# math NEWS 

Volume 75, Issue 1
Friday, September 26, 1997

## NEXT TIMON

"GENERAL L'HÔPITAL"...

He's had some improbable reaction! Send out copies of his history charts, STAT!!

## Instructions for mathNEWS

## Or How To Love Your MathSoc Fee In 10 Easy Steps

1. Show up for class every other Friday (other days are optional). A big heaping stack of the newest issue should be on most floors of the MC. If you can't find any, either (a) it's the other Friday, you dummy! or (b) you're too late, you loser!
2. With your strongest arm, pick up one copy of the new issue of mathNEWS. Do not take five. It's not like they're free. Do not fill in the answers to the gridWORD in every copy in the stack.
3. Do not read mathNEWS until you get to your first class on Friday. Under no circumstances should you open your copy of mathNEWS right there in the hallway. If you should be caught reading mathNEWS, your brain will disavow any knowledge of math.
4. Make sure to point out to your prof any of his/her profQUOTES that you submitted. Be sure to let them know your ID number as well.
5. Do solve the gridWORD, squiz, and other puzzles in mathNEWS and submit them to the BLACK BOX. Do not bang your head on the BLACK BOX.
6. Do not read between the lines.
7. Do think of a witty article that other mathies would like to read, and also submit this to the BLACK BOX. Make sure to make fun of artsies in the article.
8. If you're so insecure that you couldn't possibly want your name published, please include it anyway and ask for a 'Name Withheld' byline. This is important for lawsuits and such. This means we do not accept anonymous submissions.
9. Do not throw away your mathNEWS after you are finished. They increase in value! The first issue is now worth ten times what students paid for it!
10. Alternatively, by connecting all of the Spices that appear in this issue, you can use it as a guide for a wonderful origami creation.

CasEd

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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://viry.undergrad.math. uraterloo.ca/ mathners. Send your correspondence to: mathNEWS, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid mathners@undergrad.math. uraterloo.ca on the Internet.
The punks in charge: Brian Fox, Chadwick Severn

## Prez Sez

Well to start off, for those of you who weren't here in the Winter, My name is André and I'm the president of MathSoc. You may be wondering what I do. Sometimes I wonder the same thing. Well in general I am responsible for just about everything when it comes to MathSoc. In particular I am responsible for doing whatever needs doing that doesn't fit into anyone else's job description. I also take care of student representation to the Faculty and University administration. Yeah, it doesn't sound like much but, believe me, you'd be surprised how easy it is to fill a day (every day) with that. Rather than drone on about the wonders of MathSoc and all the great things we do, all I am going to tell you is that if you want to become involved with MathSoc, you are always welcome. If you DO want to know more I'd be glad to tell you personally and lucky for you, I'm really easy to find. Any of the following ways should work:

1. Find me in the exec office. It's in MC $3035 / 3039$ across from the MathSoc office (which is in turn across from the $\mathrm{C}+\mathrm{D}$ )
2. Call me at $888-4567$ ext. 6515 (you can even leave a message on our funky new answering machine)
3. Email me at: pres@mathsoc.uwaterloo.ca

I'll be glad to answer any questions you have.
André Cousineau
President, MathSoc

## lookAHEAD

| mathNEWS |  |
| :---: | :---: |
| September 26 | Issue \#1 somehow appears |
| October 6 | Issue \#2 production night 6:30pm, MathSoc (MC 3038) |
| October 10 | Issue \#2 perhaps? |
| Math Faculty |  |
| September 26 | Last day for 100\% refund |
|  | Better hurry! |
| October 3 | Math drop deadline |
|  | (Drop courses, that is...) |
| Movie Night |  |
| October 2 | Men in Black and |
|  | Independence Day |
|  | Details in this issue |
| MEF |  |
| September 30 | Nominations for Funding |
|  | Council due |
| Miscellaneous |  |
| September 30 | Leafs are doing great: No losses |
| October 1 | Leafs play first game of season |
| October 2 | Leafs have worst record in league |
| October 11 | New eps of B5 finally |
| October 13 | Thanksgiving |
| October 14 | Leafs looking forward to next year |

## Money, Money, Money

[You get the feeling this article is about money? - LatrellEd.] The $\$ 31.42$ you've been donating to MEF each term has piled up. The interest generated off the endowment has risen to approximately $\$ 15,000.00$.

What are we going to do with all that money, you ask? Well, that's up to you - the students. You can have your say by doing one of the following things:

## Join the Funding Council

The Funding Council is made up of students, alumni and professors. Proposals are brought before and presented to the Funding Council. The council then recommends proposals it feels are worthy of funding to the MEF Board of Directors. The Board of Directors of the endowment fund is controlled by students and consists of the MEF directors (one for each term F,W,S), 4 students from the Funding Council, an alumnus, one professor and the Dean. The board has final say over project funding.
MEF is looking for student representatives from each year (14), as well as representatives for each department (CS, AM, PM, OR, Bus., Stat, ActSci).
Nomination forms for Funding Council are available on the MEF office door (MC 4046). Nominations close Tuesday, September 30, 1997 at 4 pm . You can return your completed form by slipping it under the office door.

## Submit a Proposal

If you have an idea that would benefit education in the Faculty of Math, bring your proposal forward.

Submission for Funding forms are available on the MEF office door (MC 4046).

MEF is also looking for a director for Winter 1998. Nomination forms for the directorship are available on the office door.

More information can be obtained from the MEF web site http://www.undergrad.math.uwaterloo.ca/~ mefcom, by email (mefcom@undergrad.math), by dropping by the office (MC 4046), or by calling the office at ext. 5757 .

## Madeleine Hidas MEF Director, Fall 1997

## Math At The Movies

Movie Nights in Math are beginning again starting on Sept. $25^{\text {th }}$. After getting off to a rousing start with Scream and Fear, we are pulling out all the stops with Men in Black and Independence Day on Oct. $2^{\text {nd }}$. Movies will be held every second Thursday in DC1302 (starting on Oct. $2^{\text {nd }}$ ) at 7:00 and 9:00. Admission is $\$ 2$ for both movies. Hope to see you at the movies.

Robin Stewart
Movie Guy

> Remember to submit your prof QUOTES by either stuffing them in the BLACK BOX or emailing them to mathnews@undergrad.math

## gradNEWS

Hi everyone.
The term is underway and MGC is up and running!
Last night we had our first night out at Weaver's Arms, and it was great. So, if you missed it, well, better luck next time. What's more important, passing all of your courses or meeting the people that you will see in the yearbook every time you look at it?

Speaking of yearbooks, Grad Photos were done this week. If you missed them, run to the MGC Office and sign up for Monday. It could be your last chance.

So who is running stuff for MGC this term?
Here's the list:
Chair: Xavier Aburto
Finances: Elaine Hung
Social: Tammy Duff
MGB : Chantal Bray
Publicity : Kim Jack
Computing : Andy Kim
Merchandise: Shawna Stephens
Pizza Days: Tina Jumeian
Yearbook Editors: Jackie Sankardyl, and Niki VanKerk
If you'd like to help out with anything, please talk to me or the Director and we'll fit you in.
We are having our big group photo taken on Thursday, October 2 at 5 pm on the front steps. I'll see you there!
Don't forget about the Career Fair at Bingeman's on Wednesday, October $1^{\text {st }}$. Free buses leave from the Campus Centre starting early in the morning. (Something like 9:30)
Grad Rings will be on sale October 1-3 in front of the C+D so stop by and check them out.

That's all for now, but I'm sure I'll see you on Wednesday for Pizza Day.

Xavier Aburto

## Just a reminder. . .

Here's the schedule for mathNEWS for the remainder of the Fall 1997 term...

|  | Prouction Night | Issue Release |
| :--- | :--- | :--- |
| Issue \#2 | Monday, October 6 | Friday, October 10 |
| Issue \#3 | Monday, October 20 | Friday, October 24 |
| Issue \#4 | Monday, November 3 | Friday, November 7 |
| Issue \#5 | Monday, November 17 | Friday, November 21 |
| Issue \#6 | Wednesday, November 26 | Monday, December 1 |

All articles are due at $6: 30 \mathrm{pm}$ of Production nights. If you need an extension, please contact the editors and we'll see if we can accomidate you. If there are any changes to this schedule... we'll let you know.

Your hard-working editors.

## Where Did All the Flowers Go?

Well, Frosh Week is over, and with a few grumbles and grunts, I managed to drag myself into class Monday morning. But even as I tried for the first time in months to focus on what the distant professor was saying, my mind was elsewhere, occupied by a troubling thought.
Perhaps some of you were responsible enough to be able to remember the Toga Party. That night, of course, many people were drunk to the point of being physically sick, which, I suppose, is not uncommon for events of this type.
That night, I wasn't in the mood to party, so I decided to help organize the buses. As I got to East Campus Hall, I met someone who was on the same floor as me last year in residence. He looked fine, but his girlfriend was sitting on a curb, puking.

I got someone to call a cab to take her back to residence. I went with them, as did another leader, in case she needed help. When we got to her residence, the guy thanked me, but then added, "You must get paid well for doing this," and smiled.

I was completely shocked. It never even crossed my mind that I would be paid for bus duty. Slowly I replied that I was a volunteer. So he responded, "Ya, but you must get a lot of benefits."

Again, I was completely surprised. He seriously thought I was doing this for myself. I mean sure, I got to use a walkie-talkie, but what benefit do I get standing out in the cold and the rain helping people who can't talk or walk and get home?

The more I think about it, the more it bothers me. Later on that night, I asked another one of the volunteers why she was there, and she told me that helping with the buses was part of her responsibility, but the reason she had taken on this responsibility was to better herself.
Personally, I didn't really see the potential for selfactualization in the rain at East Campus Hall, but I respect the person who said this, and so I was left even more puzzled. A friend of mine from home once told me that it's good that Universities encourage students to volunteer, because otherwise he wouldn't have done any volunteer work at all.

I remember thinking that he was right, that most people volunteer only when they have something to gain from volunteering. And I remember how sad I thought it was that people thought this way. People do things for others, but only when there's something in it for them.

When I think even further back, I remember a day in camp when we were separated into three groups and given different "rights". Blue team had the most rights, while green had next to nothing. At meals, for example, blue team was served warm croissants, pancakes, and all the cereals with high sugar content (which is really cool when you're a kid), but green team had to stand and eat bread and water. So, several of us formed a rebellion group to disrupt this system, because, even though it was just a game, it was unfair.

And of the ten or so in our group, I was the only one who came from the team with all the privileges, the blue team. I can still remember how surprised everyone was when I got there. No one understood why I'd want to change a system that benefited me.

But to me it was so simple. That day was unfair, and things needed to change. The Toga Party had problems, and people needed help. There was nothing in it for me, so why is that so hard to believe? Why do people need to gain from something in

## order to participate in it?

The bottom line is, many people believe that life is only about self-improvement, but I think that's selfish. If life were only about ourselves, we would each being living alone, in our own space, surrounded by inanimate objects. But we're not. We're living and interacting with other human beings constantly. And eventually, everyone and anyone now alive will be dead. So whatever we have or have become, in the end, it doesn't matter, because we die. During our lives, however, we can make the experience as pleasant as possible for each other, or we can compete constantly to better ourselves.

People always complain how unfair life is, when really, life is pretty damn fair, it's just people who aren't. And it's usually the people who complain the loudest about life that are least willing to change.

Jesse Bergman

## VPAS Jive

Well, it's yet again another Fall term, another mathNEWS, and another VPAS article. I guess I should introduce myself for all of you who don't know who I am: My name is Chris Buchanan, and I'm the Vice-President, Activities and Services (or VPAS) for MathSoc.

There are a few things that I'd like to mention. The first is fee refunds. Today is the last day to submit refund forms. Before you go running off to fill out the form, I want you to consider what you'd be giving up; basically, if you get your money back, you can't use any of the services which MathSoc provides, and that includes mathNEWS. So if you're going to get a refund, put this issue back. The other services which MathSoc provides include: our infamous Exam Bank; five-cent photocopying; our PC-Lab with scanner (colour, of course); the lockers on the third floor; great social events; and a bunch of other things.

Secondly, we need your help. MathSoc is run by volunteers, so we can only do as much as we have time for. I understand that not everybody can afford to help out, but if you have at least one hour a week you can spare, we need you. We need people to help keep the Office open, to help out with social events, with publicity, and so many other things. And if nothing we're doing interests you, come up with your own project. It's your MathSoc; it's only as good as you make it.

Finally MathSoc is also your Faculty representative organization. To sum that up, we represent you, the math students, to the Faculty and to the outside world. This means we need to hear from you. If you have a problem, concern, or an idea on how to improve things around here, drop by the Exec Office (MC3039, right across from the MathSoc Office). Or even better, talk to your Class Rep. You might not know this, but you have a Class Rep. representing you to MathSoc Council. If you want to know who your rep is, take a look at the MathSoc Web Page (http://www.mathsoc. uwaterloo.ca).
Anyway, I hope ya'all are having a good term so far, and I hope to see as many of you as possible over the term.

Chris Buchanan

# Things to do in Toronto When You're Tired 

My Run-ins With The Law, Part One

Right now I'm on a work term in Toronto, and am living pretty close to downtown. I'm near Pape and Danforth, which is one of those places that's comfortably far enough away from downtown that lots of suburbanites live there and make it a nice neighbourhood, but not quite far enough away that the entire neighbourhood isn't crawling with cops just looking for a good time. Judging from last Sunday night, it would seem that I look like a good time, to a cop.
It was after dark on Sunday, around 10pm. I had spent most of the weekend hanging around my house not doing much since I was still recovering from the frosh week flu (damn froshies bringing all their damn viruses). I had just finished chugging a rather large bottle of Pepsi and the energy was starting to build up, so I decided to strap on the old blades, grab my hockey stick and go mess around in a parking lot close by.
Nothing much is happening, I'm just skating around burning energy off, when I manage to shoot the ball over the fence of the parking lot into some guy's backyard. Oh, how pleasing. I skate over to the fence and immediately discover that I can't hop it, at least not with my blades on. I also find that I can't see my ball. Now, the way this backyard works was that there were trees just on the other side of the fence, and they were quite thick. So in order to find out where the hell my ball was, I had to literally jump into the trees far enough that I would become lodged there, so that I had time to look around. All the while my legs are hanging out on the other side of the fence in the parking lot flailing wildly.
So I do this a couple of times. At one point, I fall out of the trees back into the parking lot and turn around to see two people standing in the middle of the parking lot staring at me. I just sort of smile meekly and start fiddling with my skates until they leave. Eventually, I find my ball on the other side of the fence, and although I try, I can't lift it out with just my hockey stick. I'm going to have to get on the other side of the fence. So now I start skating around, looking in all the windows of the house. I have to see if anybody is home, right? I don't want anybody catching me wandering around in their backyard. I also skate to the street and the front of the house to see if I can just walk around beside the house to the backyard (all this just to avoid taking my blades off).
Well, I'm standing in the middle of the sidewalk staring pretty intently at the front of this house trying to locate motion sensors when I notice yet another person looking at me oddly as they pass by. I suppose my attempts at not attracting attention aren't doing too well.
I decide to bite the bullet and take off my blades to hop the fence. I do so, rummage around (quietly) on the other side for a good five minutes (the ball was in the middle of a forest, or so it seemed) and then throw the ball back over the fence and hop back over myself.
I land in the parking lot looking directly at two cops. One of them is holding the ball I just threw over the fence, the other is just sort of looking intently at me.
"Looking for this?"
"Well, uh, yeah." Ok, so I'm not very eloquent around cops.
"You know it's illegal to trespass on private property."

No shit sherlock. "Yeah, but I accidentally shot the ball over the fence and I just needed to get it back".
"Playing hockey were you?" At this point, I realize that I picked absolutely the best place to hop the fence - I'm standing right beside a huge sign that says 'Ball hockey playing prohibited by By-law'.
"Uh, just practicing, actually." Yup, smooth sailing from here on, I can sense it.
"We've had a few people phoning in, talking about suspicious behaviour. Would you know anything about that?"
Damn pedestrians. "Uh, no, I don't."
"Why don't you just move along now, ok? I'd hate to have to write you a ticket."
"Uh, sure, ok." And with one last glance at the big 'hockey prohibited' sign, I pick up my stick and skates and walk, in sock feet, out of the parking lot and down the street.

Max Stevens

## mastHEAD

## Stop undressing me!

## Welcome... etc.

Here we are... the first production night of the term. Had some logging in problems tonight and some submission problems but as the night went on things eventually sorted themselves out.

It has come to our attention that the BLACK BOX has posed a serious threat to those who choose to sit underneath it. Please note that mathNEWS takes no responsibility for bumps, bruises, slivers, or other finished-wood-related injuries that may arrise from sitting underneath the BLACK BOX.

And here is the paragraph where we tell you who came to help us out last Monday. You do realize, of course, that if they didn't, the only thing you would be holding right now would be a couple of free pages of blank paper, in convenient stapled-format. But instead, they showed up, and guess what, we have content! So, here they are, along with their answer to the question on everybody's lips: When the Queen dies, who's head should go on the back of all our coinage?

Anton Fedorenko (ME!), Peter Lizak (The Spice Girls, they're British!), John Swan (The creator of the beta distribution), Scott Atkins (Lucien Bouchard, and have the animal on the opposite side moon in his direction), Michael Thorsley (On the toonie, a mug of beer; on a loonie, a half-mug-much easier to see how much beer you can afford), Carolyn MacLeod (a dead mathematician), Greg Taylor (Sailor Mercury! That way we could have some variety by putting Ami on some. Make cents?), Lara Thompson (Who would replace the Queen better than God herself?), and Kate Stange (Still thinking of an answer).

Thanks goes to Marion at Graphic Services as always and Domino's for the za.

> Brian "Latrell" Fox (John Shaft... who else?) Chadwick Severn (Chuck E. Cheese)

## prof QUOTES

"A set is a collection of shit."
Irving, C\&O 230
"Someone outside is looking at this... hey! You want a piece of me?!?"

Irving, $\mathrm{C} \& \mathrm{O} 230$
"Let's get through this boring stuff so we can get to the... oh, I'm sorry, there is no fun and exciting stuff in C\&O."

Irving, C\&O 230
"You don't know what the GCD is? They let people like that live? See, that's the problem with this world today."

Irving, C\&O 230
" $\ldots$ and you'll actually review it all again in 237 depending on the quality of your prof."

Kunze, MATH 138
"This is a great course because you get to say 'I don't know' and you're right."

Oldford, STAT 231
"In Math 136, you were taught that all bases are created equal. But that's really just a European male thing. Some bases are more equal than others!"

Willard, MATH 235
"Yeah, this is 99. If it's not, humour me for a while."
Munro, CS 240
"Any bets... if I offered a case of beer for the correct answer, would I get a response?"

Munro, CS 240
"If you put your mind to it, you can code really badly."
Munro, CS 240
"That certainly is an answer that has a right to exist. Anyone else?"

Kotlov, C\&O 342
"If you do this, you can't go wrong." (pause) "If you do this right, you can't go wrong."

Becker, CS 241
"You came in with lots of enthusiasm and questions, but we beat that out of you in the first two lectures!"

MacKay, STAT 231
"You're in math, you can't do arithmetic! It's tradition!"
MacKay, STAT 231
"What does a node do if it doesn't want to play these reindeer games anymore?"

Salem, CS 354
"If you're in the Faculty of Mathematics, you should attend this event because, well, you need a life."

Smith, ECON 102
"Now, by this stage, most of you don't know how to read books."

Crippin, MATH 135
"Every year, you people wear yourselves out during frosh week, a little damp weather comes along, you all get sick, then come to class and cough on me. I'm amazed everytime Christmas rolls around I'm still alive."

Ferguson, MATH 137
"It took a long time for people to accept the concept of noninteger numbers. The first guy to prove $\sqrt{2}$ was irrational was thrown off a cliff."

Ferguson, MATH 137

## mathNEWS on the Web

To all you frosh who have pondered the question, and to those of you who have been unconscious for the past two-and-a-half years: YES, mathNEWS is on the WorldWide Web. In fact, this fall marks mathNEWS' eighth term on the Web, and promises to be the most exciting one yet. .
Those of you familiar with the mathNEWS Web site, also known as $m N / W W W$ the past few terms, will notice several major changes to the site. Firstly, instead of the old hideously long, keyboard-unfriendly, carpal-tunnel-syndrome-inducing URL, mN/WWW can now be found at:

> http://www.mathnews.uwaterloo.ca/

Also, the "look and feel" of the site have been dramatically improved. The drab black-and-white-and-grey look has now been replaced with something more befitting one of the most popular

Web sites on campus (I'm sure you're thrilled). Actually, the renovations are still under way, so if you find any dead links, please be patient (or hassle me to get it done)...

The content has also been upgraded; more articles have been added to the "Best of mathNEWS" section. In the works are a cover art gallery and a "retrospective" section to commemorate twenty-five years of mathNEWS featuring articles and issues from mathNEWS' early years.

Finally, some interactive features may also be appearing soon, beginning with a localized search engine. Surveys, puzzles, games, and other features not found on the paper issues will also make their début on $m \mathrm{~N} / \mathrm{WWW}$ this term, making mathNEWS the place to go on the Web... So come check it out!

Viêt-Tâm Luu mathNEWS Web-dude

The Case of the Missing $Y_{0}$-Files<br>Or "The Truth Ain't Here"

A terrible scream is heard. It's you, as you read this issue of mathNEWS.
"My god!", you exclaim, "What happened to The $Y_{0}$-Files?"
"That's a good question, mathNEWS reader," replies Dan Aykroyd, standing in front of a very nice blue screen where he'll later be edited into some sort of secret government office. He continues: "In fact, that would be a great case for a Canadian knock-off of the $\mathrm{Y}_{0}$-Files."

The surroundings fade to a board room where a well-mixed group of Sigh-Workers (played by unknown Canadian actors, natch) interrogate a man known only as Latrell.
"Well, you see, it's not my fault. It's this Hammer guy-", Latrell begins.
"Hold on," interrupts Dan Aykroyd, "Could we please get some actors that we've actually heard of here?" Matt Frewer and Michael Moriarty promptly enter the room. (What a coup! Max Headroom and the Law \& Order guy!)
"As I was saying, I have no idea what happened to The $\mathrm{Y}_{0^{-}}$ Files. All I know is that my informant just disappeared." continued Latrell.
"And this is why mathNEWS has been unable to publish the latest adventures of Duller and Scummy?" probed Frewer.
"Yep," answered Latrell.
"Were their any indications that your informant would disappear? Knocks on the door with nobody there, odd sounds on the telephone, or maybe death threats?" inquired Moriarty.
"Well, I did receive a very strange message from him..." replied Latrell.
"Did you receive it telepathically?" intruded Frewer.
"No, it was slid under my door. It said 'Tying the o.' I have no idea what it means." finished Latrell.
"I know what this means. . this could be the big break we've been waiting for!" exclaimed Aykroyd. "Wait, what's that?"

But it was too late. They were cancelled by a network executive that passed by in the hallway.

Will the mysterious informant be found in time for the next production night? Will the adventures of Duller and Scummy continue? We'll find out

> in the next issue...

## CasEd

## A word from the editors

If you haven't noticed by now, this first issue is a little light. Notice how it doesn't take much of an effort to lug this thing around. Safe to assume that Health \& Safety won't be barraged with any mathNEWS related injuries this time around.

We'd like to see at least 16 pages of material for every issue. That's our goal this term. And to do that, we need your help. We need ideas. We need people to write stuff and fill up white space (like what we're doing right now with this article).

Email mathnews@undergrad.math or stop by the office (MC 3041 ) and share any ideas or comments with us.

## Lounge Laws

- $\lim ($ grade $\rightarrow 0)$ BMath $=$ BArts
- As Day $\rightarrow$ Monday, \#People_in_MacLab $\rightarrow$ infinity
- Law of conservation of mass. For every person who leaves the CSC, another one will enter.
- Law of Gravity as applies to the comfy lounge. For any body within sufficient proximity to the comfy lounge a positive attractive force is exerted on that body.
- The amount of work achieved in the comfy lounge in inversely proportional to the number of people in the comfy lounge.
- Comfy lounge + promising student $=$ Arts student 2 nd year.
- Time spent in comfy lounge is inversely proportional to mark.
- Food stuck in vending machine + Drew $=$ Shattered glass everywhere.
- If $y$ is the number of people in the comfy lounge and $x$ is the time of day where 8:00am $=\frac{1}{24}, 9: 00 \mathrm{am}=\frac{1}{23} \ldots 7: 00 \mathrm{am}=$ $\frac{1}{1}$ then the function describing y is $\frac{1}{x}$, since the amount of people in the comfy lounge approaches but never reaches 0 .
- The amount of rage and anger in the comfy lounge is directly proportional to the number of mow and crt players.

Mark, Dan, Kubsie, Dee

## Math Decor

I dare to present a challenge to the mathies of this institution. Not one involving integration or epsilon and delta limits, but one that will hopefully make you test the limits of your perception.

Mathies are infamous for their computer know-how and their jokes involving the obscure and commonly called "strange". We take pride in our uniqueness, but turn your eyes towards the other side of campus, to Hagey Hall or to the Environmental Science Building. I dared to tread in these buildings, and to my surprise, they presented colour and amusement. I found architecture labs filled with artist and engineer melded into student with art pasted to the workstations and paint streaking the walls.

Then I returned to the dismall halls of the MC. With orange doors and dreary off-white walls, the math building is likely the cause of many psychological disorders and disturbed individuals. We wonder why we're so "unique". Even the halls of the engineering buildings are host to more fascinations.

Back to my original challenge. I believe we mathies are every bit as creative as the arts students and engineers (though the latter isn't saying much I admit). With a few pleas to appropriate officials, we could easily liven the place up. A little paint, some artistic ability (of which I saw plenty in frosh week, for example), a lot of large poster backs, and this place could seem just a little more like home.

## Let's Spice up this Issue

So here it is, the almighty must-know question of every male arts student (namely Mike) who sells his textbooks for beer money (during the first week).

## Who is the most popular Spice Girl?

So, to assist those who do not know which Spice Girl is which, here is a quick description of each.

> Mel C

The sporty one, sometimes called Ninja Spice. Has brown hair and is athletic. Wears a lot of sports clothing.
Mel B

Scary Spice, the one with the frizzy hair who loves to scream(?).

## Victoria

Also called Posh Spice, she tends to wear designer clothes and never seems to be smiling.

## Ema

The chubby-cheeked blond, given the nickname Baby Spice.

## Geri

The red haired Spice Girl that has "nothing to hide". Sometimes called Ginger Spice.

Please select your favourite and clearly mark her name on a piece of paper and submit it into the BLACK BOX outside the comfy lounge on the third floor. Please hand in all submissions by October $6^{\text {th }}$ at $6: 30 \mathrm{pm}$. So don't forget to vote for your favourite Spice Girl. Next issue: the Backstreet Boys!

Peter Lizak

## The Frosh Poem

## To Math at Waterloo we came All young and bold at heart;

They taught us how to play the game Be very pink and smart.
It seemed like only yesterday We played with simple gauss; Today we prove big theorems And we are all big ' O '-ed out.
We learned about the floor in MC
The one where we should never be
We learned our high-school tests;
As long as quizzes here should be.
But most of all we found MathSoc
The one that's on the third floor;
And we decided that it's worth it all To be here at once and for all.

## Spermatikos Logos \#1

mathNEWS' new logic puzzle column

Six members of the Psycho Computer Science Club (PCSC) were playing a game of Clue; three women (Ana, Diane and Elaine), and three men (Benny, Craig and Fred). Clue is played with a deck of 21 cards, 6 characters (Mr. Green, Prof. Plum and Col. Mustard (who are men); and Ms. Scarlet, Mrs. White, and Mrs. Peacock (who are women)), 6 weapons (knife, revolver, rope, candlestick, lead pipe and wrench) and 9 rooms (including the Dining Room, the Ballroom, the Conservatory, the Kitchen, and the Lounge). One of each of these three types of cards is removed from the deck and becomes the solution while the rest of the cards are evenly distributed amongst the players. In order to play the game each player must play one of the characters. Given the clues below can you discover each player's name, the character they played, the cards they held and of course the solution to the mystery?

1. The six players were, in no particular order, Col. Mustard, the player who held Col. Mustard, the only player that held two weapons, Ms. Scarlet, Ana, and the only player without a person card.
2. The game ended in a climactic race to the Library which was won by Craig who, ironically, played the murderer.
3. The three male players are, in no particular order, the murderer, Col. Mustard (who isn't the one who held Prof. Plum) and the man who held the knife.
4. Only one player had no rooms.
5. Ana (who held the Hall), was the first to discover that the murder weapon was the Candlestick.
6. Ana and Fred held each other's identities.
7. Reading down the rooms in alphabetical order you have: The room held by the person who held the Study, the Billiard Room, the room held by the only man who played a woman, the room held by the person who held the Hall, the Hall, one of the rooms held by the person who played Mrs. White, the murder room, the room held by the woman who held the revolver, and one of two rooms held by Diane.
8. Ms. Scarlet was played by a man, but isn't the murderer.
9. The person who played Mr. Green did not hold the lead pipe and the lead pipe was not in the same hand as Elaine's character.

Submissions can be stuffed in the BLACK BOX outside the Comfy Lounge or emailed to rjstewar@undergrad.math by Monday, October 6 at 6:30pm.

Robin Stewart
If this issue was any thinner, well, you'd be done reading by now

Anton Fedorenko

## mathNEWSquiz \#1

## Same old Squiz, New Attitude!

To all those seasoned veterans out there who either survived the summer term or a co-op job, welcome back to another glorious term of mathNEWS. To all the frosh who are seeing this section for the first time, let me reassure you that mathNEWS is glad you chose Waterloo over any other university in Southern Ontario. But enough of the chit-chat, you want questions, right? All right then, let us begin our first Squiz for Fall 1997!

## Song Lyrics <br> Name the song and artist

1. Well you got your reasons

And you got your lies
And you got your manipulations
They cut me down to size
2. I wanna die, but I gotta laugh

Orange crush mama is a laugh, laugh, laugh
3. Wherever you are
you will carry always
Truth of the scars
and the darkness of your faith
4. It's only for a while

I hope you understand
I never wanted this to happen
Didn't want to be a man

## Capital Cities of the World

I give you the country, you give me the capital city

1. Central African Republic
2. Uzbekistan
3. Fiji
4. Madagascar
5. Former Yugoslav Republic of Macedonia

## Britcoms

Another fun way to spend Saturday night

1. What restaurant does Gareth own in Chef?
2. In Keeping Up Appearances, Hyancith's father lives with which three characters?
3. What fictional town does Hamish MacBeth take place?
4. Name the two women (full names) who serve behind the counter of the Ladies' Department in Are You Being Served?
5. What shire does Last of the Summer Wine take place?

And for those who don't like Britcoms, there's Sport!

1. What is the nickname of the Penn State teams?
2. Who won this year's Mann Cup for Senior lacrosse?
3. Who was named the general manager of Nashville's NHL expansion team?
4. Who won the 1922 Scottish Football Association Cup Final? A bonus point will be given if you can name the team the Cup winners defeated.

Well, that's all for this ish. If you wish to partake in the first challenge of this term, then submit your answers to these questions in our faithful BLACK BOX, e-mail them to joswanQundergrad.math or if you have the great fortune of seeing me, then you may give the answers (written, of course) to me. The deadline for answers will be October 6, 1997 at $4: 30 \ldots$ No Exceptions! This deadline (unlike the production deadline) will be strictly enforced!
Until next time, happy trials!
John "The Psuedo-Squiz Master" Swan
Brian "Calculus Cowboy" Fox

## What I Learned on My Work Term

Back from yet another work term. Did I learn anything on this one?

Keep it in mind that it is I, The King of Second Rounds. (Six times through co-op, six times in second rounds, 5 jobs.)

As I look back on my last workterm, I think "Wow, all I did was play with Oracle". But who cares, I got paid lots of money that will soon be completely contributed to the Bomber.

What did I learn really?

- Despite growing up there, I never realized just how boring Mississauga really is. There are only two types of bar there: pool halls and nudie clubs. I stuck to the pool halls. [Oh... that's a joke. Heh heh. Funny. - LatrellEd.]
- It sucks moving home after 3 years. If you haven't tried it, DON'T! I'm serious. I hate getting up on Saturday mornings, and it's even worse when you have to do house work.
- Cable TV is good... there's no better way to waste time.
- The Spice Girls on cable TV: a better way to waste time. Why do so many people hate them? I think they just ooze talent. [Huh? - LatrellEd.]
- Ouija boards are cool. No, I'm not going to explain it!
- It is possible to do a 360 on a major highway during rush hour and not hit anything.
- You can't find a bar that serves 50 in Mississauga or Brampton. [Thanks for the tip, man. - LatrellEd.]
- Public transit SUCKS!!! It took me an hour and a half to get to work by bus, 10 minutes by car.
- Nortel pays lots of money, I'm not broke yet!!!
- I can't get a date in Mississauga either, but at least here I have the Bomber.
- Roger good. Blue Jays bad.

That's all for now.



## Grid Clues

## Across

1. It goes with snooker on TSN
2. Course code for artsies
3. They sang "Green River" (abbr.)
4. So long (not in English)
5. City in Judah
6. A kind of fruit
7. Wanderer
8. Comparative suffix
9. Hawaiian island
10. It and cleanliness go together
11. Bilko and Slaughter
12. Makes a home
13. Pronoun
14. Like
15. $S N L$ alumni monogram
16. Short form for gold
17. Thing on a bike
18. Beer
19. Washer partner
20. Attach
21. Frequently
22. Goodie
23. Government money (abbr.)
24. Or (not in English)
25. It's where potatoes come from (well, not all of them)
26. Yes (not in English)
27. Prefix for port or it
28. TV drama in its $2^{\text {nd }}$ season
29. It's standard sometimes
30. It goes with Cineplex
31. Ted owns this channel
32. Relating to Ionia
33. Norse destiny goddess
34. Warm up
35. It lives in South America
36. Examples (abbr.)
37. Extravagant
38. A person with leprosy

Down

1. A guy's name
2. Much - about nothing
3. Edge
4. Full of caffeine
5. TV comedy in its $2^{\text {nd }}$ season
6. Dressing gown
7. Pompous
8. Lots of feet
9. Up in Smoke actor's monogram
10. Hints
11. By the ocean
12. Print again
13. You're not as crazy as someone else
14. TV comedy in its $2^{\text {nd }}$ season
15. Just a taste
16. French summer
17. Equipment
18. Simon $\xi^{3}$ Simon character
19. Pesticide (abbr.)
20. Hatchet
21. Eagerly
22. Common metal
23. Bested
24. Dalmatian (2 wds.)
25. A drink
26. Gooey balck stuff
27. Smelly vegetable
28. Alanis song
29. Indicating nearness
30. Affirms
31. Metal spike
32. Grand - Opry
33. Snooze
34. Ending for D, L and M
35. Auto
36. Degree for artsies

Submit gridWORD solutions to the BLACK BOX by October $6^{\text {th }}$ at 6:30pm and maybe you'll win something

