokes in mathNEWS a bit better which is something that all of us could use from time to time. ;)

# Post-Teen Angst: Earwax of the Soul Part I - Stamps 

Or "How to Keep Your Sanity While Remaining out of Jail for Most of the Time and Perhaps Even Making the World a Better, Happier Place to Be"

It's really simple... First, I spew all of my insanity onto paper, where it won't interfere with day-to-day operations of my mind (as much), and allows me to exercise sanity at most times.
And secondly, I just happen to send these insane secretions to people (preferably people I know; and usually female) and they think I'm a really cool guy or something it's just too bad I live halfway across the country from them or else they'd just love to pelt my naked body with shredded wheat and blueberries and but then when I go halfway across the country I just pick my nose and flick boogers at them all week and they think that maybe it would be for the best if we didn't get married just yet and maybe I should go back home and flick boogers at the people there and be sure to write them erotic letters every other day or they won't write back until the year MMXVII and I say okay as long as you send me a lock of your armpit hair and they say okay just to get me out of their house and I go home and tell everyone that I really scored and I cherish the armpit hair forever and have it embedded in glass and use it as a paperweight which really confuses them because I forgot to tell them about the embedding in glass part and they just can't see how I could use a wad of armpit hair as a paperweight so I explain in my next letter the entire process of getting the hair embedded in glass and they still write back even though they think I'm a psycho because they think that they're special to this psycho and had better not tick him off or he's liable to throw that armpit hair paperweight at their heads but what they don't realize is that I've got about three hundred paperweights with different girls' armpit hairs in them so they really better not tick me off because only one armpit hair paperweight would leave a bit of a bruise on the noggin, but over three hundred would likely cave in a person's skull so it's probably best that they don't know or else they'd likely sick the cops on me and lock me away forever and not let me have any more stamps which would shut down the
whole operation for a while until I could convince the shrinks that I was sane again and then they'd let me out and then I'd start writing people again and they'd think I was okay and I'd never talk about armpit hair again I'd just cherish what I had amassed until some day I get invited halfway across the country again and then I'd load up my wheelbarrow full of armpit hair paperweights and she'd open the door and I would say surprise and she'd scream and get out her shotgun because she's a psycho too and we'd exchange volleys of fire but I'd come out on the short end of that deal because shotgun pellets move faster than I can chuck armpit hair paperweights and she'll dodge all of my shots and she'll hit me with all of hers and then I'll fall over on her doorstep and she'll realize the error in her ways and shave her head and become a Buddhist and move to Tibet and I'll just sit there and let her and then take off my bullet proof vest and chuckle like at the end of a sitcom and thank my lucky stars that she wanted me to suffer and tried to gutshoot me as opposed to just blowing my head clean off of my shoulders and I'll collect up my armpit hair paperweights and be on my merry way to the next town where another psycho girl will try the same thing and the same thing will happen to her and pretty soon Tibet's gonna be a busy place because the monking business is going to be booming and they will have to start importing rice from other places and that will get the whole Tibetan economy working harder and before you know it there will be world peace and harmony because there will be no more psycho girls and everyone will be happy and Buddhist and I'll just sit back with a knowing smile slowly spreading across my face and polish my armpit hair paperweights knowing full well what I have done to help the world.

Ian "Son of God Complex" Milligan

## Hormonal Hunts for Pleasure?

Let me quickly explain to you the proximity concept of attraction for your use in pursuit of a personal-attendant/mate/sexslave. On this topic I can write one true sentence: There comes a point when it is not whether you like one person more than another; it is a matter of who is physically closest to you at a particular moment in time. In fact, we can create a representative model of this situation (Thank you Stat 231 and an anonymous engineer). We have:

$$
\mathrm{HF}=\frac{\mathrm{d}^{2} \mathrm{La}^{4}}{\mathrm{D}^{2}}+\&+\mathrm{R}
$$

## Where:

$\mathrm{HF}=$ Horniness Factor (attractiveness variable)
L = Looks Factor
$\mathrm{a}=$ amount of alcohol consumed at the moment
$d=$ the distance the person is from you at the moment
$D=$ the distance the person is from you most of the time
\& = represents the bias of the individual (i.e. a mathNEWS editor who has a preference for small, furry animals would have a large bias)
$R=$ represents the variability of the individuals hormonal rate
For a detailed explanation the reader is directed to Spivak, p123. We note that the most crucial factor is ' $a$ ', which is the amount of alcohol consumed at the moment. High levels of ' $a$ ' effectively negates both bias and variability and will make the person a slobbering, horny wino who will do just about anything for anybody. This is true unless levels of ' $a$ ' have reached extraordinarily high levels, in which case there will be sexual frustration ( $\mathrm{HF}=$ nil).

So, that is all there is to know about the proximity concept of attraction. Next week I will discuss the intellectual concept of attraction, which, based on the quality of this article, I might have a hard time doing.

## Paradise in Chaos

Today, I, Lord Nullset, awake to welcome news. The Pure Math and Combinatorics and Optimization Club is currently engaged in a serious debate, one which is already beginning to divide the very fabric of its being. But the issue is a serious one. There is a call, (which I of course, heartily support), for the PMC to become a separatist state. No, not from Canada (we've had that referendum!). No, the issue at stake is one far more dire.
Some members are now proposing that the PMC separate from Reality. While support for this move is great, others are not so sure of this drastic move. Some pointed out that this move would have drastic consequences in terms of economics - others retorted that in the field of Economics, Reality is a special case anyway. The issue remains to be settled.

I would offer my support of a move away from Reality. After all, Math in its pure form is so far from reality, that such a move is a natural consequence. . . It is right... It is true...

But hark! What's this I hear? Random voices prompting me, assuring me that we the PMC really can secede from reality.

They speak to me, calling out:
I say, Comrades, the answer is simple, we must remove all
links to the real world... we are already almost there. Few Mathies realize what lurks behind the door to room MC 3033 (maybe they're correct in not wanting to know). To them we already do not exist. However we exist, according to MathSoc. By destroying all references to the PMC in their bureaucratic nightmare of an office we will cease to exist.

Most of the elements within me agree. Some fear the dangers of a Transfinite rift so close to home, but others feel certain that the Thursday Effect of Denatured NonBeing will prevent such a catastrophe from occurring. There is the possibility of the CSC being exposed to the effects of the mutant kazoo playing life forms manifesting themselves in extra-upholsteric space. The risk of this, however, is minimal due to the effects of deadly background olfactory radiation.

Hope dawns... The referendum will soon be at hand. In the PMC referendum, vote to separate from Reality. Remember, on the fateful day, mark your ballot with a rubber duck.

Long Live the Revel-ution!!!
Yours chaotically,

## Help!

Um, just something that I liked to inquire about to the rest of the human race (or at least the male half that I'm able to actually comprehend?!). Why is it that Sarah Kamal just lives to hit me? I mean I can tolerate her pummeling me occasionally, as long as it keeps her bitterness to a tolerable level, but why?! does she insist on hitting me when someone else (read as not me) pis-cough-annoys her?

I know this is sort of an inside thing, but you'd be appealing to help from the general public if you were being bruised by a female!

Just so that I don't get already attempted solutions, these are the ones that have been attempted so far:
I. Hit her back. This actually works sometimes, but more often then not, you just get hit even harder. This tends to work on a linear to logarithmic scale: i.e. You hit her twice as hard, and in return, she hits you $x^{2}$ times as hard, where $x$ is the force you used in hitting her back in the first place.
II. Threaten to kiss her. This actually worked. . . for about one minute. When she finished her dry heaves, she chased me down and hammered on my shoulders for about three minutes. The bruise is still there. It's a rather aneurysmic shade of blue (it's my left shoulder, not the usual target of my right shoulder).
III. Grab her wrists. This was theoretically derived, based on the fact that if a persons wrists are immobile, it tends to be difficult for that person to hit another person. Unfortunately, this theory did not work in practice due to one critical flaw. When a persons wrists are immobile (for example, Sarah's), they tend to respond in a different way (for example, by kicking). This alternate response (for example kicking) can often be more damaging (for example, below the waist) than the primary form of attack (punching) in it's target range (as before mentioned, the right shoulder).

This led to theory solution IV...
IV. Ignore it, or, better yet, say something to the effect of "Oh, isn't that cute!" I tried this, and her response was, and I quote (my grasp of the obvious is amazing, isn't it) "Oh no, that's not going to work on me coming from you!" and another bruise added to my collection.
V. Don't talk to her, or about her, or, to be safe, just don't talk. Unfortunately, I'm surprisingly adept at putting my foot into my mouth. Putting my foot into my mouth requires me to open my mouth, and opening my mouth generally requires me to let something (usually sound) issue forth from my mouth. This sound seems to have the curious effect of attracting the attention of certain people, such as Sarah. This inevitably leads to yet another bruise on Kael's shoulder (abbreviated to YABOKS).

## We interrupt this article with a news flash

Upon consulting with other members of the opposite specie-cough-gender, I was informed that, regarding Sarah hitting me for the comments of others I "deserve it!" Elaboration on this topic from males as to what this really means would be greatly appreciated.

## Back to our regularly scheduled article

Oh my GOD! (That would be me, being astonished that Sarah is not presently castrating me for writing this article; rather, she is smiling at me! I think I'll run before she realizes what exactly this article concerns.

Please forward all responses to mglizak@undergrad.math
Kael "I can't believe she's not bitter" Lizak

## Grumpy Old Man

What the heck is this!? I've been reading the tales of the "Grumpy Young Frosh", and I can't believe that she could possibly believe what grumpy means. How can young spring chickens know what Grumpy means? Grumpy is when you're contemplating a degree in Basket Weaving. Grumpy is knowing that the Divine Intervention Theorem should change that 14 you got to a $3 x^{2}+e^{x} \cos (2 \pi-1 / 2)$, but you know the TA isn't going to accept it.

If you're young, you don't know grumpy.
And don't get me wrong, women can get grumpy too. It's just writing "Grumpy Old Person" doesn't look right, and saying Old Woman-well, I don't want to contemplate death at the end of a thousand dull spoons.

What do I have to be grumpy about? How about $2+2$ ?
Now, in grades 1 to 3 , you wrote $2+2=4$, and the teacher put a gold star on your paper, and you got an extra cookie during milk and cookie time. Grades 4 to 8 , you had to show that, not only $2+2=4$, but $.2+.2=.4,20+20=40$, etc. In high school, you encountered the new method, where it was important to understand what you were doing, as opposed to getting the right answer. So you wrote $2+2=5$, and the teacher put a gold star on your paper, and you got an extra serving of fries during lunch hour.
But now, in university, things go to pieces. Let me take a small sample of my University Career and show you how University Students do $2+2$ :

MATH 145: $2+2=5$ for large values of two
MATH 147: $2+2$ isn't in Spivak, it isn't important
PHYS 121: $2+2=4$. Plus or Minus that $10 \%$ error.
PHYS 122: Phys 121 with vectors
ME 219: Phys 121 with a $20 \%$ error
PHIL 145: Fish
CS 134: The code to calculate $2+2$ is ten lines long. The documentation is four pages, plus test cases to prove validity of code.

CS 246: The code to calculate $2+2$ is five lines long. The documentation is eight pages, plus test cases to prove validity of code, plus boolean logic argument to prove correctness of recursion, plus pre/post-specifications.
CS 241: The code to calculate $2+2$ is three lines long. The documentation is ten pages, plus test cases to prove validity of code, plus boolean logic argument to prove correctness of recursion, plus pre/post-specifications, plus analysis of language grammar to prove that we can do what we said we did.

CS 342: The code to calculate $2+2$ is 400 lines long, the compiler bombs on the third try, we need twenty pages of documentation to prove everything, and we get an answer of 9 billion. But we're doing it concurrently, so everything is fine.

You see? How can anybody be happy when somebody asks you $2+2$, and a whole slew of answers come to mind! Frosh! Sheesh. You have it easy. When I was your age, I walked to University through -90 degree weather, in blizzards, and +110 degree weather in the Monsoon season. Uphill. Both ways. Twenty five kilometres! We pricked our fingers and did our assignments in blood.

And we had REAL INTEGRALS ${ }^{T M}$. We did the square root of $e^{\pi}$. In our heads.

## AND WE LIKED IT!

I think I'm going to go now, because after reading what I've written, I realize that I shouldn't have had that second cookie after dinner.

Oh, one more thing: there's one more reason why Grumpy Old Men (or Women) are better than Grumpy Young Frosh. We graduate sooner.

> Jerry "Grumpy Old Fish" Han

## Bond... James Bond

Cheers and greetings in the midst of examinatosis. (ACK!! I've got (mid)terminal cancer!!!! Ack! Ack!!!)

Well. Seeing as how you have no life right now (other than the messy bacteria squirming around your well-soiled, aromatic, piss-off-got-no-bloody-time-to-do-laundry clothes), I thought I'd be the shining beacon of your life and tell you all about the stuff you've missed out on, and the stuff you've got to look forward to, socially.

First of all, the first official Math BBQ of the term was held a couple Saturdays ago, and it was GREAT FUN!! Yeah, it started raining, and yeah, the rain progressed to a blasted downpour, but the intrepid Mathies who came out looked very sexy in their (garbage bag) raincoats.

## Yowr, baby!

If you're upset at having lost your chance to flaunt your flawless bod in Glad garbage bags (Designer clothes!! Designer clothes!!), you're entirely welcome to display your sexy frisbee skills at the pick-up ultimate (frisbee) games that are being played on the village green every Mon and Thurs at 4:00. I've been to four so far, and they're tons o' fun (and a pretty good workout, too.)

Pub night's coming up!! Pub night's coming up!! This term, Mathies (whether old fogeys or young 'uns) can come out for an evening/early morning of relaxation/morose contemplation of suicide after the 'terms at the Bomber on June $23^{\text {rd }}$. The theme this term is good ol' 007 (no, not the mark I got on CS), Mr. James Bond, himself. Specialty drinks are the martini (shaken, not stirred) and (of course) the Pink Tie (tm). As usual, there will be door prizes, door prizes, more door prizes, and ooh yeah, door prizes masquerading as prizes for winners of the air hockey tourney. So that's Friday, June $23^{r d}$, at the Bomber. See ya there!!!

Sarah "Shining Beacon o' Your Life" Kamal

# Grumpy Young Frosh Tells a Little Story 

Let me tell you a little story.
Once upon a time, there was a very loving, trusting girl called, uh, Sora. Sora was a basically happy person, content just to putter around her petunia garden, pausing every once in a while to listen to the sweet warblings of the thrushes flittering through the sheltered little haven she'd fashioned for them out of soft moss, sweet-smelling grass, and sturdy sticks.

Sar-, ah, Sora was a student. She went, in fact, to the University of, uh, Woterloo, studying, um, moth. Being the good, model student she was, she decided to help out the people in the Moth Society, gracing their weekly meetings with her demure demeanor and shy smiles, often lifting their spirits with the infectious warmth of her melodic, tinkling laughter. Her positive attitude was commendable, and her sweet, pleasant personality soon made her beloved of the entire faculty. All Sora ever asked for in return for her tireless, selfless, uncomplaining work was a little respect.

AND JUST WHAT DID SHE GET?!!? EH?!? JUST HOW DID THE FACULTY REPAY HER?!??
WITH ABUSE, THAT'S HOW!!!!
Sora, in addition to her innate modesty and gentle nature, was psychotically talented. She was a genius in music and art, and it was often remarked that she was so brilliant that she actually glowed. Because of her deep, abiding love of her faculty, she and her trusty social committee would often be inspired to create artistic masterpieces of social publicitydom. Of all the stunning, incredible work she did, however, there was one piece in particular, one poster out of the many, that stood out in Sora's mind.

## The Lemon Poster.

The Lemon Poster was big. The Lemon Poster was beautiful. The Lemon Poster, irony of ironies, featured a big lemon on it. Underneath the lemon, it urged: "go to Conada's Wonderland, go to Conada's Wonderland, go to Conada's Wonderland." And at the very bottom, it said "Sublemonal messages."
Sora loved that poster. She would gaze at it in admiration and pride every day on her way to classes. She would lift her eyes to its shining lemonessence, her soul buoyed by the flowing lines on the citrus fruit displayed near the top, her heart filled with gladness at the sight of the oh-so-subtle, skillful shading that the lemon showed in, you know, all the right places. To her, that lemon represented purity. That lemon represented hope. That lemon represented thirty bloody minutes spent in the 'Soc office trying to get the blimey thing to stop looking like a blasted football.

## That lemon was her life!!!

Sora received much cruel mockery and laughter from the ignorant clods in the faculty about her prized poster. "That's not a lemon!!" the insensitive blockheads would say. "That's a FOOTBALL!!" In vain Sora would point out the carefully drawn asymmetrical outline of the lemon, where the one more rounded edge and other pointier one were more reminiscent of the lemon than any neanderthal throwing implement, and futilely she would expound on the bright yellow colourings of the lemon, which quite
obviously heralded its citrus origins. She would explain her reasonings very intelligently, but the brainless boors would remain unconvinced: "I still don't get it. Why d'you have a football on your poster, again?"

Despite all the idiocy surrounding her, Sora remained true to her lemon; her faith remained strong and unchanged, even in the face of the most horrible insults and disbelief. On her daily vigils at the shrine she had made to lemonicity, she would sweep a caressing hand across its pale golden paint, whispering words of encouragement and support while trying to shield it from the cruel jibes of the morons in the faculty, who would point at the helpless lemon and snicker in painfully loud voices, not caring that they were causing both it and Sora untold pain and anguish.
Sora withstood all this and more for the sake of her darling lemon, until something happened, something so horrific as to cause her nightmares and indigestion for years:

SOME VANDAL DREW FOOTBALL LACES ON HER LEMON!!!!
Her mouth working soundlessly, tears blurring her vision as she gazed in uncomprehending denial at the sacrilege, Sora fell to her knees in despair, her beseeching gaze raised in mute denial at the havoc that had been wreaked on her blameless, beautiful creation. Her lemon had been defiled!!! Her lemon had been ravaged!!

She felt violated!
She felt unclean!
She felt like someone had groped her bum!
She felt, in fact, just as she had that time she went on the ride called the Zipper in grade 9 with some guy called Allejandro but (*ahem*) that's another story.
After rousing herself from her shocked swoon, Sora swiftly removed the ruined poster from its spot on the wall, and whisked it to the MothSoc office, desperately trying to return it to its previous, pristine state. It was all to no avail. Her shining tribute to lemonics had been spoiled forever!!

The iron entered Sora's soul. From then on, she vowed, nothing would ever have the power to hurt her. Weeping copious, bitter tears, she cursed the day the perpetrators of the heinous crime had been born, and swore vengeance on them and all their aiders and abettors. Her disillusionment with life all-encompassing, she then proclaimed herself proudly to be a "bitter, bitter, bitter, haggard old woman", and proceeded to write many nasty articles about men, the likes of which had never been seen before in the moth faculty.

As for the culprits, Sora learned their names very easily. They were rather non-plussed and relieved by her calm reaction to her discovery of their identities, unaware of the roiling, bubbling, festering activity in Sora's active brain. Sora waited and plotted, plotted and waited, well aware that:

Revenge in a dish best served cold.
hmhmhmhmhoohoohoohoohoohoohahahahahah.
Sarah "Bitter, bitter, bitter, haggard old woman" Kamal

## How to Write a mathNEWS Article

If you're ever crazy enough to write an article for mathNEWS, then here are some important points to remember:
Do's

- Mention a tall, beautiful, dark-haired woman. This will attract the attention of $90 \%$ of the male population of the MC , on basic principles.
- Mention a random cetacean. Historical readers of mathNEWS will understand this reference
- Mention Curtis Desjardin's name somehow. Curtis has been around so long his very name adds a sage-like ring to your article. In fact, Curtis has been on campus so long that it is rumoured that he knows the secret locations of The Tool, The Pink Tie, and where Sarah leaves her sense of humour when writing for mathNEWS.
- Mention SEX!!! This will attract the attention of the rest of the MC population, again on basic principles.
- Put in a flowery reference to our MathSoc president. This will lend an air of official importance to your article.


## Don'ts

- Be bitter. This only ever works for people whose name starts with an S.
- Write about armpit hair. mathNEWS editors cut [delayed - Ed.] these articles, for unknown reasons (By definition of a mathNEWS editor, good taste was not the reason. Not that it matters, unless you were the poor shlep left typing in a full page stream of consciousness run-on sentence all night. . . sniff!)
- Ever insult the mathNEWS editors. Ever. Unless of course, you think you might get a good laugh, or you really want to.
- Write about Lemons. For some reason, the very mention of a lemon can cause certain fellow mathNEWS writers to break into a raging, foaming at the mouth frenzy. (Fortunately, the topic hasn't come up too much lately.)
- Ever use the excuse. .. I don't know how to write an article. Your retinal scan of this guide has been tracked, and is now a matter of public note. You have been warned!!!


## General Notes

You have now read and perused the finest guide that money can buy, on how to write articles for mathNEWS. Please send in your $\$ 1.5$ million dollar payment (in Altairian Dollars and Flainan Plobble Beads (Sorry, no Ningi's accepted...) to:

## Lord Nullset

The Void That is Not
Nowhere, NoHow
N0O 000
Kevin "Lord $\}$ " Hartmann

# Surviving as a Non-Mathie in the Math Faculty 

Part III : The Search for Spock

Let's face it-not all of us are here because we have an undying love for mathematics. Yes, there are those of us who signed up simply because we didn't make the cut-off for Computer Engineering, and decided to go for CS EEE instead. In fact, there are a number of us who simply HATE MATH. It is to those of us that I write this article, in the spirit of Timbley $2 n$-Toes and David Low :

- Admit that you have a fight on your hands. You can never be too paranoid. Not only is everyone out to get you, they will make you drink PowerAde.
- Forget about TA's. Forget about Profs. In fact, forget about school, you hate it anyway, right? Just think of university as a very long vacation between high school and unemployment.
- Scheduling is possibly the most important part of university. And if the university doesn't agree with the way YOU want to schedule your life, screw them. You're more important. 8:30 classes are a bloody joke. The profs are probably more sedated than you, so why bother?
- Who the hell is Shahid? And why isn't he at class? Does he think he's as good as I am? Yeah, right.
- Studying groups are very important. When your peers aren't looking, you can steal their notebooks and copy assignments so you won't have to do them. Don't get caught, unless you are successful at "getting involved" (see below).
- Hmmm ... I am looking at \#6 at Timbley and and David's articles. Timbley is suggesting that we all should become hermits, and David is singing the praises of getting Mono. Maybe I shouldn't attempt to write a tip \#6.
- Exams, tests and midterms are real things that are going to hurt your academic standing. Fortunately the Copy Centre comes though. It is a little known fact, that if properly brib...compensated, that any upcoming midterm can be YOURS before the prof gets his dirty hands on it.
- Get involved. The Mafia is kind enough to lend money to anyone who wants to organise something that has any kind of return. Remember, part of your municipal tax dollar goes to the police department, which in turn goes to the Mafia, so take advantage of it.
- (my favourite) Pray often. Consider sacrifices of ducks and squirrels, although I know some profs (particularly in Stats) prefer woodchucks.
- Remember, being in co-op guarantees you won't have to deal with UIC or (horrors upon horrors) graduate studies -co-op grads prefer welfare.
P.S. I'm just kidding. Stats profs prefer baby robins.

Amit "Most Defiantly None of the Above" Dubey

# Pick-Up Night In Waterloo 

He Shoots, He Scores

Hello, everyone, this is Jim Melton, along with Bob Adams, live at the Bombshelter Pub at the University of Waterloo where the 1995 World Pick-Up Championship will be getting under way in less than fifteen minutes. For seven months the top male and female pick-up artists have fought in the trenches, played through pain, and have earned the right to compete here for the Casanova Cup in beautiful Waterloo, Canada. This year's top two male teams both hail from the U.S.A. with the Bruins of U.C.L.A. battling the Florida State Seminoles and, Bob, these two teams have overcome a lot of adversity to make it here to Waterloo and earn the right to be the 1995 World Pick-Up Champion.

You're absolutely right, Jim, U.C.L.A. had come from behind and had its star hunk, Jack Steele, fake an arm injury to get come-from-behind sympathy points, and ultimately ended up scoring in overtime in their hard-fought win of Western Ontario. Florida State had an even tougher win over their arch-rivals, the Miami Hurricanes, when two of their top performers were ejected from the match by bouncers for instigating a fight. But, Jim, with glory this close the true hall-of-fame players will bear down and do anything to pull out the W.

And one more win for either of these teams will make that team the World Champion. One minor note of interest to our viewers: due to historically poor television ratings, a lack of sponsorship, and the rampant male chauvinism inherent in sports, we will not be televising the Women's World Championship live, but rather will be showing it on tape delay starting at 3 A.M. on most of our affiliated stations. Check your local listings. For those unfamiliar with picking up, two teams, consisting of four males each, attempt to have one of their members pick up a pre-determined female target, called the hot chick. A pick-up is considered successful if the member accompanies the hot chick home and gets a goodnight kiss from her. And, because this year's championship is being played under Olympic rules, neither sex nor a phone number is required for a pick-up.

As well, Jim, teams are not allowed to use excessive amounts of free alcoholic beverages to facilitate the pick-up.

No sirree, Bob, these guys have to do it honestly. But U.C.L.A. and Florida State have two of the best artists in the land. U.C.L.A.'s Jack Steele has had an M.V.P. season, with an astounding 184 scores with only 7 losses. And with teammate Matt Forman's record-breaking 106 assists, U.C.L.A. is the favourite to win this year's championship. But don't count Florida State out yet. The Seminoles' Tom Bruce finished strong with 158 scores and a tiny 5 losses and Dave Rickard has thrown out numerous key blocks on opposing players, Bob.
That's right, Jim, but both of these teams have their hands full tonight because both are trying to pick-up Waterloo's own Jill "The Ice Queen" Campbell. And, believe me, Jim, this gorgeous fourth-year kinesiology student is no sure thing. Campbell has virtually come out of nowhere to record a league-leading 34 shutouts, including 9 in a row. When she was in junior varsity, she shot down future actor Chris O'Donnell in Los Angeles. One thing that both Steele and Bruce know: it will take more than fame and cash to score with Campbell.
The two teams are entering the bar and having their I.D.'s checked right now, Bob, and Jill Campbell is busy warming up
by the pool tables. Campbell has been especially touch on her home field, yielding only a paltry 6 scores all year, Bob.

Only 6 scores, Jim, even though she received more pick-up attempts than any non-Bomber waitress in the last 5 years.
And they're off, Bob! U.C.L.A. is making for the pool tables and attempting to impress Campbell with their billiards acumen! Florida State is going for the more subtle approach by requesting Campbell's favourite party song, the Tragically Hip's "Courage"!

Good moves by both teams, Jim. Jill Campbell is quite the pool player herself and, of those 6 pick-ups she gave up in Waterloo this year, four occurred at night by excellent pool players. As well, U.C.L.A.'s Jack Steele is an accomplished 8-ball champion from the state of Iowa. Florida State is doing what's worked for them all year, Jim, and that's controlling the environment. Tom Bruce and company know that the right tunes can put the hot chick in the right mood dancing and, Jim, when it comes to dancing, no boy is better than Tom Bruce.
Wait just a minute, Bob! U.C.L.A. has been penalized twenty minutes for roughing the bouncer! I think it's number 68, John Halcond, the right guard whose being flagged by referee Tim Chin! Let's look at the replay!

Yep, Jim, it is Halcond putting the knee into the groin of the bouncer right in front of the ref. A stupid penalty, especially at this stage of the game. Now U.C.L.A. cannot even make eye contact with Jill Campbell for twenty minutes.

Uh oh, Bob, now Campbell is going to the washroom! Long. time fans will recall that this is what Campbell does when she is bored and is considering moving to another bar! Tom Bruce is getting into line at the food counter so he can talk to her when she returns!
A very aggressive play, Jim, but not that uncharacteristic for Florida State. Bruce knows that he has twenty minutes on the power play and is going to try to win right now! It worked for Dave Johnson of Nebraska in 1966 and Andre Boulain of the Sorbonne in 1984! A gutsy move, but a smart move in my opinion, Jim.

Well, Bob, Campbell came out of the bathroom and blew right by Bruce before he had a chance! Now the penalty to U.C.L.A. is over, and both teams are right back to square one.

Jill Campbell is lightning quick, Jim, and Tom Bruce just wasn't ready for it.
U.C.L.A.'s Jack Steele is strolling casually over towards Campbell but he takes a huge block from Florida State, Bob! That's a Dave Rickard special, Bob! No one is slicker at pretening to drop change when paying for a drink when he's in the middle of the aisle!

We can see when we slow it down, Jim! Rickard sees Steele, closes off the hole, drops the coins, and holds Steele for a no gain!

And Tom Bruce is asking Campbell to dance, Bob, and she's smiling, Bob, she's smiling! I think she's going to say yes!

If there's one weakness that Campbell has, Jim, it's that she's a sucker for a handsome dancer!

And they're dancing, Bob! U.C.L.A. is trying to jostle them a cut in but it's not working! Steele is desperately trying to make
continued on page 15
continued from page 14
eye contact with Jill and teammate Matt Forman is attempting to pick a fight with Bruce, knowing that Bruce has a big ego and a short temper!

Yes, Jim, but Bruce knows this is the World Championship and he isn't going to take a chance on being tossed out of this one.

Look out, Bob, but I think he's going for a kiss! He's going, going, gone! Tom Bruce has kissed Jill Campbell and Florida State has upset the U.C.L.A. Bruins for the 1995 World Pick-Up Championship! Florida State has melted the Ice Queen! Back home in Florida, Seminole fans are going crazy! Florida State has won the 1995 World Pick-Up Championship!

And you can bet, Jim, that there will be a lot of changes coming soon to the U.C.L.A. Bruins. They were heavily favoured, but came up empty.

Well, ladies and gentlemen, the Florida State Seminoles are the 1995 World Pick-Up Champions! Overcoming incredible odds, the Seminoles pulled out immortality! Thank you for watching and goodnight from the Bombshelter!

> Graham "Cosell" Rogers

## Top Ten Pieces of Advice Tutors Never Give Out

## (Thankfully)

10. Isn't there someone else who can help you with this?
11. Buy this math book the engineers use, it has all the proofs in it for this course. Or, just take the pages from an engineer's book-they never need to prove anything anyway.
12. You know, it's amazing how many theorems you can fit on your hand if you really try...
13. Well, you could use proof by counterexample, but why not just skip the question altogether?
14. How we go to the Bomber, you buy me a lot of beer, and I do your assignment? I think that's only fair, don't you?
15. Have you heard of Arts?
16. Here's a quarter, call someone who cares.
17. Try attaching twenty bucks to your first page; that sometimes helps raise your mark by a few percent...
18. You'd probably get a better mark if you copy off that guy over there... He did the questions faster than me!
19. That's okay, if you don't like Pascal, you can do your assignment in Visual Basic.

## A Rebuttal

Interesting... My first night out to mathNEWS, and everyone is standing around here doing nothing. Where is all the work all of these people supposedly sacrifice to put this thing together? Where's the pizza? Why are people asking if then can line up to look down Poesy's shirt? Why am I sitting in front of this thing typing away like a fool, when I could be home sleeping, or eating, or getting healthy, or implementing artificial intelligence in Pascal, for a Mac? (pause). Scratch that last one. I didn't really mean it. Besides, this is kind of entertaining.
Oh yeah! I remember. I came to write a rebuttal for all those Ms. Grumpy Young Frosh (who, by the way, is *only* eighteen, which means that she *still* has to wear those *weenie* buttons) (Yes, that was a gratuitous use of weenie, but she started it. I refer you to her article in mathNEWS volume 66, issue 6). But, of course, she doesn't have the *guts* to show up the night that I *blatantly* tell her I'm coming to write a rebuttal! I realise that I took all of eight months to get around to writing a rebuttal, but I find it curious that SHE DECIDED NOT TO COME, the night that I TOLD HER I WOULD! Not only that, but I *warned* her a *week* ahead.
(*Kael's temples are now starting to throb, and his face is turning red*)

Besides, I was *busy* corresponding with fellow male mathies, not to mention the occasional engineer. I'm sorry to say this, Sarah, but most of these males are *not**weenies*. Results ranged from "She hasn't experienced enough of us," as if she's experienced any of us, to "It's a very unenlightened and sexist attitude," which, in terms that even an eng ${ }^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}$ thug could understand, means "she hasn't really experienced enough of us."
(*Kael's nostrils are now starting to flare*)
Maybe, just MAYBE, she could stop COMPLAINING, about not finding the BATHROOM, and open her EYES, and look AROUND!!! It's not like the bathrooms are any more obvious for the GUYS!!!
(*Kael frothing at the mouth now*)
Hello? HELLO! Take a DOWNER! And JUST because we look a LITTLE GEEKY, and JUST BECAUSE we DON'T SHOWER more than once a month, and JUST BECAUSE SOME OF US DON'T HAPPEN TO SEE THE SUN MORE THAN about FOUR HOURS a WEEK doesn't mean that WE ARE WEENERS!!!!!
(At this point, half of the people in the MathSoc office are running out the door, and the other half are looking for weapons... Preferably big, heavy things like the photocopiers, or the filing cabinets. ..)

WHY IS SHE *_SO_* BITTER! *ARRRRRGGGGHHHH!*
(Kael's arteries burst, and he falls unconscious to the floor. Just then, Sarah walks in, and says:)

I'm *NOT BITTER!!!! *

Kael Lizak

## The Game

## Clue Corner

Game day has now been set. The Game will be run on the weekend of July $22^{\text {nd }}$. There are more details in this week's Imprint article. If you still don't know that much about the Game, pick up the May $19^{\text {th }}$ copy of the Imprint and check out the Sports section. All articles have been duplicated on our Web page.

I hope you enjoyed the mythology clue. As with all clues, the solution of one yields the location of the next. In last week's clue taking the first letter from each of the mythological characters tells you to search for the next clue at the Optometry building:

```
O edipus
P}\mathrm{ enelope
T itans
O rion
M inotaur
E cho
T artarus
R emus (or Romulus)
I carus
```

Good luck with this week's sample clue (Black to Move). The answer is one of the following:
A. WHITE'S PARK
B. SUTRO BATHS
C. NINE MISSIONS
D. DON SEGUNDINO ROBLES PARK
E. OLD UNION COURTYARD

## Jamie and Ben <br> http://ccnga/ jrhodge/The_Game/

## We Interrupt This mathNEWS

## From the "Speeders Beware" Department

State troopers in Arizona have taken a new approach in the war against speeders. Plainclothes officers are now stationed at the sides of highways pretending to be hitch-hikers, using a handheld sign to disguise the radar gun. When Premier-elect Mike Harris scraps photo radar, he may introduce this - be careful.

> The Globe and Mail, Mon. June 12, page A14
> Darren Morby

## DARKNESS

Deep. Empty. Everlasting. Pitiless.
Ailing sight as some terror awaits
Rage echoes back. Life's anger ceases
Keen fear reaches out, mutilates
Nothing overcomes whispered hoplessness
Eyeless radiance enraptures and suffocates
Silent, opaque, lifeliss ire. Depthless abyss Slowly and invisibly retaliates.

Black To Move
The Game


|  | White | Black |  | White | Black |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. |  | c4-c3 | 31. | g6-g7 | f8-g8 |
| 2. | g5xd2 | c3xd2 | 3. | f5-f6ch | e7-f7 |
| 3. | e4xd2 | a6-a1 | 33. | f3-e4 | c8-e6ch |
| 4. | e1-f1 | a1xf1ch | 34. | e4-f3 | e6-d5ch |
| 5. | d2xf1 | d4-c5 | 35. | f3-g4 | d5-e4ch |
| 6. | h2-h3 | e8-c8 | 36. | g4-g5 | e4-c2 |
| 7. | f1-e3 | c8-e6 | 37. | g5-h6 | c2-c8 |
| 8. | e3-c2 | e6-c6 | 38. | h6-h7 | d6-e5 |
| 9. | c2-e1 | c5-d6 | 39. | h5-f4 | c8-a8 |
| 10. | g2-g3 | c6-c4 | 40. | h4-h5 | a8-a2 |
| 11. | e1-g2 | c4-e4 | 41. | h7-j6 | a2-a5 |
| 12. | f2-f4 | e4-e6 | 42. | h6-g5 | a5-c5 |
| 13. | g1-h2 | g6-h7 | 43. | h5-h6 | c5-c2 |
| 14. | g3-g4 | e6-e8 | 44. | h6-h7 | c2-c8 |
| 15. | h2-g1 | e8-f8 | 45. | h7xg8/Qch | f7xg8 |
| 16. | g4-g5 | f8-c8 | 46. | f4-h5 | c8-a8 |
| 17. | h3-h4 | g8-f8 | 47. | g5-f5 | a8-b8 |
| 18. | g1-h2 | c8-e6 | 48. | f5-g6 | b8-b6 |
| 19. | h2-g3 | e6-c4 | 49. | h5-f4 | e5xf6 |
| 20. | g2-e3 | c4-e2 | 50. | f4-h5 | b6-b1ch |
| 21. | e3-g2 | e2-c4 | 51. | g6xf6 | b1-b4 |
| 22. | g2-e3 | c4-c2 | 52. | f6-g6 | b4-e4ch |
| 23. | e3-d5 | c2-c8 | 53. | g6-h6 | e4-e1 |
| 24. | d5-f6ch | h7-g7 | 54. | h6-g6 | e1-e6ch |
| 25. | f6xh5ch | g7-f7 | 55. | g6-g5 | g8-f7 |
| 26. | g3-f3 | c8-a8ch | 56. | h5-f4 | e6-c6 |
| 27. | f3-f2 | a8-a2ch | 57. | f4-g6 | c6-e4 |
| 28. | f2-f3 | a2-c2 | 58. | g5-h6 | e4-c4 |
| 29. | f4-f5 | c2-c8 | 59. | g7-g8/Qch | f7-f6 |
| 30. | g5-g6ch | f7-e7 | 60. | g8xc4 | Resigns |
|  |  |  |  |  |  |

## mathNEWSquiz \#3 Questions We Think No One Can Answer But Somehow, Someone Will

Now I am impressed. Someone actually answered the Power Rangers question; I didn't think it would be likely.
The answers you've been waiting for are: D-Day: 1: $3^{\text {rd }}$ Canadian Infantry; 2: Dwight D. Eisenhower; 3: June 5 ${ }^{\text {th }}$; 4: Overlord. Kiddie Shows: 1: Koryu Sentai Zyuranger and Go Sei Sentai Dairanger; 2: Ernie "Mr. Dressup" Coombs; 3: Red; 4: LeVar Burton. Song Lyrics: 1: "We Didn't Start the Fire" by Billy Joel; 2: "Do Wah Diddy" by Manfred Mann; 3: "A" by Barenaked Ladies; 4: "In Your Eyes" by Leslie Spit Tree-o.
Our submitters were Pokey and Phil Collins ( $9-\mathrm{um}$, I can't understand Japanese writing, so I can't credit you on that question, sorry), Slaves to the Gridword (9), Bob the Great and Powerful (10), Guy Incognito (10), and Yudmaster and Ziv Zero (10). Ohh, I hate deciding ties, but... Wheel of Morality, turn, turn, turn, tell us the lesson that we should learn... and after that Animaniacs reference, Bob the Great and Powerful is our winner. His prize is available for collection in the MathSoc office-I hope.
Now on to the third squiz. Your mission: get as many correct answers as possible and submit to the BLACK BOX or to mathnews ©undergrad.math by June 26 at 6:30 P.M.

## Seconds, Please <br> Another Jerry Han Category ${ }^{T M}$

1. Neil Armstrong was the first man on the moon; who was the second?
2. Marc Garneau was the first Canadian astronaut; who was the second?
3. What was the codename for the second atomic bomb dropped by the United States on Japan at the end of WWII?
4. Which regular character was introduced in the second season of the original Star Trek series?

## The Ren 8 Stimpy Show

1. "Our country reeks of trees; our yaks are really large..." Next line?
2. Which of Robin Hoek's weapons does in the evil Sheriff of Dodge City?
3. What rolls down stairs, alone or in pairs, rolls over your neighbour's dog?
4. What shiny red button could Cadet Stimpy not resist pressing?

## 1980's Song Lyrics

1. So why don't you use it?

Try not to bruise it
2. You want to run away, don't care where you go You want to run away, run away, that's all you know
3. When you wake up tomorrow, you'll be all alone All the love that we had I have quickly outgrown
4. You said you didn't need me in your life

Oh, I guess you were right.

## gridCOMMENTS

Seven submitters answered John Wetmiller's headache cryptic correctly (and by headache, I mean that's what I got checking them all. So many words... can't escape. .. where am I?): Bob the Great and Powerful, BriGuy, Clark Kent, The "C + D", G.C., Grid Runner, and the Slaves to the Gridword. Not quite right submitters were Elvira, Mistress of the Dark; The Happy Wanderer; Pokey; and Ziv Zero. A random drawing for the prize (I'll explain that later) gives it to Clark Kent! Congratulations!
There were four submitters to the conventional, those correct being Pokey and Slaves to the Gridword, and those wrong, Mike Walker and Ziv Zero. Yet another draw gives the prize to the Slaves! You and Kent and the issue \#1 winners can go to the MathSoc office where they will (hopefully) have a prize for you.

The vast and sundry flammable items were: Math textbooks (highly flammable because they're DRY); Bob Rae (wait...that's my favourite thing I wish would catch fire); Canada Day fireworks, Branch Davidian compounds in Waco, Texas; my car; Fire! Yeah, baby! Burn baby burn! Burn it all down! Down as the flames rise higher baby higher! Flames baby! Yeah! [I said catches fire; pay attention!]; my hair, daily; Imprint [but then we'd have nothing to make fun of...]; my MATH 237 notes (burned immediately after the final, may they rest in peace); pubic hair [OK, that's enough outta you].
Comments: Volunteer for Canada Day; G.C.: I know you; Gyaah! My shoes won't stop squeaking!!; Mr. Bob Backlund for President! [Hey, I just lost the election as Natural Log Party leader; don't remind me]; Another class, another Gridword; You can lead a horse to Labatt's 50 , but you cannot make him drink. [Unless the horse is called Flipper - Ed.]
OK, now that that's done with, on to the third grid, with me in control. Submissions to the BLACK BOX or to mathnews©undergrad.math will be accepted until June 26 at 6:30 P.M. And by the way, what are you doing on Canada Day? That's the gridQUESTION. Good luck!

Darren "Ren" Morby

## Grid Clues (Cryptic)

## Across

1. Does a fur vest bubble? So I hear (11)
2. Alpha Centauri with 1,024 bytes is naked! (5)
3. Give the crest back to me, the abbreviated pound! Me! (6)
4. Preoccupy yourself in this sob session (6)
5. Fifty missing from the former prisoner's home? Surpass all others (5)
6. Did Frank or Simon schuss t' her? (7)
7. My son's cousin lives that way, in a French town (5)
8. Half of Darren's mixed egg is a revoke (6)
9. The sea and the mixed-up lance abort (6)
10. Send payment via timer, in reverse (5)
11. I wasn't looking for the confused stripe! I deny! (11)

## Down

1. An inert ante? That's crazy! I'm amused (9)
2. Almost sounds like this wine is fer mouth (8)
3. The stirred sauce was responsible (5)
4. Dis has ta be the worst calamity I've ever heard of (8)
5. The Ferengi lost a direction and hit the border (6)
6. The cord with a confused gun bee (6)
7. This meat product saw sage, we hear (7)
8. A sprocket followed by a backwards tin makes French brandy (6)
9. I can fib about the disadvantage (9)
10. He leeches out the secret in two directions (8)
11. Former pectoral muscle? Ted anticipates so (8)
12. Don't take the copies of mathNEWS and sue, sis! That's insane! (6)
13. No? O, in this backward region it's an African country (5)

## Grid Clues (Conventional)

## Across

1. Pretend to be (11)
2. Put forth (5)
3. Kind of geometry (6)
4. Using a lasso (6)
5. Col. Oliver
6. Part of line (7)
7. Set up (5)
8. Kind of acid (6)
9. Peanuts teacher (6)
10. Sink (5)
11. The U.S., for one (11)

## Down

1. Expose to nuclear emissions (9)
2. Part of ship nearest the rudder (8)
3. How most computers encode text (5)
4. Rising out (8)
5. The Far East (6)
6. Betrothed (6)
7. Dye (7)
8. Element in pitchblende (6)
9. Tales of the past (9)
10. Stretched (8)
11. Recent arrival (8)
12. Wicker material (6)
13. Magnesium sulphate (5)


## Last Issue's Solutions



