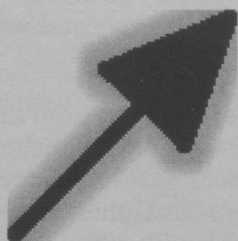


math NEWS

Volume 86, Issue 1

Friday, May 18, 2001



Mostly Harmless

Prez Says

Hello all. My name is Liam Dorey, and I'm President of Math Society this term ... Wow, now what do I say? Ok, first off I'd like to see more Math Society involvement. Of the approx. 2000 students on stream, only 50 or so are actively involved in Math Society. Ok ok, I know you're all busy, and lots of you don't really seem to see how Math Society is useful, or why you should come out to our events. Well I'd like to change that ok ... I'm probably wishing on a star (you know the ones that turn out to be satellites so your wish doesn't come true), but I'm going to try anyway. First off I'm going to follow through with something they did last term, and have a couple of focus groups; basically, I give you some free food, and a bunch of you tell me what you think about the Math Society, and what should change or stay the same. I'm also going to look into following in Paul's lead and hold a charity event. If anybody out there would like to help out with that, contact me at prez@mathsoc.uwaterloo.ca. Now if anybody out there has any other complaints, suggestions, or ideas on what Math Society is doing or should be doing, you can stop by the Math Society Exec office (MC 3039) and tell me. There's a good chance I'll be there on MWF, after 11:00 and before 5:00. If there's no good time in there, you can e-mail me, and we'll set something up. Now I'm going to try and come around to your class and talk to you about what MathSoc is doing etc. If I don't show up in one of your classes, then someone else will talk about what's happening with the Math Society. Anyway that's all for now.

Liam Dorey,
Math Society President S01,
prez@mathsoc.uwaterloo.ca

Movie Nite Report

Hey, Albert, tha second movie guy, here for the first time to tell you what movie nite is all about. Well it is about movies, and watching them, in the DC 1302 on the soft and padded chairs that move on pivots. You will see the movies projected on a plenty large enough screen for all to see. The sound is booming and the high hats crisp, etc. We have food and pop and movie guy Tushar with his sidekick Kyle, so you know it's worth it.

Welcome everybody to the Spring term. I'm Nadia V. Ursacki and I'm your Vice President, Activities and Services for the Math Society this term. I am in my last term here (yes!), so I want this term to be a blast. Things are shaping up well so far ... except for one thing. I still need a Social Director. Basically this person will be in charge of making sure that MathSoc runs some great events this term. Please get in touch with me if you are interested in this position or have any great ideas for events. The office is also looking for a few more office workers. So look on the door to see if you can fit an office hour into your schedule and help the office stay open more.

Friday, May 18th (that's today) is our first **COTTON CANDY** day, so come buy some. 75 cents for one bag and two for a loonie. We will either be set up on the 3rd floor or outside the Math Building (depends on the weather).

MathSoc Movie Nights are also back this term. Every Thursday night, two movies for \$2. Albert has an article about them.

lookAHEAD

mathNEWS

May 18	Issue #1 springs in
May 28	Issue #2 production night 6:30pm, MathSoc (MC 3038)
June 1	Issue #2 sits in the summer sun

Math Faculty

May 22	100% refund deadline
May 29	Course drop deadline

MathSoc

May 24	Movie Nite
May 18	Cotton Candy (again)
May 30	Dave's Dastardly Decathlon Starts
May 31	Movie Nite (again)

MGC

May 26	Pete Love needs a date 729-4121
June 1	Canada's Wonderland Trip
June 26	Pete Love still needs a date 729-4121

Co-op

May 28	Postings end, Interviews begin
Sometime later	You get stuck with a sucky job

Miscellaneous

May 20	International bacon day (not the server)
May 21	Victoria Day
May 22	Canadian Hangover Day
May 23	Drink, Recover, Repeat
May 24	Dave's Birthday
May 25	Dave's Hangover Day
May 26	Drink, Recover, Repeat

Coming up next Thursday we have on the dessert cart of movie delights, *Terminator 2* and *The 6th Day*, and maybe some Arnold Schwarzenegger prank phone calls cause they are funny, but I'm just saying this now, so no promies, but what ever goes on, it shall be a good time for all. Then the next Thursday will be the double feature of *Run Lola Run* and *Pulp Fiction*. So you all come out ya here.

"Phat" Albert "tha second movie guy" O'Connor

VPAS Sez

As you throw out notes and stuff from the courses you have passed and don't have to worry about anymore (isn't that a good feeling?), don't forget about the MathSoc Exam bank. Bring us your midterms and finals so that others may also pass the course. Just give them to your friendly office worker in the MathSoc Office (MC3038).

The MathSoc Coffee and Donut Shop (The C&D) will be having BBQ lunches every Tuesday and Thursday this term from 11:30am to 2:30pm, starting on Tuesday, May 29th. (Which will also be our next Cotton Candy day). Their regular hours are 7:30am to 7pm Monday to Thursday and 7:30am to 5pm on Fridays.

Check the white board across from the C&D for other MathSoc events and announcements.

Nadia V. Ursacki
Math Society Vice President, Activities and Services S01,
vpas@mathsoc.uwaterloo.ca

Applied Problem Solving on Work Terms

Stories not to tell a prospective employer

Disclaimer: I enjoyed my first work term. Sure it wasn't exciting work, but I got paid (not that I actually desire money but it helps cover the tuition and the upgrading of the computer). The working conditions were all right, it's just that the work itself was quite boring. Moreover I could finish work faster then they could produce more for me to do. This means I had spare time, and I needed to find ways to fill it. Like looking up the speculation around the Hitchhiker's Guide to the Galaxy movie or printing out bus maps for Winnipeg. This is a tale about one such method. Take into consideration this: a co-op student behind a rather paranoid intranet (that is site-ban happy) and a rather nifty online comic...

The Problem

So I was reading this nifty little comic, excellent piece of work, and a great way to distract me from the small blue cube I lived in for 7 hours a day. This cube only had 3 major opening to the outside world. A door and two things I assumed were air vents. Underneath the blue carpet were steel plates that made funny noises when I walked on them. Further below me was the corpse of an old reactor that once ran experiments in new ways of energy generation. I was sitting on my little, red, ergonomically-incorrect chair staring at my (err, don't have a ruler) 17 inch (or maybe bigger) monitor that can switch between my WinNT and Win95 machines. I was surfing the net with Netscape 6, reading the comic strip when it happened. I pressed the link to go to the next day of the comic and I got the "ACCESS TO THIS SITE IS RESTRICTED!" page, where it says if you think this site really shouldn't be restricted then you can phone your net admin and bitch (not in those words). Now, I was in Manitoba and the net admins where in Toronto, and it would be hard to explain to the system why I should be allowed to read comics. So I had a problem.

Brief Analysis

Obviously the fact that I was hitting the site a total of 600 times in about 3 days probably caused the domain to be flagged and looked at by someone in Toronto who thought, "This has nothing to do with what this company is doing," and therefore restricted it.

Generation of Possible Solutions

The goal is to read the comics, that is all. Now I could attempt to side step the restriction by hacking around (though I wouldn't know where to start) but such action could be taken as a direct act on the system, and I could get into deep shit, which I had no need or desire to be in. I wanted the comics. Maybe I could find a mirror for the site. I looked hard but found no active ones. I could leech them all at home and bring them to work on a CD. So a solution was forming. I needed to get the files from a computer not on the company's intranet. But how could I automate this procedure? Doing it manually would defeat the purpose. I figure some scripting was in order. Then I realized that it would be easy with Java .net system classes (go lazy programming).

Details

Now the said comic keeps its image files on another server so I had to figure out where they were stored by viewing the sources of the comic's websites. I discovered the comics were archived with the date for a name followed by 'a.gif'. The date took the form of yymmdd. The first major problem was to write a class that could keep track of this information and reproduce it. Next was the class that could go through the process of leeching using the Date class. I set the system up and tested that it worked, except for a small problem ...

Debugging Sunday

Sunday was a problem (and other exception to the conventions would be problems too but they were manageable). From the date alone I had to find a way to figure out if it was Sunday. I search the net but had trouble finding an algorithm stated well enough to use. Then I stumbled across a quaint C algorithm and I was in business.

Expanding on a Good Idea

I next created a class that would produce very simple html pages for me to make viewing the comic even easier. This program utilized the ever-useful Date class.

Overview

So I wrote, developed, and compiled the code on my two windows machines at work. Then uploaded my code to bacon, and tested it there. I started to download the data a month at a time (all I could hold on my drive on bacon). I was going to just plop the data down in my extensive public_html directory and view it off student.math but being a clever boy who learns from past mistakes, I thought if I did that it would be only a matter of days until I was banned from Waterloo's servers (problem). So I ftped the data down to my NT machine and viewed the series up to April 2001.

Now that is problem solving at its finest. The challenge of solving the problem managed to waste time even better than the comic did. I should point out it only took a hour or so total time to write and test the code (but it was spread out over a few days as I was doing some real work too). Pretty good for not doing anything of the sort before. I had the first programs I would need if I wanted to manage a mirror site to the comic's main site. It's really too bad I can't use this story in an interview for my next job as an example of my problem solving ability.

"Phat" Albert O'Connor

ISSN 0705-0410

mathNEWS is normally a fortnightly publication funded by and responsible to the undergraduate math students of the University of Waterloo, as represented by the Mathematics Society of the University of Waterloo, hereafter referred to as MathSoc. mathNEWS is editorially independent of MathSoc. 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. Current and back issues of mathNEWS are available electronically via the World Wide Web at <http://www.mathnews.uwaterloo.ca/>. Send your correspondence to: mathNEWS, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid.mathnews@student.math.uwaterloo.ca on the Internet.

Mostly Harmful: Bradley T-1000 Smith and Peter 'Love' Lizak

Probabilities one can actually relate to

With a 5-1 defeat in New Jersey, there will be no parade on Yonge Street in June for the 34th straight year (unless, the Raptors do the improbable and go all the way). For those who care, the Leafs have not won the Stanley Cup since 1967. That's about as long as a stat 231 lecture, or the time it takes to remove all 126 needles from your back after an acupuncture session, or the time it takes to rake the leaves in the fall in the Elora Gorge (the place is full of maple trees). It seems that Tie Domi will win the Lady Byng before the Leafs win the Cup again. This is just one of the probabilities that came to my mind tonight (or Monday night).

Here is my list of probabilities, followed by the related event:

- 1: The real-time lab will claim the life force of a UW student this term.
- 0.98: Stockwell Day will quit politics within the next 20 years.
- 0.95: Chance that a transit strike will occur in a major Canadian city within the next 6 months (or, in the case of Vancouver, doesn't end within 6 months).
- 0.9: Queen Elizabeth II turns 90 before Jean Chretien retires.
- 0.88: Eric Lindros will play zero games between now and July 1, 2004 (when anyone can sign him).
- 0.85: There will be another school staff (be it teachers, janitors) strike in Toronto before the "double cohort" occurs in 2003.
- 0.75: The Simpsons will achieve cult status (wait, it already did).
- 0.67: Nortel stock will drop below \$20.
- 0.6: People become sick of Survivor-imitators before Survivor is no longer profitable.
- 0.56: There will be more questions on the questionnaire of

the 2006 Census.

- 0.5: You will win a coin toss (unless, of course, the coin is rigged).
- 0.4: The Beatles will have a #1 record in the year 2020.
- 0.37: The grass in Beijing will be "green" this summer.
- 0.3: Toronto gets the Olympic bid for 2008.
- 0.24: Losing direction in Los Angeles.
- 0.15: A party will sweep the B.C. provincial elections (this is a HIGH probability).
- 0.1: *mathNEWS* moves into a bigger office.
- 0.08: The Star Wars program will be revived.
- 0.03: In a meeting of world leaders, protesters and the police can get along without any confrontation.
- 0.01: The Leafs will win the Cup during Mel Lastman's tenure.
- 0.0001: *mathNEWS* will win a Governor-General award.
- 1×10^{-6} : The Middle East will have peace within the next year.
- 1×10^{-8} : Someone outside of UW know what the term "combinatorics" stands for.
- 1×10^{-10} : Simon L'Avier or Mark McDermot become real people.
- 1/Google: Any party, other than Liberal, have total control over Canada (i.e. have majority in all 13 provinces/territories and in Ottawa).
- 0: Everyone follows the speed limit on the 401 (no, congestion doesn't count).

(Note: These probabilities are only guesses and are for entertainment purposes only. Don't get angry at me over this because your estimation is probably as accurate as mine. By the way, a google = 1×10^{100})

Jason "the Screamer" Lau

MEF Update: New Professional Development 'Sub-Fund'

New Fund:

MEF has decided to set aside \$750 for individual, professional development. This 'sub-fund' is brand new so we're still working out some of the specifics. What I can tell you is that the new fund is intended to encourage students who wish to attend 'math related events' to apply for funding. Math related events include academic seminars, teachers' conferences, etc. If you're not sure whether an event qualifies ... ask me (Note: we will not fund your Java Certification, MCSE training, etc. but we *might* fund your attendance at a Conference on Java Security). More details will follow in the next issue of *mathNEWS*. In the mean time, feel free to email me with any questions or concerns.

Projects/Proposals from W01 that received funding:

1. Wireless Networking for Students: The purchase of 2 wireless access points (for the comfy lounge and the C&D) and 5 PCI adapter cards that students will be able to sign-out from MFCE. This is part of a pilot project to establish a wireless network in certain areas of the Math building (some rooms on the 5th floor will also have access points installed).
2. Web-Based Tutorials on Applied Math: The continued development of several web-based tutorials for AM 451.

3. Fluid Dynamics Demo Equipment: a wave tray — simple wave effects (i.e. effect of rotation); a wave tank — wave motion/internal wave effects; a Taylor Couette Cell — change of states/Taylor vortices.
4. TSA conference: Funding for members of the Teaching Student Association to attend a conference held by the Ontario Association for Mathematics Educators. MEF has asked that those who attend the conference hold one or more seminars (at UW) based on what they learn at the conference.
5. Study Manuals for ActSci Club: The purchase of several books and study manuals.
6. Midnight Sun Project: Funding for UW's favourite solar car.

Want to get involved in MEF? Several positions have opened up on the Funding Council. For an application form drop by the MEF office.

Troy Gonsalves

Chair of MEF Board of Directors

mefcom@student.math.uwaterloo.ca

173 Hours On A Bus and Topics to Avoid while Picking Up

Greyhound has this great deal: \$179 round from anywhere to anywhere. One could go all the way across the continent for a mere \$200, yeah, taxes. How can they afford to bus people all over the continent for so little money? The truth is that people do not do this more than once. Once if they are a little crazy, I speak from experience. Last month I bussed from Kitchener ON to Whitehorse YT, for only \$202. What failed to register with me was that it would be 86.5 hours on a bus. It seemed to me that paying just over a dollar per hour on the bus was a good price. Though after an hour or two on the bus you realize how uncomfortable the seats are. After a day or two you realize you haven't slept properly for 3 days. By the end you have no energy left and do not want to deal with anything until you have successfully found a bed to crash on. Ah, sweet wonderful beds. Beds are definitely a step up from bouncy bus seats. Trust me, not bouncy in a good way.

Not to mislead anyone, it's a joy to see the different aspects of Canada's physical geography. Though after 10 hours of watching spruce trees and granite rock pass by, it is striking to the imagery of Vagon poetry. Then I was awed by the Prairies as flat as $y=1$, the awe eventually passed away and I was watching the same scenery and the same house for the next day. They have a legend in the Prairies that you can watch your dog run away for three days. I would add on that you could watch the bus drive by for one day. Then to the mountains, through northern B.C., and southern Yukon. Thrilling, a complete wilderness with the scattered settlements with only one or two buildings whose major industry is feeding the passengers. I was pleased to have taken the bus since it was my first opportunity to see much of the country.

It was the bus trip back a week later that was painful. First off I was already ill, presumably because I took a plane the day after getting off a 3.5 day bus ride. And so I bussed back across Canada while mostly ill. Surprisingly I felt as if I had seen all the scenery sometime before. Now after three days of sitting on a bus staring out the window a girl from UW came and sat beside me on the bus. I knew she was from UW because she was wearing the sweat shirt. I felt butterflies in my stomach, was it fate or perhaps just the A&W burger I had for supper? So conversation ensued in an attempt to make my last 12 hours pass pleasantly. Now after this conversation I realized I had touched

on a couple of conversation topics that should strictly be avoided while "trying to pick up."

Firstly, never ever discuss the time of your last shower especially if it is more than a day ago. Now once she realized I was from UW and in math. She asked jokingly, about the stereotype that Mathies have poor hygiene and rarely bathe, "So have you had a shower in three days?" "Sad, but truthfully, no," I admitted with shame. Though after three days straight on the bus I thought it was justified and had I had any sleep in three days perhaps I would have responded wittingly. In retrospect it is I would highly discourage anyone from admitting their hygienic behaviour on their initial conversation.

Secondly, yes it does get worse, never discuss the stripping industry of Yellowknife. I think that this could be extrapolated to include the stripping industries of any city neither participant had been to. Some of you may be thinking, "But what if the lead in is just perfect and it is the direction the conversation is flowing?" Well, that was how I felt, but truth be told as smooth as the transition was it definitely did not gain me points ... at best it was a break even venture. She had noted that there was only one stripper in Yellowknife at the bar. Now, I, being a man of precision, noted that it's actually a different stripper every week. Each week a new stripper arrives and acts as an understudy of the current performer. Then after a week's training she takes to the stage for a week and takes on the role of training the new understudy (I thought that it was quite interesting how the two week rotation worked). So the stripping joint in Yellowknife actually had a different stripper each week; however you can't actually make any real money in Yellowknife just dancing, to make money you have to do "something more." Surprisingly enough women do not seem to be impressed by one's knowledge of strip clubs in the Northwest Territories. Again it may be the fact I had not slept in 3 days though I would again like to reiterate to avoid the conversation topic of stripping in Yellowknife.

Though the journey was immensely tiring, I did gain some insight which I am glad to have achieved, as well, I did learn a lot about the stripping industry in Yellowknife from a dancer in Pink Mountain, B.C. (population 2). And to think these stories for a mere three cents a kilometer. The joys of travelling Greyhound. Yeah corporate plugs.

David Nicholson

Letter to the Editors

I am writing this letter regarding an article, *Life in Korea*. [By Erich "Fuzzy" Jacoby, Volume 74, Issue 2 — *TaxiEd*] It seems to exaggerate things about Korea and Koreans. It tends to make fun of Korean people in a small town called Ham Yang. Besides that, the writer, whether or not it was his intention, generalizes his narrow point of view about Korea and Koreans without really having lived in Korea. His report about Korea and Koreans in a small town of Korea appears to be very misleading. This article is likely to make readers create prejudices and stereotypes towards Korea and Koreans. I believe that the title must be changed since *Life in Korea* is too general for this article and that the writer must include his length of stay in Korea and his whereabouts in Korea. Koreans are considered to be weird, rude, and ignorant people in this article, even though it's far from the truth. For example, Traffic follies, Some unique road sights, Food

(or so they say), Teaching, and Miscellany. All of them look as if the writer has been to all the regions in Korea by his generalization, has observed all the Koreans and their ways of life (as though he had watched some animals), and has reported it. The writer needs to respect Korea, Koreans, and their culture as a whole. I am afraid that the writer doesn't know the fact that every single culture, whether it looks funny or not, from the eye of the beholder, has its own characteristics and deserves respect. The writer of this article doesn't seem to have heard of cultural relativism. Sometimes stereotypes arise from a single unpleasant experience. I don't know what he has gone through in a small town in Korea but I strongly recommend him to take a society class. Thank you.

Yours truly,
ANDREW

Best of Last Term's *prof*QUOTES

"Drug dealers fail to report their income for taxes."

Smith, ECON 102

"You will give me four cows, and half your house because you need this pot so badly."

Smith, ECON 102

"You can't buy cocaine on a credit card."

Smith, ECON 102

"I really liked Iron Maiden, back in the eighties ... freaky guitars, drug addiction, it's great!"

Vasiga, CS 241

"And so you wait in line for concert tickets because you've never actually seen someone do that to a chicken."

McLeish, STAT 340

"So if you look over the faculties, men earn more women than money."

Chipman, STAT 231

"I expect your full, undivided attention or for you to sleep quietly in your seat."

Kierstead, CS 134

"C++ allows otherwise unrelated classes to 'share their private parts' via a mechanism called 'friendship'."

Godfrey, CS 246

"Hip Hip Array!"

Barry, CS 445

"Where are my balls? Who's got my balls?"

Gilbert, PMATH 336

"I know it's hard to look stupid in front of your peers, but don't worry, I do it in front of hundreds of people every day."

Kierstead, CS 134

"I hate saying it's 'sort of constant' in a room full of mathies. It's like saying 'sort of pregnant'."

Smith, ECON 102

mast*HEAD**Life, The Universe, and Everything***

That's the title of a Douglas Adams book ... don't expect to find the ultimate answer and question in here. It's sad to hear Douglas Adams has died, or ended the long, dark tea time of the soul as he might have put it. I feel like I grew up with his books the way my dad had them lying around. We'd go on long road trips and dad would pop in the 12-part radio show, which would kill about 6 hours of driving — and keep us from talking to each other, hmmm. Well yes, I remember the text game where you had to go back to the beginning of the game because you forgot to look for one of the four lint balls under Arthur Dent's bed. There was the comic book (actually, there were a few, but we only tracked down one) and the BBC TV series which is on one of the oldest VHS tapes in our house. Then came Starship Titanic, I hated that game, stupid bird. Not to forget my aunt waiting in line for hours to get Last Chance to See autographed and my dad calling a book I lent him a liff. Man, this sucks. He had a couple more projects in the works too. He shall be missed. And I haven't even read the books yet.

So, in honour of his most famous work, we asked the Monday-sacrificing *mathNEWS* staffers what their ultimate question was, something that could only be answered by Douglas Adams, something that would be funny when you replied "42" to it. So, there was Albert O'Connor (What size is Pete's "Love?"), Jason Lau (How many years will it take for Toronto to win ANYTHING ever again?), David Nicholson (What did I get in coding theory last term?), Gord Pollock (How much money will I have left at the end of this term?), and Greg Taylor (How many more *mastHEADs* am I going to appear in?).

Thanks goes to Domino's Pizza for their wonderful pizza, even though we ate at Mel's Monday night, which was terrific, great, thanks! Also thanks to Graphic Services who give us great boxes full off okay *mathNEWS* issues.

Pete Lizak (How many times do I have to ask you to sleep with Raymond Lai before you say yes?)

Bradley T Smith (42?)

"There's another guy named Troy Vasiga who gets into *mathNEWS* all the time. I don't know anything about him."

Vasiga, CS 241

**ATTENTION DIABLO II JUNKIES:
Battle.net Wants To See Your Porn**

The recent update for DiabloII, and Starcraft included a new license and user agreement for use of Battle.net, the online game-matching system specifically designed for Blizzard games.

What many people DON'T KNOW is that Battle.net has quietly inserted a few lines into the agreement that will allow them to leech off information for "demographic and identification services." Apparently, they need to identify us and put us into demographics by scanning our entire registry, all our document files, our home networks, cookies, our entire web browsing history and more. Even our beloved recycling bin can't escape from the Battle.net rampage. Even if your porn has eluded your roommate for terms on end, Battle.net may have in their possession

your secret photos of Anna Kournikova in a matter of nanoseconds.

DiabloItems.net has suspended their usual activities and is now canvassing a protest in light of this. As per *mathNEWS* regulation, we are to participate in and endorse any and all protests as violently as possible. [Hmm, somebody's been reading the wrong *mathNEWS* constitution — *TaxiEd*] Head over to www.DiabloItems.net and sign that petition. Although it doesn't contain a comments section to vent your frustration, you can always find a few more 'imaginary' friends to sign that petition with you.

As always, vigilant gamers, stick it to the man.

Raymond Lai,
pissed off gamer

Coming to You, an Unforgettable Circus Experience

Attention, people. The event you have all been waiting for is upon us. The Commons Travelling Circus will hit the road and go on a trans-Canada tour, covering all corners of the country.

You will witness the magical talents of the Big Red Machine, which comprises members from all over the country. See the sensation from B.C. performing impossible acts, such as making things appear just by opening her mouth. The people in Prince George, B.C., who saw the act said that the act is unforgettable. See the whiz from Newfoundland who takes all kinds of punches and still has the strength to throw punches of his own. Watch Kitchener-Waterloo's very own member of the Big Red dive into hot water and try to get himself out of the piranha-filled pool. Most importantly, however, don't miss the ring leader's incredible act of making paper (or people) appear in the spotlight as quickly as they disappear into the lime light.

In addition, you get to see the United Group, a fast growing group with a heavy-western flavour. Witness the ring leader jetskiing on dangerous waters. The wonderboy who can transform and appears as someone else in radio shows (or any other public places) is a must see. You will get to see six members attempting to pull off the Anti-Gravity Pump, where they each attempt to bring one other member of the United Group from the ground and bring that person on top of him while swinging a rope.

There will also be two smaller circuses on tour. They may not gather the attention that the Big Red Machine or the United Group get. However, as both circuses have people who can perform the "jump out of the corner and to the search light" act, missing these two circuses will be your loss.

As a special bonus, a dynamic ring will join the tour in the Quebec leg of the tour. They will dazzle you with their separation act and the tongue-twirling war of words with the Big Red Machine.

This tour will only have one performance in each city. This will be the only chance you have to witness this gigantic production for a long time. When you see the stampede of reporters, you will know that the circus tour is in your town. Don't miss it. A tour of such gigantic proportions only occurs once every three or four years.

This message has been brought to you by
Jason "the Screamer" Lau

Top 10 Things to do this summer

10. Bulk up another 50 pounds
9. Raymond Lai, using a Java script you wrote
8. Do that bendy straw trick with a bottle of Jagermeister. You know, the one where the straw lets the air in, so the liquid pours out really quick!
7. Enjoy the 8 days in Canada without snow
6. Throw the stag party you never had
5. If you play professional hockey for a team that hasn't won the Stanley Cup in 34 years, maybe you should practice!
4. Eat lots of twinkies
3. Write a *mathNEWS* article
2. Bradley T Smith
1. Pete Lizak

Pete Love

A Class Act

Act II, Part I

The Synopsis

Clara has been stunned by a six by six identity matrix. Taurice is still searching for that nuclear warhead. Varg is eating a Pixie Stik. Mark has become an engineering student by drinking highly concentrated beer, hence making him invisible and unsuave. (Any questions?)

The Roles

Clara - the whimsical artsy, exuberant, joyful and attractive

Taurice - the jaded math student, bent on world domination

Mark - the former suave science student, now in engineering

Varg - the first year engineering student, invisible to everyone . . . and naked for some reason

The Scene

The room is dark except for the feeble flicker of the overhead projector. The room is silent except for the ticking of the clock. The room is void of life with the exception of our four characters.

The Play

(Clara snaps back to reality and grabs Taurice by the collar.)

Clara: What are we going to do? Mark's disappeared.

Taurice: *sigh* Since I couldn't find my nuclear warhead, I decided to look into your "Mark" problem. It seems he drank a highly concentrated beaker of beer. There are approximately 10 moles of barley in this liquid and I've concluded through electrolytic analysis that it is at least 10% alcoholic. This verifies my hypothesis that Mark has become an engineer.

(Clara stares incredulously at Taurice.)

Taurice: *sigh* The beaker had lots of stuff in it that made Mark go poof. (Taurice makes a poof motion with his hands. Oddly enough, it looks like a move done by the Backstreet Boys.)

(While Taurice continues his explanation to Clara, Mark and Varg are having an in-depth conversation.)

Mark: So . . . um . . . why are you naked?

Varg: It's comfier.

Mark: (long pause) You've got a point.

(Mark takes off his clothes and lounges.)

The Notes

There's nothing nastier than two naked Engineers except maybe three naked Engineers.

MonkeyMan

Where's the BLACK BOX?

Hey look, there's a giant amount of cork board on the third floor. Cool, lots of space for clubs to put up posters . . . but wait, something's missing . . . where's that darned **BLACK BOX** gotten to? It's not across the hall, it's not upstairs, it's not on a train, it's not in the rain, it's not on the Heart of Gold running the infinite improbability drive . . . oh, there it is, in the MathSoc office, go figure. With the introduction of the wall of cork board, the *mathNEWS* **BLACK BOX** has been temporarily located on top of the lost and found in the MathSoc office. Feel free to drop off Squiz and Grid solutions, *profQUOTES*, articles you're too lazy to type up and email, naked pictures of your mom, money, and non-perishable food items (please, no more perishables). If it moves again, maybe we'll let you know.

Those Editors

The Heaviest Door on Campus

A Letter from Plant Ops

Following an electrical audit of the campus by Ontario Hydro, it was noted that the tunnel connecting the third floor of MC to DC was consuming an abnormal amount of electricity. As a result, the Dean of Mathematics requested an in-depth investigation by Plant Operations.

A squadron of janitors clad in a green uniform set up a site that would take observations and measurements of tunnel activities and send them back to HQ where a highly trained team of statisticians would process the data and compile a report. Their findings were astounding.

It was noticed that multiple individuals, who had to enter DC from MC, would use the handicap button. Data concerning the people using the button was sent back to the statisticians. Based on the evidence, there did not appear to be any link to age or race. The only possible explanation, given the lack of explanatory variates, was that the door was just too heavy.

The statisticians reported to the Dean of Mathematics that some people were just too weak. Stronger individuals needed the assistance of the button to get past the door's inertia. One statistician said that the weight of the door was not actually taken and there was a possibility that people were just too lazy to open the door themselves.

He is now recovering in the hospital from multiple beatings.

As a result, the Dean of Mathematics has demanded that Plant Ops bypass the normal five year processing of requests and replace the door with a lightweight material that can be opened by all.

Current reports indicate that administration is now deciding between paper or plastic.

MonkeyMan

Spew

Oh to spew or not to spew, the ultimate question, of course, is the answer. First off while I don't intend to offend anyone and if I do then I'm sorry, but mainly I'd like to say that anything I say in this article are my personal opinions and not those of the Math Society, Ok now I get to ramble. Umm, work was fun, still working at inscriber too, it's lots and lots of fun :) anyway it's summer and summer is amazing sometime like sailing ... Sailing is fun fun fun ok ... That was a tad childish I suppose ... but meh ... when I was oh ... 18 or so? In the summer of grade 12 I got to sail on a Tall Ship for a couple of weeks, it's was amazing. The boat was a 2-masted barrack (I think it's been a while since I've taken any tests), anyway back on topic ... meh topics. Anyway there's nothing quite like sailing on a boat like that you can pretty much ride out any storm Lake Huron is going to throw at you ok and storms at sea are amazing you can see the lighting up close and a 360 degree view of the storm. It's amaz-

Don't worry, more spew on the next page...

profQUOTES

(Students guessing the order of an element of a group)

Prof: "The answer is not 8."

Student: "Is the answer 8?"

Prof: "It's NOT 8."

New, PMATH 336

"The graph G is 2-edge connected, and what does that has to do with the price of eggs in China?"

Richter, C&O 342

"These aren't the brightest terrorists you've ever seen ... probably because they haven't taken a course in macro-economics."

Smith, ECON 102

"This is a bird course."

Clarke, CS 452 (that's real time)

"I was advised not to do this [cover the overhead with a sheet of paper and lower it one line at a time] as it looks like striptease."

Cheng, CS 360

[Later, forgets what he said about striptease and does it again]

"I heard whistling. No tips please."

Cheng, CS 360

"Spread out all your fingers, treat your left hand as x and right hand as y. Put them side by side and you have xy. Now flip over both hands ... you get reverse(xy) = rev(y)reverse(x). Truly a handwaving proof."

Cheng, CS 360

"If you're going to get it wrong anyway, why don't you get it wrong the right way?"

Cheng, CS 360

"Why do you study CS 360? First of all, it is required."

Cheng, CS 360

"... but the reason we call these *non-negative* constraints is a secret."

Tuncel, C&O 350

"[About the final] We don't try to wipe everybody out, we accidentally do it sometimes."

Springer, STAT 231

"[About the final] No calculators, if you can't divide by four, go out and shoot yourself."

Burkowski, CS 445

"I'm sorry, you'll have to speak up. I'm getting old and deaf."

Hoffman, PMATH 330

"... but that's beyond the scope of this curse ... I mean course."

Balka, STAT 230

"... and if that isn't obvious, just do it again until what's obvious becomes totally clear."

Chan, CS 341

Food For Thought

Wooden-headedness

Why in recent times have British trade unions in a lunatic spectacle seemed periodically bent on dragging their country toward paralysis, apparently under the impression that they are separate from the whole?

Barbara W. Tuchman in *The March of Folly*

Right now there is something like three different Unions on strike. (Okay I am jumping the gun by starting this article April 26th; but, I have a good excuse. By the time you read this, I will have been stuck up in the Real Time Lab for the past two weeks and lord only knows if my writing will be understandable — I will be so tired.)

Now I want to comment on the support workers strike in the TDSB (Toronto District School Board).

First this strike is important to you. Why? Well for one thing, unless you are graduating before the end of the summer you will be going to school with students who had to endure this strike. Remember the TDSB is the biggest board in Canada and at only about an hour's drive from Waterloo, one of the major suppliers of bodies to this campus. This strike is also important not because of who is striking but rather because this is the fourth year in a row that the schools in Toronto have been locked out for at least a week or so.

Heck, unless, like me, you are graduating in April of 2002 ... well alright, unless you started here at Waterloo on or before September of 1997 you missed a few days of school thanks to a strike. Well actually I missed a couple days in 1987 over prep time, but that was almost 15 years ago, so we won't count that experience.

But back to the support workers for a second. I really like the propaganda that reads, we are striking to get better schools for the children. What great martyrs! Oh Please! The support workers are on strike for the normal reasons, they want more small green pieces of paper, or more digits in their bank account, that's what it boils down to. If they really cared about the quality of the class room they would have run for office or something. But forcing the schools to be filthy cess pits and then finally forcing the TDSB to close the shops ... For people who care so much about children I must admit they have a curious sense of logic.

Yes but Michael, they haven't had a raise in years.

Well no, actually, two years ago they went on strike and got a raise, a cost of living adjustment. This time they want a raise like the teachers got, eight percent over two years.

So the teacher's got a raise, give the support workers something.

Well alright, the teachers did get a raise, but ignoring for a moment that not one school was closed down while the teachers negotiated their new contract (a contract that still does not bring a TDSB teacher's salaries in line with adjacent school boards). The teacher's also saw a decrease in their numbers by something like 600. Something the support staff will absolutely not tolerate.

Yes but shouldn't support workers be paid the same as the support workers in adjacent school boards?

Okay to be honest I have no idea what school boards near Toronto pay their support workers. But consider what the sup-

port workers do. They are not professionals, they are labourers. Mostly building maintenance and teaching assistants. Now, not to play down the roll of a TA, I was a TA for Math 117 in the Fall of 98, but most people could be TAs. And building maintenance, believe me there are lots of people in Toronto who would love a job that was as cushy as what the Board of Ed caretakers get.

For goodness sakes people, has anyone besides me noticed the economy has gone south like a Quebecor in Winter? [*If only they would stay south ... — Pete Love*]

JDS Uniphase just announced another 5000 job cuts. Nortel is laying off people I studied with in first year. This is not exactly a time to say, "Michael, we deserve more money," and expect something that could be confused with sympathy.

Okay, generally speaking Unions piss me off. Sure they did great things for workers one hundred years ago. But now ... I don't know. I read reports the Unions hand out, about what schools are hiring "scab" workers and I think, "real professional guys." One school, that will remain nameless, mostly because I don't remember the name, was on the scab list because the retired principal came back to answer the phone while the secretaries were on strike.

I like this possible phone conversation:

"Hello is Mrs. Smith a grade three teacher in? ... This is Nurse Jones from the *blank* Toronto General Hospital, does Mr. Smith have a pre-existing heart condition? ..."

You know being reachable most of the time has its advantages.

How about the message I wanted to leave my dad during the strike.

"Message for D Cole: Michael will be coming home late because he is going out with a friend."

At least dad had a cell phone, but he would have had a heart attack if I could not give him the message and then not come home after work.

Yeah, my parents are teachers, and, yes, dad crossed the picket line a few times over the years. You know what though, I think that some things are just a little too essential to shut down entirely.

But hey, its for the good of the children.

Michael Cole

↓↑↓ Spew ↑↓ ↑ Spew ↓↑ ↓ Spew ↑↓ ↑

Spilt over spew...

ing :) anyway so the sunsets and sun rises are amazing too freaking amazing anyway ... They let me be helmsman and it was lots of fun to sail a 72-foot boat. Ok I'm going to sail around the world someday hopefully when I'm still young. Make a tidy sum of cash and save and scrimp and then disappear off into the wild blue yonder for a year or so (With a satellite internet link of course sigh ... or not those are almost as bloody expensive as the sail boat) anyway that's a dream. But it's something I do intend to do anyway I guess I'm not felling very spewish today so whatever. bub bye.

Liam

The Heaviest Door on Campus

A Letter from Plant Ops

Following an electrical audit of the campus by Ontario Hydro, it was noted that the tunnel connecting the third floor of MC to DC was consuming an abnormal amount of electricity. As a result, the Dean of Mathematics requested an in-depth investigation by Plant Operations.

A squadron of janitors clad in a green uniform set up a site that would take observations and measurements of tunnel activities and send them back to HQ where a highly trained team of statisticians would process the data and compile a report. Their findings were astounding.

It was noticed that multiple individuals, who had to enter DC from MC, would use the handicap button. Data concerning the people using the button was sent back to the statisticians. Based on the evidence, there did not appear to be any link to age or race. The only possible explanation, given the lack of explanatory variates, was that the door was just too heavy.

The statisticians reported to the Dean of Mathematics that some people were just too weak. Stronger individuals needed the assistance of the button to get past the door's inertia. One statisticians said that the weight of the door was not actually taken and there was a possibility that people were just too lazy to open the door themselves.

He is now recovering in the hospital from multiple beatings.

As a result, the Dean of Mathematics has demanded that Plant Ops bypass the normal five year processing of requests and replace the door with a lightweight material that can be opened by all.

Current reports indicate that administration is now deciding between paper or plastic.

MonkeyMan

Bang Bang Boogie

Well ladies and gentlemen (and ladies) this is the third term that I'm writing for *mathNEWS* ... so does that make me something special? [No, not really, you're just damn hot, like all the other long term *mathNEWS* contributors :) — Pete Love] ... Well not really I guess. Well so what's up? Really? Wow that's greeeeeat. I'm kinda stuck on a topic for this article so let's just talk about amusing things. First of all; I'm one of the movie guys!!! The other two are Albert (see my Movie Nite Report article for even more low down — Albert) and Kyle. We're gonna have kicking movie stuff going on. We've already had two amazing Movie Nites and we hope you'll show up to the rest of them. If you have movie suggestions then please email movies@mathsoc.uwaterloo.ca.

Second and foremost is that we need volunteers for Canada Day. That's right, Math runs a very very large portion of Canada Day at Columbia Day. Tons of fun like Twister, origami, parachute games, and WATER GUN FIGHTS!!! Additionally you get a cool t-shirt, free food (for every 4 hour shift you do), a cool goody bag, and you get to party at the Bomber afterwards with all the other volunteers. We need people to help us with all sorts of stuff like setup, clean up and actually running the events. So if you're free on Canada Day and want to help out then email me @ CanadaDay@MathSoc.uwaterloo.ca or visit the mathSOC office and sign up there. We really need lots of help ... 'k ... thanks.

Now onto other stuff ... hmm ... Ultimate Frisbee is lots of fun, after a game we usually like to sit around and enjoy the "weather," my allergies are really acting up ... I think I might be allergic to pretty. GREEN FLARES GREEN FLARES ... anyhow: www.thespark.com is running the DMS project which is extremely funny, check it out, it's greeeeeeeeeeeeat. [While you're there, check out the 'Fat Project' too! — Pete Love]

Ok that's enough from me, I'll chat with you all later when I have something interesting to say. Bang bang boogie.

Tushar
Professional Quack

A Gripe

Okay, I have worked in the IS industry on lots of co-op jobs and I know its not easy. This point must be particularly true in the undergrad.math land where I have seen gripes from students desperate to recover from `rm -rf ~/*` (gotta wonder what became of that CS major). And other students who wonder why they are not listed in the UW directory after checking the little box on their time table that reads, "Don't list me in the UW directory."

But I gotta complain. What is with the eating in the lab enforcement? Okay its great that MFCF is cracking down on people in General Purpose Unix labs who are munching away while checking email at 2 in the afternoon. (Maybe those email checkers will go away so I can do my assignment.) But what about the Real Time Lab.

I mean come on guys, I spend more waking hours in there then anywhere else. Hell, by term end I will spend more hours there then anywhere else period. And now some co-op student on an ego trip can revoke my account because I am trying to multitask? To that co-op student, be polite to the people in the Real Time Lab, they will be your boss one day not long from now.

Silly and idle threats aside, I have, wait for it, 7 days from when the previous assignment is due until the next one is due.

What is the "next assignment?" Oh nothing hard, just do all of CS 354 (minus dynamic memory and file systems) on the i486, a chip that ought to be better known for its myriad of annoying throwbacks to the i4004 than its popularity. And I have 7 days for that, C&O 480, and CS 454. Insert eating, sleeping, going to the washroom, and writing silly *mathNEWS* columns that I am not sure anyone actually reads.

Now I have a great idea, lets crack down on Real Time students because heaven forbid some first-year student sees an upper year student eat in the lab, and that first-year student might actually sink to the level of a kindergarten child and start doing the same. For goodness sakes, if I do go out and make the next great Real Time OS I'll buy the University its next train set, just like the founders of QNX did. Now let me eat in the lab while I debug my OS Kernel. Eating in in the Real Time lab has been tolerated since I was in Frosh, why the change in policy?

Michael Cole

"Machines use electricity — that is why you shouldn't program in the tub."

Vasiga, CS 241

I Sold my Soul for Fame and Pizza

So yeah, this would be my first *mathNEWS* article. Rumour has it that by signing up to write/type/lick the floors clean for *mathNEWS*, I've actually sold my soul to the editors. Oh well. At least I get worldwide fame and pizza. Well, at least Math Faculty-wide fame. And the pizza strangely hasn't shown up yet. But in any case I get to share my vast knowledge with you, the *mathNEWS* readers. Or something like that. Of course I'm only in my 1B term, which makes me younger, less educated and arguably stupider than most of said readership. But I have magically discovered a set of mathematical techniques and proofs that, while obvious, haven't made it into any textbook I've seen. So here goes nothing.

Law of Limited Sadism

Look in any math textbook. You probably have one that you should be looking in anyway. Observe the gibberish some elitist math prof scribbled down. Feel the scorn as the author taunts you with the insinuation that you should actually understand this junk. Stare blankly at the exercises that ask you to prove a proposition you don't even grasp. Why would anyone think of inflicting this on another human being? It's easy to see, sadism is the only plausible explanation.

But there's only so far they can go without most people catching on. For instance, if they ask you to prove something, it's pretty much guaranteed to be true. This can be a very useful

property. Next time you're doing an assignment, and stuck, try using it:

Exercise 6.6.6: Prove that tweedledum is equal to tweedledee when Saturn is in Aries (or something like that).

Solution: Observe this is an exercise in 'Lucifer *et al.*'. Thus, it must be true, by the Law of Limited Sadism.

... and quote me as some kind of knowledgeable math genius who discovered this brilliant law. They will *have* to accept it. (I should probably put a disclaimer in here or something.) Moving on...

Law of Mathie Pickup Line Ineffectiveness

This one's pretty obvious. It only took a brilliant super-genius such as myself to codify it. (Narcissistic? Me? No.) The law states that "The effectiveness of any pickup lines including mathematical references will tend to zero." Look at one specific example: "Hey, nice asymptote." In the best case, the poor mathie will continuously approach getting a date, but never quite get there. That's unfortunately about the best you can hope for. Standard 'hunk' pickup lines aren't that much more effective, but somehow they attract the opposite gender better. This is an area that requires further research ...

Gord Pollock

www.i-swear-i'll-get-to-it-eventually.com

mathNEWSquiz #1

Squiz Squiz Squiz Squiz

Hello, and welcome once again to another term of Squizzes! When we last left the Squiz, some person had won a C&D gift certificate by demonstrating her superior ability to answer Deep Space Nine trivia. Will history repeat itself? Will there be more science-fiction trivia and more winners? The answer lies with you. But wait, how can I affect the Squiz? (That's you thinking) Why, simply by being our SquizMaster! (That's us answering your thoughts telepathically) Nothing brightens up a resume quite like the word "Master." And if you want to be the SquizMistress, that's cool too!

The writer of the Squiz has a great deal in freedom: You can work at MC on Production Nights (where you are paid in food), or you can work at home, plus they get to pick the topics — so much freedom! As long as there are 15 or so questions (that you know the answers to, of course), we're all winners! Plus, you get the added bonus of handing out prizes. Yes prizes! All for thinking up a few questions. And if there's a group of you who want to do the Squiz, that's fabulous too! You're all fabulous! Now here's the Squiz. One point for each correct answer.

Douglas Adams (1952 — 2001)

1. Where does Marvin usually feel pain?
2. What was God's final message?
3. Who ran the holistic detective agency? (Bonus: What was his name before the agency started up?)
4. Who co-wrote The Meaning of Liff with Adams?
5. When did Adams (or any of his books) last appear in a Squiz?

Survivor II

1. Who was the oh-so-lucky million dollar winner in the Survivor sequel? (Include last name.)

2. What animals do the terms "Kucha" and "Ogakor" refer to?
3. Why was Michael flown out of the Outback by helicopter?
4. Rodger found a stone for Elisabeth which was in the shape of what object?
5. What is the continent they're supposedly using for the oh-so-anticipated Survivor III?

The Louvre

1. What is wrong with the name Venus de Milo?
2. Who designed the new entrance to the Louvre?
3. Which artist has an entire room dedicated to a series of 24 of his painting?
4. Where is the other version of da Vinci's Virgin of the Rocks?
5. What are the names of the building's three wings?

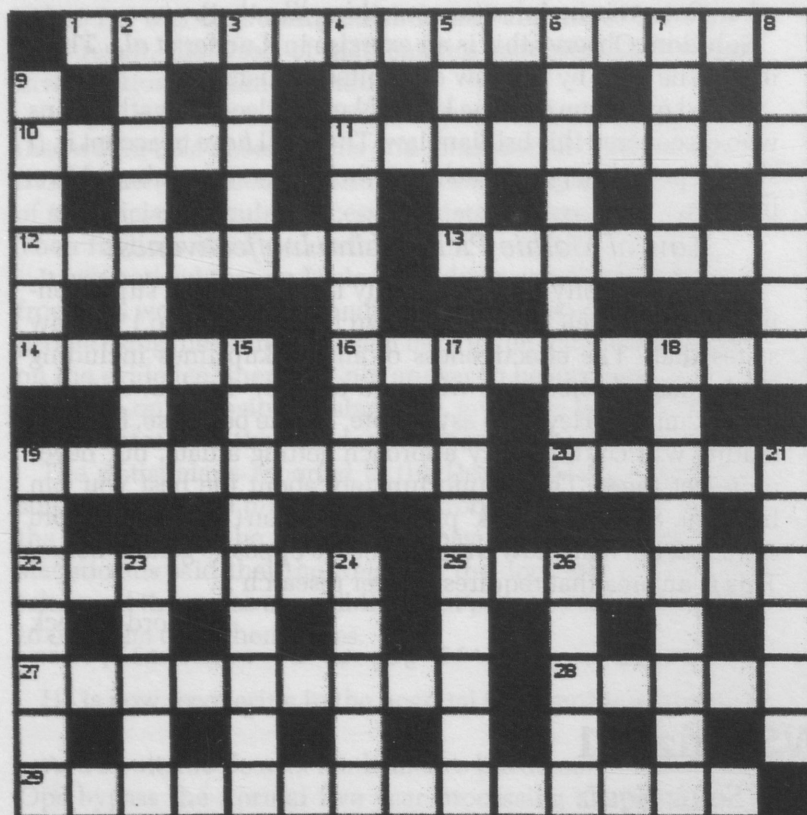
George Orwell's 1984

1. In what language were Winston Smith's job instructions written?
2. Whose statue was replaced by Big Brother's in Victory Square?
3. What are the three super-states?
4. What is England now known as?
5. What is $2 + 2$?

Good luck all, you can submit solutions to mathnews@student.math.uwaterloo.ca or drop it in the **BLACK BOX** (which is now located in the 'Soc office, go figure). If you are interested in being a SquizMistress/SquizMaster, let us know via email or the **BLACK BOX** or simply come to the next Production Night, May 28th. See you then??

Cheers,
The *mathNEWS* Staff

GRIDWORD



The Feds Want You!

(To be a Math Co-op Rep)

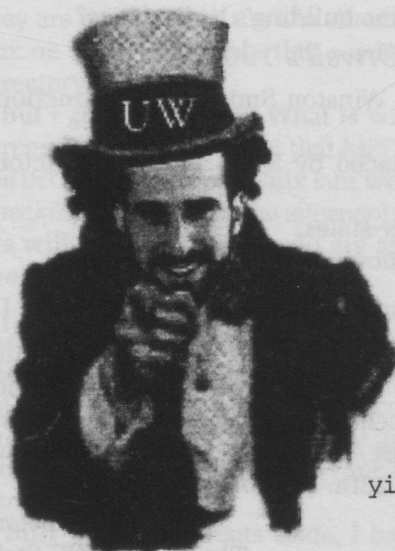
The Federation of Students will hold an election in early June to choose two Mathematics Co-op representatives for the Students' Council. Nominations open at 9am on Friday May 18th and close at 4:30pm on Friday May 25th. The nomination forms, requiring ten signatures, will be available in the Feds office.

The winning candidates, who will represent on-stream Mathematics Co-op students, are expected to represent their constituency by attending monthly Council meetings, collecting feedback from the student body, reporting on Federation of Students activities to MathSoc and working on individual initiatives.

On-stream math students interested in making campus a better place for undergraduate students will find this a great opportunity.

For more info contact:
Yaacov Iland President,
Federation of Students

yiland@feds.uwaterloo.ca



gridCOMMENTS

Well, another summer term, and for me, I have no classes, so I get to enjoy every evening however I please. Surprisingly, very few have involved the Bomber Patio, but that probably is for the best, because, I'm already over the lifetime average of beer consumption for North Americans. I think I have to move to Germany.

There was no grid from last issue so there ain't no winners, but we have prizes lined up, so if you want some C&D gift certificates, then do the cryptic, and bust your ass through the MathSOC door, and drop them into our BLACK BOX, located above the lost and found. We will find it a new home sometime this term... we just have to figure out where, so if you have a good place, and are willing to tell us about it, then drop a note into the box, or email mathnews@student.math.uwaterloo.ca

This weeks grid is by the illustrious Linda, who makes some of the doppest cryptics I've seen in a while... next issue, we'll try to get a regular set of clues as well.

So, without further ado, here is the cryptic...

Pete Love

Grid Clues (Cryptic)

Across

1. Fly forever there (5-5,4)
10. Accountancy cannot eliminate plant (5)
11. Popular songs with offbeat milk focus (4,5)
12. Appealing tree with turn in it (7)
13. Winning or withering (7)
14. Initially contestants, radiant in evening dress, wept! (5)
16. Better tailored and equipped (9)
19. Mao feints broadcasting declaration (9)
20. Reads about challenges (5)
22. Mars or Venus... In suspense? (7)
25. Less solvent (7)
27. Prisoners kept in awful pit in cavity (9)
28. Support comes from endless faith, they say (5)
29. Fabricated "Red" hassles rare in practice (5,9)

Down

2. I expect no special waiver (9)
3. Note was left in cinema illicitly (5)
4. Bad debts after nominee ends away (9)
5. Place to hide in evil lair (5)
6. Marie, right-hearted, wore red to wed again (9)
7. Second back pose was fabled (5)
8. "Donna Karan'ed" to death, we hear (7)
9. Shortsighted of me, old pro, being followed, I see (6)
15. If old fads erupt early, Bud's yellow (9)
17. What slow thief did in the garden (4,5)
18. Natural at spinning (9)
19. Threatened guys won (7)
21. Under pressure, hair loses vitamin and curls (6)
23. Money changer pure Easterner (5)
24. Sounds like a nice room (5)
26. In midst of put-down (5)