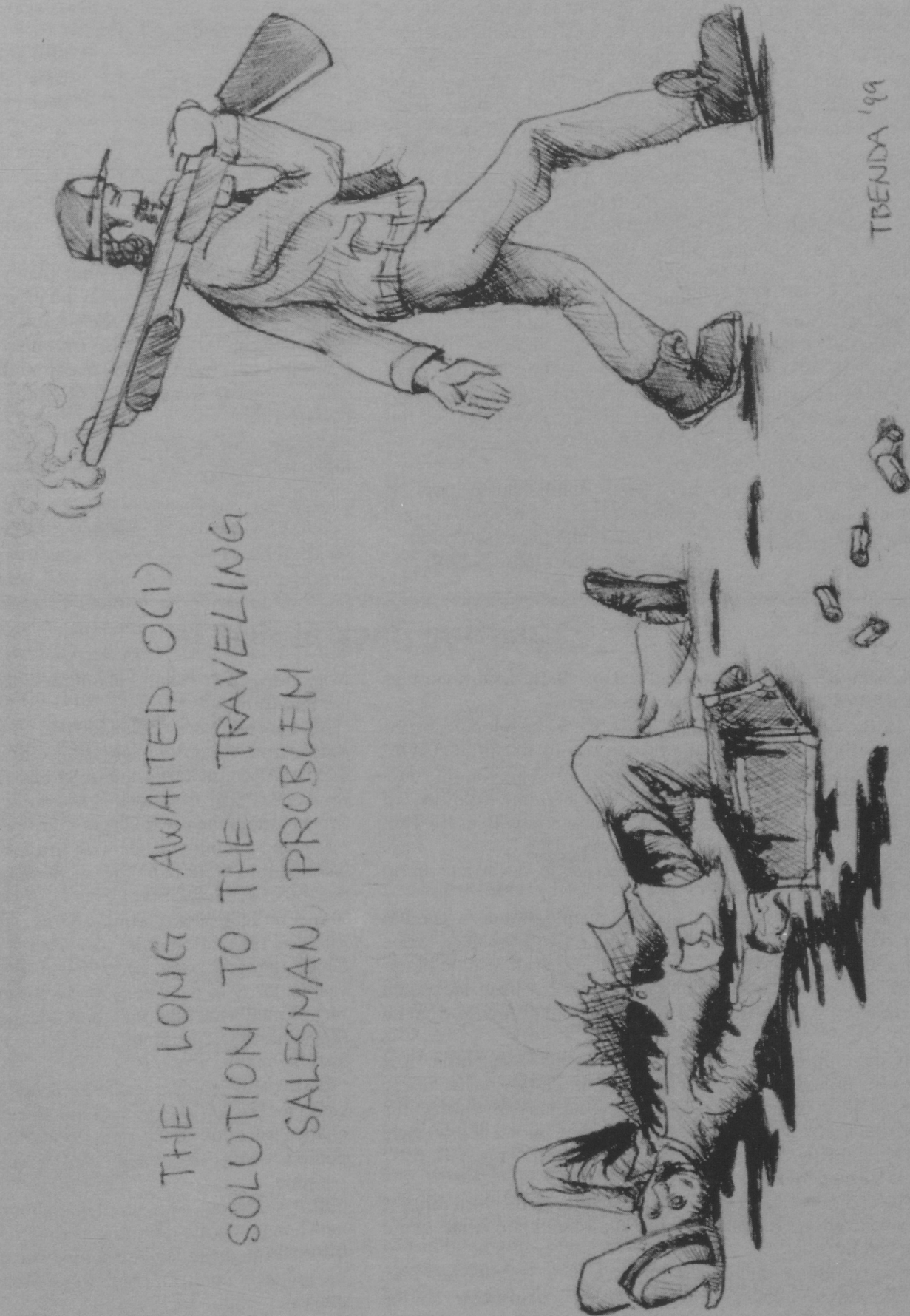


mouth NEWS

Friday, July 9, 1999

Volume 80, Issue 6

THE LONG AWAITED OC(1)
SOLUTION TO THE TRAVELING
SALESMAN PROBLEM



TBENDA '99

How to Pick Up A Cute Store Cashier

Thanks to all the people who came out to help on Canada Day, Natalie is raving about how fabulous everyone was. She actually won't shut up about it. Day after day... "Wasn't [insert random volunteer name here] amazing!? He/she just [insert random volunteer feat here]. Wow!"... We tried to feed her cookies with razorblades to get her to stop, but she's much smarter than we'll ever be. Those of you who weren't there missed out on a very interesting day. I'm not sure what it feels like but I'm sure it's fun. I spent my day handing out little flags, being shot with a water gun (in the rain no less) and falling in a dunktank. And they fed me too. Life can't get any better.

You may have noticed the glass display case on the third floor is temporarily housing a "Relics of MathSoc's Past" display, consisting of random unidentifiable items found in the Executive office (we have since identified the largest item as the desk of the VPAS after she insisted on having the individuals responsible for the furniture movement beaten to death with cassettes of bad fairy music). If you believe you own any of the items in the case please e-mail exec@mathsoc.uwaterloo.ca 'cause we sure don't want 'em.

Executive Office Hours have been established by popular demand (?). If you'd like to contact us the best times to try are:

Bruce (President):	Tues 1:00P-2:00P (MC3039)
	Wed 2:00A-4:00A (MC3022)

(If you don't know who I am, I will try to be wearing a big straw hat when in MC3022)
Natalie (VP Activities & Services): Tues 11:30A-2:00P (MC3039)

Chris (VP Academic): Wed 1:00P-2:00P (MC3039)
Tues 11:30A-12:30P (MC3039)

Jeremy (VP Finance): Wed 11:30A-12:30P (MC3039)
Tues 2:30P-4:30P (MC3039)
Thurs 2:30P-3:30P (MC3039)

Warning: Although we will try very very very very very very hard to be present, these office hours are liable to change without notice. If there is something of urgent importance that must be dealt with during one of these hours you are strongly encouraged to e-mail us beforehand. (Andy Knapp on rollerblades, wink, wink, nudge, nudge, say no more, say no more..)

Some people think that the second week of July is clothing optional week. Although I have nothing against highly controlled nudity, all students and faculty members are encouraged to come to school wearing lots of clothes. Bring some for your friends too.

Oh, and this weekend, please try to lie down lots and not move very much. Only you can conserve gravity.

Bruce Lee-Shanok
bcleesha@undergrad.math.uwaterloo.ca
MathSoc President

Chatting Back at Brucie

I was deeply disturbed to read the article in the last copy of *mathNEWS* entitled "Chatting with Brucie".

Unfortunately, there has been a disconcerting trend for Bruce to insult the Math Society, and denounce its usefulness. Why do I find this disturbing (or, more importantly, why should you)? Bruce is the president of the Math Society and, whether we like it or not, is the ambassador for Math students to the Faculty.

So here is a subset of the problems I see in the article, in no particular order.

I know part of his article stated that people should respond to a problem with a person by telling them. Unfortunately, Bruce represents not only himself when he writes an official document, but also all Math students and the Society itself. He speaks for us, so why shouldn't all of us know about replies to what he says?

He also claims that people are using lies and half-truths. How are we supposed to find out the truth if we can never talk to him, as he avoids his constituents? If he isn't "avoiding" his constituents (us... you know, Mathies), then he just doesn't have the time for us. So how do we get the truth? Pray, tell. (P.S.: what happened to the "open door"?)

The comment about the Society including the word *Math* is most intriguing. It represents all Math students; what would you call it?

Now, briefly on the topic of impeachment. If Bruce had read the bylaws he claims to hate so much, he would know that the process would shut down the Society for about a month. Why

would anyone who cares about the Society do that to it? We're not *that* dumb.

Also, we as a Society decided that "Brucie" should attempt to refrain from vulgarity in anything official he wrote. He continued to ignore the representatives of you guys, and acted anal-retentive simply to show that he could. That is just sad. (Sorry, Bruce, but you really don't get it, do you?)

My next comment deals with Bruce calling the Society's bylaws "stupid". These bylaws were created primarily to ensure the smooth running of the Society. If you followed them (hint, Bruce, nudge), at least you could say, "Hey, they told me to do it!" Also, they are the only way that off-stream and regular students are represented, which means ignoring them ignores the vast majority of those who you represent. As well, if the current council (who represent the students) wanted them changed, they could change them. They haven't, so I guess the bylaws are OK.

Lastly, and most importantly, Bruce thinks that the Society sucks (or is approaching suckiness). He is truly in a position to change this, but he hasn't done it. His "revolution" isn't happening. Things are actually getting worse, a feat I didn't think possible.

Bruce, do us all a favour. Remember that you represent all of us when you write anything as the President, and try to think things through harder. You could even discuss things with people not on council. Or listen to us. We're talking. Just stick out one ear.

Diana "Concerned Student" Price

Former Editor of Imprint Speaks Out About ... Imprint

I am writing here to inform you about a major problem happening this very moment here at UW. It concerns Imprint. I know many of you do not ever read Imprint, but I hope that, at the very least, you share my belief that Imprint is meant to be a student's newspaper, open to every student. I hope you believe this, because I have to tell you right now that it is not.

The Imprint is no longer in the hands of students, or even people who care about student needs. Imprint has become a place hostile to students. Already, one member of the editorial board this term has resigned, another three or four section editors are ready to resign, several students who have been valuable hard-working volunteers in the past have simply walked away, and potential new volunteers have been turned away.

Many staff members are afraid to speak out for fear that they will be ostracized, or even kicked out of Imprint. That's right. Did you know that you could be banned from Imprint for simply walking in to a staff meeting and criticizing the newspaper? Does that sound like freedom of the press?

The Board of Directors, who are ultimately responsible for the running of the newspaper, have done nothing to solve the crisis. The President refuses to even acknowledge that a problem exists. The three current members (there should be five) are not even registered students. Two of them haven't been on campus since winter term. The Board has not met even once since winter term. Staff performance evaluations, one of the duties of the Board, have not been conducted for over two years. The By-laws of Imprint, which legally must be available to you the membership, are kept in a locked file cabinet.

Under pressure, two of the three members of the Board have said they will resign before the end of their term in September. However, they are not willing to do this in a Special General Meeting where you, the students, can choose your own Board members. Rather, they are going to do it in a closed meeting, where they can choose their own replacements, and censor any candidate they do not like.

Even if you have never read or worked for Imprint, I am asking you to help all your fellow students who do. I am asking you to help take back YOUR student newspaper. Write letters to the Imprint Board of Directors, demanding that they resign in an OPEN GENERAL MEETING, where a new Board can be DEMOCRATICALLY elected. Write letters to Imprint advertisers, asking them to stop advertising with Imprint until the situation is resolved. Most importantly, show up at the Annual General Meeting in September if you can (this exact date of this meeting MUST be announced in Imprint before the actual date). At that meeting, vote in a Board of Directors who will be RESPONSIBLE, who will CARRY OUT THEIR DUTIES, and who will return the University of Waterloo's student newspaper into STUDENT HANDS.

Kieran Green
Imprint Editor in Chief
1998-99

Things That Bug Me
Piddly Little Spaces Like This One

MathSoc Dean of Math Nominating Committee

To the undergraduate students of the Faculty of Mathematics: The Nominating Committee for the Dean of Mathematics, constituted under the terms of Policy 45* ("The Dean of a Faculty"), is now in place and has held its first meeting to begin the process of identifying the next Dean of the Faculty of Mathematics.

The committee is composed of 13 members. There are representatives from each of the departments, a member-at-large, staff association representatives, a graduate representative and an undergraduate representative, an external faculty member, and members of the secretariat. We have prepared an advertisement which will invite applications and nominations until October 1, at which time we will review credentials, interview selected candidates, and ultimately recommend a candidate to the Board of Governors at, we expect, a February 2000 meeting.

As the undergraduate student representative, it is my responsibility to bring the questions, concerns, and perspectives of the Math undergrads to the table. Between now and the next meeting (September), the members of the committee have been asked to return to their constituent populations to determine their opinions on a number of issues.

I am currently in the planning stages with MathSoc for a forum regarding this subject.

Please feel free to contact me via e-mail at dstebila@undergrad.math with opinions, questions, or concerns relating to this issue.

Respectfully submitted,

Douglas Stebila

* The full text of Policy 45 ("The Dean of a Faculty") is available online at

<http://www.adm.uwaterloo.ca/infosec/Policies/policy45.html>.

Women in Math

Why are there so few women in Computer Science? Why did you leave (or stay away)?

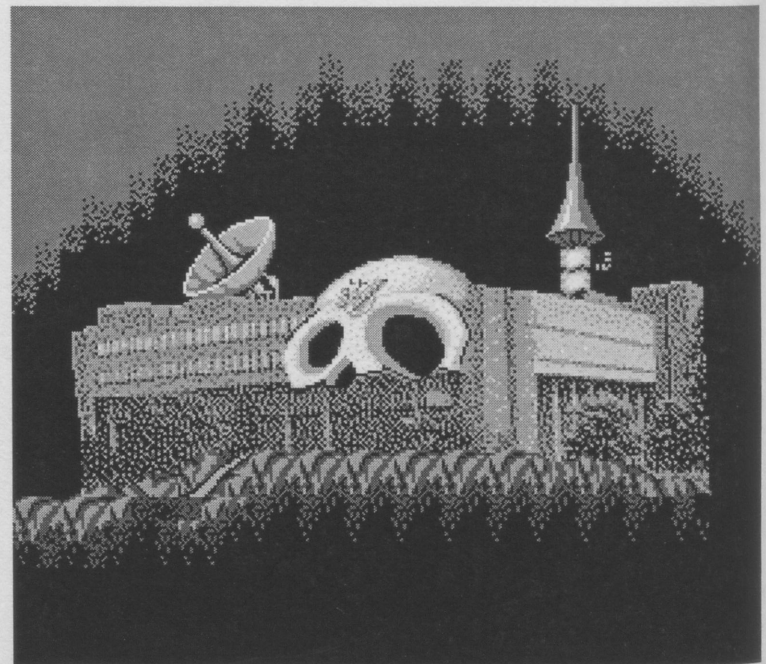
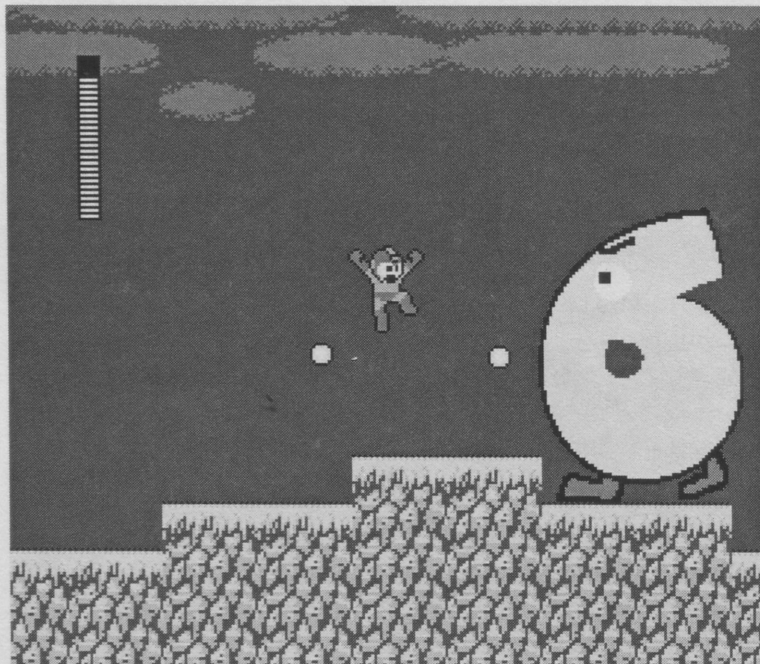
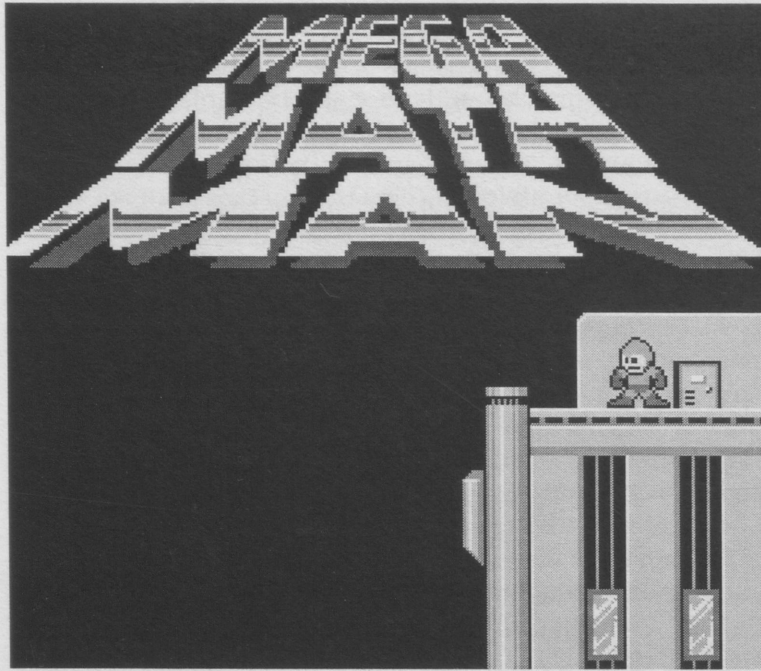
Although many of us ask the first question, there seems to be very little consensus on the answer or answers. More often, the question leads to other, related questions. Is it a consequence of the increase in enrollments in science and engineering? Do girls turn away from computer science in primary school? Is there anything anyone can do?

We cannot answer all or even any of the questions, but we'd like to try to figure out what we can do to improve the chances of attracting a higher percentage of women to Waterloo. Hopefully, in the process we'll learn how to make it more attractive and enjoyable for everyone.

If you (female or male) have left Computer Science or decided against it despite interest in the subject, your insights would be of great help to us. Please join us for a focus group session from 4:30-6:00 on Wednesday, July 21 in MC5158. In partial compensation for your time, we'll be providing a pizza dinner.

RSVP by Monday, July 19 to Meltem Kurtman (mykurtma@math, ext. 6508)

Fun with NES Emulators



Top Five Ways To Eliminate Green Shit

Have you seen the stuff on the west campus pathways these days? I never remembered it to be this bad — living off-campus has its advantages. Is planting taller vegetation along the creek banks really going to stop those ill-mannered animals (see June 17 Daily Bulletin)? Lets see, if they're smart enough to shit on the pavements, I think they're smart enough to fly over those shrubs. Besides, what predatory animals live on campus anyway besides Food Services? So in typical politically incorrect fashion, here are my top five ways to eliminate our pesky wildlife friends:

- Lace the grass with cyanide. If UW students are dumb enough to eat raw grass they deserve to die.

- Declare open season on the branta canadens. They're violating our constitutional right to enjoy our property!
- Tell the geese that the grass is greener on the engineering side or launch a mass goose food feeding campaign over at the engineering buildings.
- Shit on the grass. Ahhh... the sweet smell of revenge.
- Tell Food Services goose tastes just like chicken.

jang
The author disclaims all responsibility
for actions resulting from this article.

BUDS Wants You!

Dear Mathie,

It's me again. BUDS has scheduled an additional information meeting! If you missed our first meeting, this is the perfect opportunity to find out about BUDS. In case you missed my first announcement, BUDS is a group of students, staff and alumni who run a volunteer drop in homework help centre for high school students. Many of these come to us because the resources to help them are not readily available elsewhere.

We are looking for tutors, a drop in centre coordinator, a web page designer and a maintainer, and organizational team members. If you aren't able to commit to the time, we also have a need for one-time volunteers. Come on out to our next meeting on Wednesday July 14th at 4:30 in DC 1304 to find out more or to sign up!

See you there!

Sam

Hi Grads of 2000!

The yearbook committee is searching for great pictures of you from frosh to the final year of your life at UW. If you have any fun and interesting photos you would like to see in the yearbook, please write your name on the back and leave them in the yearbook mailbox in the MathSoc office or in the MGC office. If your name is not legibly on the back of any photo then that photo will not be returned. All photos will be returned at some point around the end of Winter 2000. Please note that due to the high volume of volunteered photos, not all photos will appear in the yearbook. If you have any questions or are interested in helping out with the yearbook, please send me a note at mgc@undergrad.math.uwaterloo.ca.

Nathan

Y2K yearbook editor

In Praise of Creation

Now, now, what, pray tell, do we have here?

A moment of your life is mine now; I hold it, I own it. My words are your chains holding you to me; I have, if only for a moment, your attention.

Now, as bemusing as that is to me, that's not why I'm writing for you today. What I'd like to see for a change is a little more creativity in the math building, so I thought I might just open some eyes.

Let no one deny the intelligence and focus that defines a mathie's most enduring trait. But is it really worth it? Have any of us lost a part of ourselves through our determination and accomplishments?

I say yes to this because I refuse to believe large samples of people could all be born boring and dull. I couldn't live with myself thinking so many people could be satisfied with empty, circular conversations.

Thus my point is this: as you learn and mold yourself into whatever it is this university... this *machine* wants you to be, don't lose touch with your soul. Don't lose enjoyment in thinking about things you don't have to.

And, late and night, when you ask yourself why you don't just kill yourself, make sure you've got a good answer.

Adam
2B CS

profQUOTES

"If I say to do this as an exercise, I set a dangerous precedent."

Nica, PMATH 351

"It's a kind of abuse of notation which has become traditional."

Nica, PMATH 351

"You could tell someone to prove this; they'd probably spend a lifetime doing it. Then you'd show them the four-line proof; they probably wouldn't be very happy with you."

Richmond, C&O 480

"Hoh-meh-oh-mohn-phism... which is probably the longest word I get to write in this course."

Nica, PMATH 351

"Yes, still in the 20th century, we are."

Nica, PMATH 351

"More people look happy now. Be happy!"

Ward, CS 454

"I'm in section 5.1 for those who would like to follow along in your hymn book."

McLeish, STAT 331

"Don't drop your projection matrix... that could really hurt."

McLeish, STAT 331

"You cannot bring any crib notes to the final unless you have a tattoo, describing the method of projecting a vector somewhere on your body. Of course if people start taking their shirts off to see their tattoos, we may have to stop this practice."

McLeish, STAT 331

[at the start of class] "OK, so, any questions?"

Mavaddat, CS 351

"Most PCs today come with 64K of RAM."

Mavaddat, CS 351

"In most recent filesystems, like anything past 1971..."

Good, CS 354

"When you have a hard disk in your system, you don't expect it to be taken out while the system is running."

Good, CS 354

"You need disk quota if you have multiple users and you need to make sure they don't waste all your space with their Netscape cache."

Good, CS 354

Spaghetti For Bridge Players!

The UW Bridge Club will be hosting its traditional Pasketti & Bridge Night next week. It will be held on Thursday, July 15th @ 7:00pm. All are welcome, whether you are an experienced or a novice player. This is destined to be a very social evening, so be prepared for some fun! For more information, please contact the UW Bridge Club at ngarbet@artsmail.uwaterloo.ca.

Gigi

Cynic's Corner

For whom the bill tolls

Well, here we are again. I'm still procrastinating, writing random things and trying to amuse people. The topic for today: vanishing cash. No, not the money that disappeared after your maid service came through, or the pay phone that gypped you of your quarter, or even the rising tuition that causes vast amounts of dollars to vanish from bank accounts. I speak of how there seems to be a lack of cash around because it's been replaced by cards and other forms of payment.

Now, I suppose in a way this is a good thing: makes things more efficient, people who want to steal your money now need more high-tech knowledge, and you don't have those two-dollar coins jingling about in your pockets. But one shouldn't be doing this at the expense (so to speak) of people still using bills or coins. And what prompts my annoyance? Well, at the end of last term I wanted to photocopy some solutions on reserve in the DC library, for exam preparation and so forth. So first I spent some time figuring out which papers I needed copied. Then I went to make the copies, but it seemed that only three of their photocopiers actually accepted coins, the rest required a swipe card or somesuch. I only wanted a bunch of sheets for one course, so I figured why not just use the coin copiers? Well, at one copier there was a lineup. So I went to try another one. It seemed to be jammed. And all these copiers were locked up so that you couldn't fix them yourself (maybe they have trouble with paper or toner thieves). So I tried to track down the third pay photocopier. I managed to do so, and found that it was not working either. This explained the lineup.

So I was in the lineup, and of course someone else seemed to be copying an entire textbook. I tried to pass the time by doing some problems. I didn't check, but one hopes that anyone using this photocopier is doing so with coins... I mean, if you have a card, you can use one of the other ones! (And actually, if you do have a card you might be able to make a little money off of it by lending it out.) Anyway, I finally got my copies done and everything but it had been a bit over an hour, so I had to pay a late fee due to the "course solutions can only be out for 60

minutes" policy. Well, I hadn't expected it to take that long just to make my copies! I asked them to look into the problem of the other copiers not working and the person just told me that wasn't their responsibility (or the like). All they do is take my money apparently, so I suppose there was another vanishing cash aspect there.

Four things I learned from this. There aren't enough pay copiers, and in general cash is being phased out more quickly than you think. Also, maintenance is an important aspect of keeping people happy (couldn't the person with the keys wander around every hour and yank out a piece of stuck paper if there is one?). Plus, it's a lot cheaper to just copy things out by hand (probably sticks in your head better too). And finally, procrastination is poor, both when studying for exams or midterms and when trying to write *mathNEWS* articles, because you never know when something else is going to come up too. It can make someone tense, in a manner not unlike the tense situation of describing past events and trying to avoid present tenses. Then again, things could be worse, there's the trouble of describing past events if you happen to time travel into the future and back.

But I digress. So hopefully I will have done well on my midterm yesterday, three days hence. I'd better have remembered to bring my student card when I go. (It neither has money on it now, nor did it currently.) And keep an eye on those five dollar bills, they may have been the next to go sometime after now or before this is read in a later time.

Greg "hologrami" Taylor

mastHEAD

Guest Editor: Marvin the Martian

Attention, Earthlings! I hereby claim this newspaper in the name of Mars! Isn't that great?

There were some silly Earthling beings wandering around here a little earlier claiming to be some kind of "ed-ee-torrs", but they were blocking my view of Venus, so I disintegrated them. So I'm afraid that you're stuck with me for now, at least until the others finish incubating and ship you all off to the mines.

There weren't very many Earthlings who were here to aid me in my designs; perhaps your species is smarter than I had given credit for. The dupes that were here kept babbling about some new "Village 3", and what they wanted to see in this "V3". They were: Greg Taylor (Tomatoes, carrots, celery (but V8 has more variety)), Mike Thorsley (More of those reptile aliens in human skins), Daryl McEachern (Real food! Not the stuff they try to convince us is "food"), Chadwick Severn (The Global Village), Gigi Garbett (The original Village People. Go West!), Matt Walsh (The Brian "Latrell" Fox Memorial Curling Lanes), and Richard Bilson (Room service).

While unwittingly assisting my domination of this planet of yours, they consumed significant amounts of something that they called "the Colonel's Chicken", which might be what passes for food down here. I personally would like to thank Marion at Graphics, especially for letting me supply the mind-control ink that even now is sinking into your pores...

Marvin the Martian

lookAHEAD

mathNEWS

July 9	Issue #5 presents itself
July 19	Issue #6 production night 6:30pm, MathSoc (MC 3038)
July 23	Issue #6 wraps it up
July 28	More news is good news

Math Faculty

July 29	Lectures End
August 3	Exams Begin
August 14	Exams End

MGC

July 30	Intent to Graduate Due — Fall
---------	-------------------------------

Co-op

July 16	Continuous Phase Registration form due
July 27	Posting #8 expires

Miscellaneous

July 14	Bastille Day
August 2	Civic/University Holiday

Everybody's Favourite Series

Here is a sample application of the geometric series.

Problem

A friend of mine asked me for help with his drug addiction problem. "You gotta help me Sam! I want to be high all of the time!" So, here is my solution.

Solution

In one minute, $0 < r < 1$ of the THC in the body is eliminated from the blood. In the case of my friend, it was about $\frac{1}{2}$ (this number varies from person to person). Presume that my friend inhales once per minute. (If he smokes faster, the problem can be rescaled. This also neglects the slowing down I measured in my friend's consumption. Apparently he has poor time sense while high.) Assume his joint has a fraction a of the optimal dose. Then, after n minutes, he has $a + ar + ar^2 + \dots + ar^n$ of the ideal dose in his blood. Denote this A_n . Now,

$$\begin{aligned}(r-1)A_n &= ar + ar^2 + \dots + ar^{n+1} - a - \dots - ar^n \\ &= ar^{n+1} - a \\ &= a(r^{n+1} - 1) \\ A_n &= a \frac{r^{n+1} - 1}{r - 1} \\ &= a \frac{1 - r^{n+1}}{1 - r}.\end{aligned}$$

As he consumes his joint, we let $n \rightarrow \infty$. Then we approach $A = a/(1-r) = 2a$ (in the case of my friend).

The problem is now reduced from a physical problem to one dealing entirely with finance and metaphysics.

Sam Lisi

Reply to Letters from Iran

Matt has politely asked for an explanation to these letters, so since he asked for it here it is.

As you suspected, there is indeed an underground cult of worshippers of *mathNEWS*. Though, more accurately, they worship great mathematics in general. It comes as no surprise that they are driven to the source of the world's greatest and most powerful Mathematicians: UW, the MC, and *mathNEWS*.

I personally know the reasoning behind their wondrous ideals. A great mathie mind is worth more than gold (or heavy weapons) since it can produce both in quantity. There are currently 3 individuals who have taken advantage of the situation. They now reign in Iran as gods (and 1 goddess).

The explanation to the constant letters: those who write are desperately seeking the great power these 3 wield in order to usurp some or all of it for themselves! A new civil war is brewing in this far off land, a mathie war!

I suggest that there is only one course of action. It is not to oblige and aid them, nor is it to ignore their plight. We must merely introduce all mathies and would-be-mathies overseas to the joys and wonders of the Comfy Lounge card games! By introducing these wholesome rituals into the Iranian math-religions, we will create overwhelming feelings of apathy and contentment. This will eradicate the threat to our current gods in place in the middle-east, since the followers will no longer want to do anything about their rule.

This action should not seem like the corruptive grip of the dark side that it is. Rather, if marketed as the only true path to mathematic comprehension and skill, it will be embraced as enlightenment. After all, you too can achieve the almighty power of a UW Math degree simply by playing cards 10 hours a day! It worked for me.

Kurt "Product of the Comfy" Jackson
BMATH '99

Random Thoughts

Well I just got back from spending the Canada Day long weekend (yes all 4 days - damn classes on July 2) with friends in Ottawa. I had a blast... it is a great place to spend Canada Day, and to visit (I had never been to Ottawa before). I'm looking forward to going back next year. While we were there we managed to hit the Casino De Hull... I lost \$15 but had fun doing it... Wow, losing money can be fun.

As you are reading this I am probably getting ready to drive to Toronto to see the Great Big Sea/Blue Rodeo concert tomorrow (woohoo). This is my third time to Toronto in just over a week... ouch! I've been waiting for this concert for over a year (since I saw Great Big Sea last summer). It looks to be a great show, what with their new album and the line up.

In the last two days (these days being Sunday and Monday) I have seen two movies, neither of which have impressed me very much. First I went and saw the South Park movie. I have to admit that I found it humorous. It had many funny lines, yet it succeeded in offending many people. My personal favorite scene is when they shoot Bill Gates. My advice: unless you are a die-hard South Park fan (God help you if you are)... wait for the video!

After seeing South Park on Sunday, I decided to go see what *Canis Lupis* is like. This is the film that the FEDS made last

term. Well, after the premiere showing fell through in the winter, the FEDS finally were able to show it last Monday. If you want to know what it was like: take *Pulp Fiction* and remove the acting, plot, and script... and Presto! you've got *Canis Lupis*. I have to give credit to everyone who made this film, for it is an amateur production and I appreciate the fact that someone wanted to do something like this. Unfortunately, this film was bad, really bad. It was pointless, stupid, and cheesy. I hope that we can see another movie made on campus... one that is better than *Canis Lupis*.

However, this Thursday is looking to be a good Movie Night. We are showing *There's Something About Mary* and *Never Been Kissed*. In up coming weeks we will be showing *Stepmom* & *Deep End of the Ocean* along with *Pushing Tin* and *Office Space* on July 22nd. Our final movie night will be July 29th and so far we have *The Full Monty* and *Still Crazy*. Hope to see you at movie night. Remember, movie nights are only \$2 for 2 Movies. They start at 7pm in DC1302. We are always looking for ideas of what movies people want to see at a Movie Night. Please send suggestions to movies@mathsoc.

I hope everyone's exam schedule is looking good. My schedule isn't great... but at least I finish on my birthday!!!

CONTINUED on page 8

Spermatikos Logos #6

So what do you think of this fine weather we've been having? Makes you proud to be Canadian, eh? Don't you just wanna curl up in your igloos right about now? <giggle> Apparently that's the effect I had on some people with my last Logos. I'm very proud of the following brave people, who defeated my puzzle and submitted their responses: Terry Spafford, Pam "the Cute" Ambachtsheer, the St Paul's Shadow Council, and the returning champion, Duncan McGregor. But who won the ultimate battle? And what does this have to do with a cross between frisbee and football? Nothing. The lovely, yet unmentionable, prize goes to Duncan McGregor, you lucky duck! Go pick up your prize at the MathSoc office (you know where that is by now, don't you?)

Last Week's Answers

1st	Mike	macaroni salad	dress	fireworks	peanut butter
2nd	Jean	lasagna	candles	dancing	heavenly hash
3rd	Edna	pop	book	theatre	cookie dough
4th	Stan	rolls	gift certs	swimming	strawberry
5th	Trish	cole slaw	goldfish	Mao	tiger tail
6th	Bill	potato salad	CD's	Volleyball	vanilla

This Week's Puzzle

Summer is Warm III: The Dating Game

I got some complaints about the difficulty level of last week's puzzle (one complaint was actually from someone who successfully completed the puzzle!). I feel I should warn you that this week's puzzle is a trifle easier (I hope it insults your intelligence!) and that it's the last puzzle of term that you can submit to. So anyone who hasn't yet won a prize, and feel that they can defeat Duncan in a duel, here's your chance. Submissions are due by 6:00 pm on Monday, July 19 in the **BLACK BOX**, or in the MathSoc office, or by e-mail.

Hypothetically, the Mathematics Society at U(W) was able to scrounge enough interested parties (not necessarily humans, but we'll let that go for now) to play the game. And at the end of the game, they had five couples (for our purposes, we will use

male-female couples), which they sent to a date at the movies (thankfully air-conditioned!). As it happens (coincidentally of course), each couple went to see a different movie at a different theatre. Each couple also shared a different snack while watching the movie. Your task is to determine who dated whom, where they went, what they saw, and what they ate. Oh, and of course report back to me with your findings. Okay? Let's go!!

1. Katrina did not go to either the Bookshelf or the Mustang Drive-In with her date.
2. William's date wasn't Katrina.
3. The couple who went to the Princess Cinema did not eat popcorn.
4. The couple who saw South Park ate the licorice (which wasn't the snack shared by Charlotte and her date or by Ron and his date).
5. The couple who saw *Notting Hill* didn't share nachos.
6. Zeke and Dianne didn't share a sweet, sugary snack nor did the couple who saw *Wild Wild West* (which didn't include Ron).
7. Mark and his date saw *Tarzan*.
8. Susanne (whose date wasn't Mark) didn't have a chance to eat dinner beforehand, so she and her date munched on hot dogs.
9. Amanda and her date, who saw *An Ideal Husband*, didn't eat the chocolate-covered raisins.
10. The couple who went to King's College Square did not watch *South Park*.

RANDOM THOUGHTS (continued from page 7)

Living in Village I hear rumors of the new living accommodations coming in the future. My favorite is the new village between V1 & V2. This new building actually sounds interesting; the rooms will be air-conditioned and they may have a modified meal plan (less than that of the existing villages). Basically it sounds like they are trying to combine the Villages and the Columbia Lake Townhouses (please tell me whose bright idea it was to build residences that far away from campus). I think with all of the new residence additions they are finally realizing that one of the major reasons that people do not come to Waterloo is the lack of guaranteed residence. I know that it was a major factor in several of my friends coming to UW.

Hey I got a job!!! Co-op has worked for me!!! After going through the matching phase, and getting annoyed with co-op for scheduling all my interviews during classes, I got my ranking form... I got offered the two jobs that I really liked... this forced me to decide which one I want... I took the one the was giving me more stuff (I like perks).

Wow... I had a lot of randomness... I apologize to anyone who actually read all of that! [You mean like the editors? — *ΣEd*] It was fun to write!

Daryl McEachern

Gigi "the Logosmistress" Garbett
gngarbet@artsmail.uwaterloo.ca

The things I learned from Assignment 2 in CS454

1. I don't know jack about mathematical analysis.
2. I now know how to make pretty graphs in Excel.
3. When you're alone in the lab at 3am, spirits of fallen CS students talk to you.
4. A midpoint is not a midpoint after all.
5. Here is a preview of the final exam:

Question 1 (worth 100% of your final exam)

Write a 20 page report consisting of mathematical analysis on everything I've taught you.

6. I learned how to grin maliciously as if I wanted the lecturer to get killed.
7. Cars magically disappear when they cross an intersection if we don't think about them.

mathNEWSquiz #6

Hey, all you wild Mathies out there!! It is I, the Subliminal one, once again here to...well, I'm sure you've gotten the point by now. I come with questions, you answer them, you give solutions to me, I give someone a prize. Any questions? No? Good. So, we might as well start this endless cycle once again...

Here are the solutions to the last issue's Squiz: **Music Lyrics:** 1) Five Man Electrical Band, "Signs"; 2) Guess Who, "American Woman"; 3) Barenaked Ladies, "The Old Apartment"; 4) Bruce Cockburn, "Wondering Where the Lions Are"; 5) Alannah Myles, "Black Velvet"; **Prime Ministers:** 1) 20; 2) Neustadt, Ontario; 3) Lester B. Pearson; 4) Arthur Meighen; 5) Louis St. Laurent; **No. 99:** 1) Glen Hanlon, Vancouver Canucks; 2) Wade Flaherty, New York Islanders; 3) 2857 points; 4) 5; 5) 9; **Canadiana:** 1) Sandford Fleming; 2) Kleinburg; 3) "The Postage Stamp Province"; 4) Calgary; 5) Halifax Harbour explosion.

For the last Squiz, I received 4 submissions. The people who kindly submitted, along with their scores, are as follows: Ian "The Word Guy" Facey scored 3 points (obviously, this was not his day); Lukas Kamps and Mission: Bananarama each scored 17 points; and this week's winner, and first repeat champion of the term, is **Colin Wood**, with 18 points!! Congratulations, Colin! Your prize can be picked up in the MathSoc office.

And now, it's time to play the Squiz!!!

Music Lyrics

1 point for title/performer, 1 point for theme

- "Now the half-time air was sweet perfume
While sergeants played a marching tune
We all got up to dance
Oh, but we never got the chance."
- "Got home early one morning
Much to my surprise
She was eating chicken and dumplings
With some other guy."
- "I just can't believe the loveliness of loving you
(I just can't believe it's true)
I just can't believe the one to love this feeling to
(I just can't believe it's true)."
- "No one I think is in my tree
I mean it must be high or low
That is you know you can't tune it but it's all right
That is I think it's not too bad."

Totally Odd Trivia

- What percentage of house dust is made up of dead skin flakes—50%, 60%, 70%, or 80%?
- According to suicide statistics, what day of the week do most suicides occur?
- How much salt (in pounds) does one gallon of seawater contain—1/10, 1/4, 1/2, or 1 whole pound?
- In terms of population, what is the world's most commonly spoken language?
- In "Monopoly," what property does one have the greatest statistical chance of landing on?

That Lovely English Language

- What is the only English word to end in "mt"?

- What is the shortest complete sentence in the English language?
- What is the only English word to have 3 back-to-back double letter combinations?
- Name any 3 common English words that do not have a rhyming word.
- What one-word term is the act of snapping one's fingers referred to as?

Sports Potpourri

- Name the only city whose professional sports teams' uniforms are all the same colour.
- Name the only father-and-son duo to hit back-to-back home runs in a major league baseball game.
- In Olympic badminton, how many feathers are all birdies required to have?
- Name the oldest stadium used in the NFL today.
- In his career, Lou Gehrig hit 23 grand slams, more than any other player in history. Name the active player who has the most grand slams (among active players, at least).

Well, there you have it. Submissions for the Squiz will be due by 6:30 pm on Monday, July 19. You can submit, remember, by either e-mailing me (cjm McGuire@undergrad.math.uwaterloo.ca), or by dropping your solutions off in the **BLACK BOX** outside the Comfy Lounge. Good luck to all of you, and take care!!

Chris "Mr. Subliminal (Curse my metal body)" McGuire

SASMS Incoming

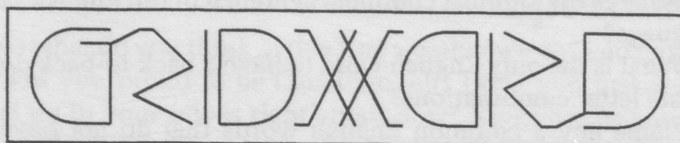
Greetings from the PMC. This article is being posted to inform you all that the Short Attention Span Math Seminars (the SASMS) are coming up real soon, and the PMC is looking for presenters. If you think you could talk (for about 15-25 minutes) about anything that is in some way related to any kind of math in front of a small audience, then you're just the right person to give a seminar.

Speakers need not be math students or members of the faculty or even of the University, so spread this around to people you might think could be interested. E-mail Peter McLub (pmclub@undergrad.math) or Jim Nastos (jnastos@undergrad.math) if you are interested or have any questions about the SASMS.

The talks will be scheduled near the end of July.

Jim Nastos
Pure Math Club

B	E	L	L	B	O	T	T	O	M
O	S	T	R	I	C	H			A
O				G	H	I	B	L	I
T	R	A	M		O	S		O	N
L	I	V	I	D		T	W	O	S
E	V	E	N		F	L	I	N	T
G	E		T	B		E	T	S	R
G	R	O	P	E	S				E
E			I	N	E	R	T	I	A
R	E	F	E	R	E	N	D	U	M



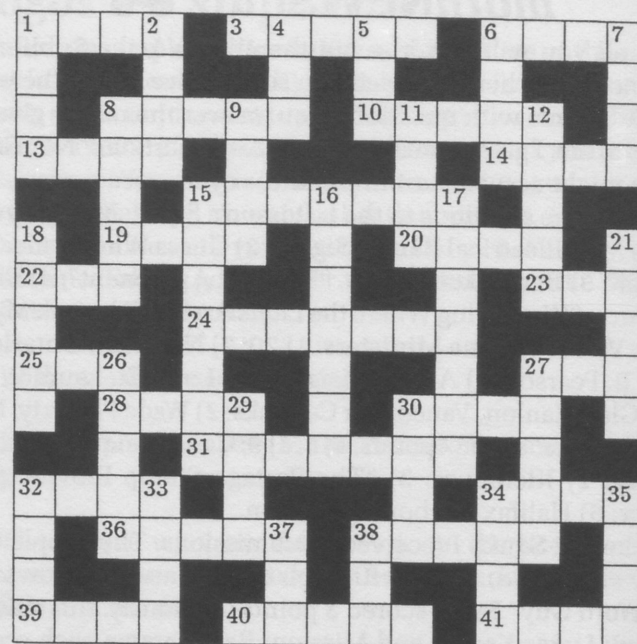
Grid Clues

Across

1. ZZ Top song
3. Expression of contempt
6. A coin to stop on
8. Split in two
10. Lake of Canadian political significance
13. Contact by phone
14. Calibrate
15. John was one
19. Squirrel pelt, heraldically
20. Ivy-League school
22. Colour
23. A helicopter's tilt
24. Hidden, poorly-known
25. Steamy place of relaxation
27. A king or a dog
28. Wearing clothes
30. Germanic tribe which settled England
31. There's a legal limit to the snow here
32. Maize
34. Measure of land area
36. Norse Fates
38. What one did with cards
39. Something tired people do
40. One of the Romany
41. Leave out

Down

1. Soft magnesium silicate
2. Where do bad folks go when they die?
4. Egyptian earth goddess
5. A sometimes-slippery tree
6. Means of ventilation
7. Corrolary to IF
8. Piece of garlic
9. _____ and loathing
11. Not hard
12. Founder of the University
15. Temporary encampment
16. Slight flow
17. A food order or a double
18. Gap
21. Between
26. Fetal oak tree
27. Act in response
29. Condemn to 2 Down
30. Roman king of the gods
32. Maker of supercomputers
33. Midday
34. Lower female range
35. A way out
37. Cunning
38. Brand of modelling clay



gridCOMMENTS

Greetings again, loyal crossword addicts! I hope that July has treated you all well so far. Despite both the dearth of solving time for last week's Grid, and some small confusion as to which month follows June (specifically, whether or not it's June again), I have received **ten** submissions to the Issue 5 puzzle! Imperfect solutions were submitted by Hugh & Karen; Queen Sparkle & the 3rd Floor Crew; Matt Slager; and M'n'N (apologies to those last, by the way; "N" stands for *Neel*, not *Noel* as I wrote last week.); perfect solutions come from the St. Paul's Shadow Council, Ipo Madness, the CSC System Acquisition Goon Squad, Ian "the Word Guy" Facey, Jovie, and Mission: Bananarama. Congratulations, all! By a suitably random process, the CSC System Acquisition Goon Squad take the prize this week.

I don't have much to say regarding this week's puzzle, except that I deliberately avoided words that are *truly* obscure, although I threw at least three song references into the clues, of varying levels of arcaneness. Personally, though, I think that it's a very pretty Grid.

Oh, since apparently the lack of a GridQuestion last issue made Queen Sparkle & Crew sad, I won't make that mistake again. This week, I'd like you to tell me, *how are you beating the heat?*

Happy Gridding!

Matt Walsh

Oh, almost forgot. Submissions for this Grid are due on July 19th (got the month right!) at 6:30p.m. Enjoy!

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@undergrad.math.uwaterloo.ca on the Internet.

We feel like chicken tonight, like chicken tonight, like chicken tonight: Matt Walsh, Richard Bilson, Chadwick Severn, Greg Taylor