

math NEWS

Volume 75, Issue 5

Friday, November 21, 1997



This serene little
backdrop is dedicated
to all the people that
pissed us off during
the making of this issue.

Skog

Prez Sez

So what has MathSoc done since the last issue? Well, we had a road trip to the Brunswick House with the Engineers. From what I hear it went fairly well. This week was also course evaluation week for MathSoc and as those of you in core courses (hopefully) know, MathSoc volunteers administer the evaluations for those courses. Since I'm writing this at the beginning of the week and you're reading this at the end, I'm just going to say that everything went perfectly without any hitches. Also we tentatively will have the computer lab up for use very soon and will also (unless something terrible happens) have money from MEF to purchase a new computer for student use. In other computer related news, our new printer has finally arrived. Suffice it to say that we all think it's really cool. This printer is also for use by any student and will be available for use as soon as the PC's are back online. I will also say that the General meeting on Wednesday was a rousing success (unless of course the disco ball got voted through... man, people will sign anything). That should be all for now... see you next time.

André Cousineau
President, MathSoc

Newspaper for Borrow!

That's right... MathSoc is offering a new service. We are working on getting a subscription to *The Globe & Mail*. It will be available in the MathSoc office (MC3038) for borrow on an hourly basis with your student card. We're not sure when the subscription will begin so watch for signs. [*Like a swarm of locusts or cows wearing pink ties? — LatrelleEd.*]

Brought to you by your
friendly VPAS collective
and MathSoc.

Why I Felt Like Crap On Tuesday Night

I had a bag of croutons and a bottle of Pepsi for dinner.

CasEd

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Given their 30 days notice to Vince: Stone Cold Chad Severn, Brian "Dude Love" Fox

Oh, Come All Ye Faithful!

Seasons Greetings, fellow ActSci Students!

So, are we ready to wean ourselves from the Actex manuals yet? Since the manuals have been a part of you for at least six months, I know you'll feel pretty naked without the manuals... but c'mon, I think we can do it!!! Or, can we???

This is yet another reminder about supper TONIGHT at the Mongolian Grill. Here are the details:

What: Supper and night out
Where: Meet at the Mongolian Grill
Restaurant
When: TODAY! November 21, 1997
Time: 7:00p.m.
Who: All

Ultimate Destination: Yet to be decided

Before I wrap up my duties for the term, which is rapidly coming to an end, I would like to remind you about the final event hosted by the ActSci club. This will be a student panel discussion hosted by fourth year co-op, regular, and visiting students. Some of the topics on the agenda are:

1. The new exam system versus the old exam system
2. Co-op workterm experiences (local and abroad)
3. The ActSci program at U(W)

I strongly urge the frosh who are seriously considering Actuarial Science as their major to attend this session. It may be the most valuable panel discussion you have ever attended.

Are there any topics or issues that you would like to address? The panel would love to hear from you. There will be a "suggestion envelope" posted on the door of the ActSci Club. Please drop off all questions, comments, or suggestions early. This will enable the panel to adequately prepare for topics.

For further information, please feel free to contact your class reps or myself at: jsankard@undergrad.math.

Looking forward to seeing you all at supper! For those of you who are still "zoned out" and are unable to make it to supper, good luck on your final exams and Merry Christmas!!!

To my fellow Grads-to-be: Doesn't it feel queer going home for Christmas with just an overnight bag and not your entire room??? The end **must** be near! Good luck on your final exams!

Jackie Sankardyal
Publicity Director, ActSci Club

Ross Willard Appreciation Day

The first annual Ross Willard appreciation day was a blast, with Ross lecturing to first year students about the Fundamental Theorem of Calculus. The party was highly sociable and involved refreshments and freshly frozen apple pie. Why didn't we bake it? Simple. We had no oven, and it's easier (and safer) to bake while sober. Toodaloo until next November 7.

Peter Lizak

mastHEAD

*There's an evil monster inside you.
I will name him EDITOAR!*

You may be wondering how we managed to put this issue together when there was a mathNEWS strike going on. Well, we're happy to announce that all of the mathNEWS staffers are back at work. They decided that they'd come back and finish this term's issues because they're doing it for Timmy.

If you can believe this, we spent almost half an hour tonight trying to come up with a good mastHEAD question. We had everything from *Favorite alternate method of delivering mail to Who the man?* All of these were rejected since Fox will have to use Shaft in his answer. So, unless he uses "Who's Shaft?" as his answer to this week's question, I think we're okay.

Here is everyone who helped out tonight along with their answer to the question *To what question would you respond "Not Me.?"* Mike "Hammer" Hammond (Who wants a big frosty glass of Orbitz?), Peter Lizak (So who here knows how to quantize the solar induction unit to reduce stress caused by flames of extravagant proportions?), Michael Thorsley (Who'd rather be doing CS 370?), Greg Taylor (In "do me fa so la te do" what tone of the scale is missing?), John Swan (Who is responsible for those Squeezes?), and Robin Stewart (Aren't you the guy from Caroline in the City?).

Thanks goes to Domino's Pizza for their wonderful pizza and to Marion at Graphic Services (who even makes a cameo appearance this issue!).

Brian "Latrell" Fox (Who's graduating anytime soon?)
Chadwick "Spots" Severn (Who wants the last Veggie slice?)

Attention Mathies!

Want to improve your resume? Come to the Career Resource Center!!

At the career resource center, there is a special service available to improve your resume. A team of dedicated and trained volunteer students, called student career advisors, will help you with:

- Resumes (for co-op, regular, or graduate)
- Letters (cover or broadcast)
- Career searches
- Interviewer tips
- Self-assessments
- Labour market trends

You would be wise to come in **now** and book an appointment because the beginning of the term is our busiest time! This service is free of charge. Make sure to bring in a resume and/or a cover letter for your appointment. An appointment can be made throughout the week and your session with a career advisor lasts for about fifty minutes. Don't miss this chance to have a great resume!

Maigen O'Marra

lookAHEAD

mathNEWS	
November 21	Issue #5 reads your palm
November 26	Issue #6 Production Night 6:30pm in the MathSoc Office
December 1	Issue #6 is dumped in your lap
Math Faculty	
December 2	Last day of classes
Movie Night	
November 27	We don't know... it could be <i>Leonard Part 6 & Ishtar</i> for all we know Look for signs... posters, that is...
Co-op	
December 3	Get out the yellow pages
Miscellaneous	
November 22	Yet another MathSoc meeting on Redundance Awareness
November 24	Musical Chair Day in Landen
November 25	Pin the Tail on the Laser Printer Day in MathSoc
November 26	Pinata Day in Real-Time Lab
November 27	Red Rover Day in Laurent
November 28	Hide & Seek Day in Mac Lab



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THREE ON THREE

3 MEDIUM
PIZZAS
LOADED WITH
YOUR THREE
FAVORITE
TOPPINGS

MEDIUM

\$20⁹⁹
+TAX

3 LARGE
PIZZAS
LOADED WITH
YOUR THREE
FAVORITE
TOPPINGS

LARGE

\$25⁹⁹
+TAX



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Computer
Science
Club

A Student Chapter of the ACM

CSC Flash

Greetings, human beings!

I imagine your midterms are just about over (if they aren't already) and finals are coming up, but I don't care about your problems and frustrations because I don't have to do them (ha ha ha). Me? Cynical? No way!

So, what the hell is with this whole Macintosh episode? What's next? All computers will be relocated next to windows and doorways in an effort to reduce heating costs to the University this winter? For the love of God, why can't both sides agree to some compromise? I certainly wish that MFCF asked for the students' opinion on the Mac situation before the sentence was made.

As for the CSC talk schedule, all I can say is look for postings around the MC for more info on upcoming talks. There may still be a few more tutorials this term. Why don't I know exactly what talks will happen in the immediate future? Well, to put it bluntly, I'm not directly informed of such events, and for that matter, why the hell not? Come on people, I voice your events, so for God's sake get organized, damn it!

Now, as promised, here is that blurb on 3D graphics cards and accelerators:

First off, 3D graphics are not just fancy things to beef up games (though that tends to be a strong use of the technology). In fact, you can use this technology to graph those pesky three dimensional figures you work with in Calculus, or give your presentations that extra "zing" (hey, I once blew the socks off some exec types at work by bringing up an animated 3D pie chart quite clearly showing how the company would go bankrupt in about 3 years given present conditions). Now some things to take note of is that some 3D cards are video cards (such as Matrox and ATI cards), while others are merely add-ons to your existing video card (such as the Diamond Monster 3D). This is an important factor to consider when buying one (or requesting one for your office computer from your boss depending on the situation). For simplicity sake, and the fact I don't feel like ranting for an entire issue, here are many of the terms that will make you seem knowledgeable when it comes to 3D graphics with their basic definitions (these are all features to look for on a 3D card):

- Anti-aliasing: A technique used to make edges appear smooth by blurring pixel edges to eliminate jagged edges (jaggies)
- Alpha Blending: Used for blending two images together. This creates atmospheric effects such as fog and depth cueing (lowering the intensity of lighting to make an object appear more distant from the viewer)
- Bilinear and Trilinear Filtering: A technique which "smooths" flat surfaces, such as walls, that appear to move linearly away from the viewer
- Bat 3-D Pills: Reverses the effect of a 2-Dimensionalizer-

style weapon (refer to old campy Batman series)

- Double Buffering: A method for using two video buffers: One for rendering the image, and the other for displaying it. The result is the appearance of smooth-motion animation
- Flat Shading: A basic shading technique by which all polygons that make up the rendered image consist of a single colour (this results in a blocky effect, since there is no blending of colour)
- Gouraud Shading: A more advanced shading method by which the corners of each polygon (that make up the rendered image) are analyzed, and averages the colour values over each pixel in the polygon
- Perspective Correction: Correctly alters textures in a scene to give a real sense of convergence as continuous images (such as walls) appear farther from the viewer
- Texture Mapping: A method for pasting bitmapped images over polygon surfaces to add another level of realism
- MIP Mapping: A method of minimizing distortion caused by shrinking or enlarging an image during perspective correction by storing copies of the bitmap that makes up the image within memory
- Rendering: Describes how colour is distributed on each polygon that makes up an entire image
- Z-Buffering (or Hidden Surface Removal): Tracks the depth of each polygon (from the viewer's perspective) to make sure that objects that fall behind others in a scene do not get drawn to the screen but do appear as the user moves within a scene

Well, that's about it for now but be sure to watch for the next CSC Flash, where I'll talk about whatever I damn well feel like.

Calum T. Dalek
Exterminator Extraordinaire

Pay Attention!

Because of a screwy schedule and Thanksgiving mucking everything up, Production Night for Issue #6 is on **Wednesday, November 26** at 6:30pm in the MathSoc office (MC 3038). Articles and submissions are due at 6:30pm on that day. Issue #6 is due for release on **Monday, Decmeber 1**.

So you better show up on Monday and pick one up or we'll plaster the walls of the 3rd with all the excess copies.

You have been warned.

m.N.e. 4 life
(mathNEWS editors for life)

Chris's Metaphysical Moment

(or, *The Light At The End Of
The Tunnel is burnt out*)

The 6th floor Sun lab used to be a pretty good secret, a quiet place to work, and where I used to slave and toil through my CS coursework. So, I've walked the path to the 6th floor elevators hundreds, maybe thousands, of times.

This number drastically increased by the creation of my second home, the Graphics Lab. And so, when I found myself walking towards the elevators on a caffeine run many cups of coffee ago, I spotted the difference: a flashing, blinking Exit sign, pointing towards the stairwell.

Now, it's not the presence, but the behaviour, of this sign that attracted my attention. And it wasn't one of those subtle flicker, this was a full-bore, hard-core, attention-wrenching "look at me!" type of flashing. Irregular enough only to try and convince me it was natural.

Of course, I wasn't convinced. I stood and pondered it for a while, savouring a sense of life, of intelligence, emanating from it and appealing to my animistic streak. After all, I talk nice to elevators, because you know what they might do if you don't.

I then tried to decipher the reason for this attention grabbing. Here was an Exit sign, flashing a visual scream at me, proclaiming... what? An exit? A new path? Perhaps a way to break out of this routine, a way to break out of this while(alive) do loop that can be so suffocating. Perhaps, if I merely follow the sign, my life could be forever changed.

So, I decided not to take the elevator down to the third floor, and I followed the Sign. And, a few minutes later, found myself in the comfy lounge with a cup of coffee. Nothing had changed.

I passed this same sign a dozen times this long eternal night, and it kept beckoning to me. I could not shake the feeling there was meaning, that the building was talking to me. And as the night progressed, caffeine did what it always does: keeps the eyes open while the mind shuts down. And as those pesky higher brain functions stopped working, the purer subconscious made the true answer clear.

And I stood by the Sign, and I watched it, and I loathed it. For it sat there, mocking me and my captivity, chained to an expensive toy, being forced to apply half-learnt half-forgotten mathematics to CPU-hungry algorithms. I hated that Sign at that moment, and the cruel, malicious Math and Computer building, which was showing its true, nasty, petty, mocking nature at last. Teasing me with what I could not have, not for several hours at least.

My metaphysical journey complete, my enlightenment a flickering flame in synchrony with the Sign, I returned to my second home and imparted my story upon my classmates. I then decided to share it with you, so that you may understand the spirit of this building, and what might happen, if you don't talk nice to the elevators.

Chris "Not Bitter Guy" Klein

[Does this article prove that some signs can have a life of their own? I don't know, but this comment down here proves that this article wasn't a complete column and needed some extra padding.]
— CasEd.]

Little Trains of Thought

Still need tracks of some kind

Do you ever get lost in thought? I mean the type of lost where you don't notice that you passed your house two blocks back. Or when the strange looks on other people's faces tell you that you aren't making those sound effects *just* in your head. Well, don't get lost in thought in the bathroom. Trust me, you don't want to mix up the toothpaste and the hair gel.

Speaking of bathrooms, guys, a great reason for wearing gloves in winter: cold hands and an urgent need to use the restroom. 'Nuff said.

Anyway, I was thinking the other day. Well, actually, I tend to think most days (amounts vary) but on this particular day I was thinking about comas. I was thinking about comas, and how you can't tell when a person will wake up from one, or if a person will wake up at all. It was then that I decided that if I'm ever in a coma, I want the people at the hospital to let my beard grow. It would be like waking up and poof! instant beard! Besides, I think I'd look good in a beard.

Tattoos, however, have never really appealed to me. (My sister recently got a belly-button ring. This has nothing to do with the story, I just need to change the subject later on.) But I am considering getting a full-body tattoo. Of somebody else. Namely, Brad Pitt. Hey, the ladies seem to be attracted to him.

Not that I have trouble attracting the ladies! Hell, no! Why, I sometimes have to fend them off in droves! Heck, there are a few droves out front right now, yelling and screaming hysterically. Why, if I were to open the door a little, you could probably even hear them, chanting, chanting: "Dork! Dork! Dork!"

My mistake. That's just my family.

Okay, so maybe I exaggerated a little. Maybe it isn't exactly in droves. But my sex life is just fine, dammit! Fine! Great even! Sure, I'd like to share it with somebody, but then there's always room for improvement.

Now here is where I subtly change the subject.

My mother was surprised when my sister had her belly-button pierced. Not that she got a belly-button ring (she simply **didn't** understand that) but by the fact that she had her belly-button pierced for this. (Well, they are doing amazing things with Vello these days.) She'll probably have even more trouble understanding what my sister's decision to undergo two weeks of infection has inspired me to do. I've decided to have a small buzzer subcutaneously placed in my chest. Then whenever I hit my left nipple it would make the Star Trek™ communicator chirping sound. That'd be neat. And one heck of an ice-breaker at parties.

Well, it's a thought anyway. (And thanks to my uncle Ron for the title.)

Chirp chirp. Beam me up Scotty.

D. K. "I still don't know who hit me in the head" Gardiner

[Boy, so close, yet still not a complete column. I'll just say here that being in a coma is apparently not reason enough to be granted an extra late in CS 241. And don't even think about piercing the prof's nipple. And if only the last sentence finished off this column, I wouldn't have had to write this one.]
— CasEd.]

profQUOTES

"In my calculus..."

Gilbert, MATH 135

"I've long ago forgotten all the trigonometry I ever knew..."

Goulden, MATH 135

"No one got 1 out of 50..."

Goulden, MATH 135

"This is a lousy example." (pause) "This is a great example!"

Goulden, MATH 135

"I'm gonna mention calculus here, because it's so much fun."

Goulden, MATH 135

"I might try for a while, depending on how stupid I am."

Goulden, MATH 135

"If all but one of a million bombs hit the targets, the taxpayer won't be upset that one of the bombs was wasted - the one which hit the hospital. You didn't hear me say that."

Kotlov, C&O 342

"I'd like to thank the students in the front row. All semester they've been writing messages on the desk. For instance, today it says 'I love adjacency matrices.' I think they're lying..."

Kotlov, C&O 342

"Would anyone like to bet money?"

Kotlov, C&O 342

"Nobody in the class was out of his mind enough to spend the entire weekend thinking about this stupid problem instead of going drinking beer with his buddies. I understand."

Kotlov, C&O 342

"I don't think it's necessarily wrong, but I think people will laugh at you."

Atlee, CS 445

"In prehistoric times... or around when I was born..."

George, CS 370

Prof: "If this doesn't come out to 0, someone'll have to jump off the building." Student: "Who?" Prof: "I don't know; we'll vote on that."

Zorzitto, PMATH 442

"A beer would help, but I have something else in mind."

Willard, MATH 137

"This is against the law, isn't it? Is the dean here?"

Willard, MATH 137

(Reading mathNEWS) "I couldn't have said that..."

Willard, MATH 137

"Isn't it illegal to serve beer in class? I'm breaking the law then... no, wait! One of *you* is breaking the law!"

Willard, MATH 137

"If you got the mean score, feel happy. If you got higher than the mean score, feel even happier. If you got less, you should feel less happy. If you failed, think about the drop policy."

Willard, MATH 137

"What the heck am I doing? Well, I've had a little to drink."

Willard, MATH 137

"Two hours ago, I recall saying something about pie and a beer." (Sees pie and beer on desk) "Obviously, I should've asked for something more expensive."

Willard, MATH 137

"... Ok, what was I talking about... oh, yes, oh yes! Calculus!"

Willard, MATH 137

"In fact, I *was* able to do it by inspection, but... when I wrote down the answer it was wrong."

Willard, MATH 235

"You guys were so busy appreciating me... you forgot your linear algebra!"

Willard, MATH 235

"Now, for this fuc... function... oops, I was thinking of something else!"

Willard, MATH 137

"Am I still making sense or am I boring you? Well, I'm probably boring you."

Oldford, STAT 231

"Can someone tell me if the graphs are isomorphic? Yes or yes?"

Irving, C&O 230

"If you're seeing spots from the acid trip on the weekend you'll also have trouble with graph theory."

Irving, C&O 230

"Okay, but I think I can show you a proof that doesn't involve the hand-waving."

Crippin, MATH 135

"I'll use a different colour here to show you I'm innovative."

Crippin, MATH 135

"This is an easy algorithm. If you measure difficulty by how many beers you can drink and still do it right, this is a case-and-a-half algorithm."

Munro, CS 240

Things to do in Toronto When You're Tired

Head south and meet Americans!

One of the crappy aspects of southern Ontario that I don't like that much is the fact that it's really just a huge exercise in urban sprawl. After all, when one of my co-workers here in Toronto can (and does) commute to work everyday from halfway between Waterloo and St. Jacobs, you know that Waterloo is really just the suburbs of Toronto. You can't really go anywhere for that "nature experience" without first driving for a couple of hours.

However, one nice thing about the location of Toronto in particular is that, as with the rest of Canada, it's really damn close to the States. The States are fun mainly because of the people inhabiting them. Gosh they're dumb.

The Americans have had, for the longest time, this sense of having to do everything themselves and they can't trust anybody else. Whether they're enforcing their own idea of a global community behind the ragdoll of the U.N., or casting their own president and government into controversy and suspicion, the average American just doesn't trust anybody to get things done. And even if things are getting done, they're not getting done in the correct way. This obsession of doing it your own way even goes as far as where to take a piss.

I had the opportunity two weekends ago to see the Buffalo Bills play a home game against the Patriots. It was an ok road trip, despite the fact that the game was kind of crappy (although there was a kickoff returned for a touchdown, I suppose that doesn't happen all that much). It was at the end of the third quarter when, kicking myself for not playing over/under on the game, I went to the bathroom in the stadium. Mmmmm... male washrooms at a stadium which seats 50,000+ during a break in the play. How fun.

As I'm waiting in line outside the doors to the washroom, I notice a sign that says something akin to "Please refrain from using the floor as a urinal". I considered this a bit of an odd message to put on the wall, but whatever. After a good long wait in line outside the entrance to the washroom, I finally manage to get inside the washroom. As I come around the corner to look into the washroom, I see yet another sign, this one reading "Please refrain from using the washbasin as a urinal". My eyes then track down to eye level where I see ten guys crowded around

the washbasin using it as a urinal. Well, ok, there were huge lineups to get into any of the real urinals, so I could perhaps see this. However, when I saw the guy in the corner just start pissing on the floor, and the five other guys who thought this was a good idea and promptly started doing the same, I decided I could hold it.

I was willing to cut those guys slack though. After all, the game marches on whether you're in the can or not (not like all those Buffalo fans should have been in a hurry to watch another quarter of the Patriots scoring, but...), and stadium washrooms are always an adventure in fun. But this past weekend I was down in Niagara-on-the-Lake (distinctly different from Niagara Falls, which is a good half hour away). Niagara-on-the-Lake is known primarily for the Shaw Festival, a theatrical series much like Stratford except focusing on George Bernard Shaw and related works. I was down there to see a production of *The Two Mrs. Carrolls* (very good, by the way) and happened to meet a few American theatre goers in the process.

Now at fifty bucks a pop for the bad seats, and a town that really has nothing other than the theatre, I would expect these folks to be pretty hardcore theatre gurus. After talking to the couple for a while ("No, she's not my wife, not anything like my wife, we just go on a lot of honeymoons. Don't tell her I said that.") they seemed pretty easy going, but they did know quite a bit about the theatre. Well at intermission I met the gentleman outside the theatre taking a smoke. We talked for a little while more until the end of the intermission was signalled. At this, he promptly walked over to the side of the building, and in freezing temperatures starting taking a leak, putting his cigarette out in the process (for those detail freaks, needless to say, he was a one-hander). Well it was interesting seeing a man dressed respectably (he even had a fedora) taking a leak on the front of the building in Niagara, but oh well. On the way back into the theatre I asked him if he was a football fan.

I guess in America, new emphasis is brought to bear on the saying "Don't eat the yellow snow".

Max Stevens

Amy's World

So having exposed you to my warped sense of humour last issue, I have decided it went well and I should write more. Story time!

Once upon a time in an enchanted land there were 3 beautiful and powerful witches. Now these were good witches and ruled fairly over all their subjects. Except one. You see, there was this annoying little gnome from the wild blue yonder who wore these evil orange trousers. These trousers were so evil that whenever the witches saw them, they laughed so hard that they were rendered powerless. Now the witches couldn't allow this to continue so they hired a blind man (who was hence immune to the power of the trousers) to burn the pants. So the trousers were burned, the gnome banished and the witches lived happily ever after.

Amy "I'm not cynical" Green

	P	A	R	E		D	O	C		A	N	A	P			
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It's a Small World at 800 Kilometers An Hour

Welcome to flight 450 bound for New York City. Please fasten your seatbelts. My nervousness seems unbearable. A nagging feeling dances in the back of my mind, telling me that I am gonna die. Logic was no comfort, my fear was overwhelming; something would go wrong. I am so afraid of flying.

An hour on the runaway, and then we accelerate (ahh..this is crazy), faster and faster, my heart beating in rhythm with the engines (slow down); a pace so fast, it produces a dull roar. I'm so scared. Lift off, and we sway in the turbulence, like a thrown playing card whirling through the air. We rise, climbing higher and higher. I'm so scared, sweating with fear as the captain casually tells us how much longer this torture will last. I'm so scared that I feel queasy. The flight attendants begin to serve drinks.

Soon the plane levels out, and I relax a little. It is so beautiful up here. Everything down below looks so peaceful. The white snow on the ground recedes slightly as we head south.

From up here, I can't see what's happening down below. My mind easily ignores what's happened in the world. Hundreds of thousands, if not millions of people, little innocent children, dying. Refugees, homeless, hopeless, wandering... I can't even feel the bitterness, or the hatred between the different "factions" of humans, or see the sadness and pain in their eyes.

Up here, it's impossible to remember the rest of the world. I bet I could even repress my knowledge of the Holocaust. The voices of the survivors do not reach me at 22000 feet. Six million, that's such a big number; I can't even count that high. Besides, what does it mean to me, what does it matter, if I'm flying in a plane?

Here, Remembrance Day was just another day. I maybe noticed the odd red poppy here or there, but I have ignored the millions of lives sacrificed for my liberty. Here, Remembrance Day is just a day of the week. Why should I have to care? I wasn't in the war.

Wait a minute, I can see something! It is a man who has climbed to the top of Mount Everest. He has planted a flag and now is watching the sun slowly set. Let us all admire this man.

But wait, his body is numb...his limbs lifeless. Here is the conquerer of mountains, frozen to the bone. He is forced to

amputate his now useless toes. But his toeless determination is not enough. His condition worsens, and soon he can no longer walk. His guide is forced to abandon him. Later, on television, a documentary will capture this man's death.

This man who to me has no name has died. In retrospect, the guide, who filmed the man at the summit, said it had been that man's best day. And so he rests somewhere atop Mount Everest, toeless, frostbitten, celebrating his best day?

I shudder to think that some people find their best days only atop a mountain in freezing cold weather, weather deadly enough to end their life. I make a promise to myself to never climb so foolishly. And I remember a girl I once met who said she would take me climbing, and wonder where she is now.

I reach into my bag and grab a book, to take my mind off the nauseating descent. The book reads, "I came to the woods because I wished to live deliberately...to live deep and suck out all the marrow of life." But I am oblivious to this too, and instead, I focus on myself, my fear, and the airplane.

In my horror, I stare out the window and catch a glimpse of the sun through the clouds. For an instant, my fears float away and I remember. I remember the voices of the unsheltered and the hungry. I hear the wailing of the children and I feel their tears dripping into the hot sand. I can see the killing, the torture, the unspeakable acts of violence, and the bitter engine of hatred that propels them. I remember the Holocaust and the millions of victims. I see the soldiers, younger than me, dying in columns. And I see the frozen flowers on the grave of some man.

How do I end their suffering? How do I salute? How can I respect and honour their memories? I don't remember; I don't know how. Tears stream down my face, and I stare forward with the other passengers, as we approach the warm glow of New York City.

I gather my belongings and feebly shuffle through Customs, wondering where all the marrow of life is to be found. Soon, though, I forget my flooding tears. I celebrate blissfully, day and night, in New York City. And I stare in awe, wondering, how many airplanes fly through here each day? I don't remember.

Jesse Bergman

Cabbage

My bout with cabbage. *[This ought to be good. — CasEd.]* Actually, it wasn't much of a fight *[Oh really? — CasEd.]*, I mean how hard does cabbage fight back? *[You'd be surprised. — CasEd.]* You kind of eat it and well, that's it folks. *[Not much imagination there. — CasEd.]* But, I did have a bout with my cousin Jon, *[I can hardly wait. — CasEd.]* (No, this is not the cousin issue.) *[Note to reader, I didn't bother printing the cousin thing. — CasEd.]* We had a challenge to see who could eat more cabbage rolls. *[And I'm George Franklin. — CasEd.]*

For those of you who know, a Lizak can eat more than any other mortal man, *[And probably shits more, too. — CasEd.]* but, unfortunately, this cousin was not a Lizak. *[Lucky him. — CasEd.]* I devoured nearly 2 dozen (23 actually) cabbage rolls, *[So that's what smelled on Production Night. — CasEd.]* leaving my cousin in the dust (actually they weren't that dusty)

[Ha ha. — CasEd.] but needless to say, no one from that side of the family has ever challenged me in a competition involving cabbage since. *[Lucky them. — CasEd.]* I am the undisputed cabbage eating champion of my family. *[Wow, congrats! — CasEd.]* (Insert evil laugh here) I will take over the cabbage eating world (insert another laugh). *[When do you start working on the humour world? — CasEd.]*

Oh no! Here comes anti-cabbage man. *[Oh, I wonder who this is... — CasEd.]* The latest mutant beast created by the no-broccoli cult! *[What a surprise. — CasEd.]* Ahh, he's attacking innocent cabbages! God save us! What can we do!!!! *[End this article quickly? — CasEd.]*

Is it a bird... *[No — CasEd.]*

Is it a plane... *[No — CasEd.]*

No, it's the incredible super gardener, with auto attack action

continued on page 9

continued from page 8

rake and hoe! [And special chlorophyll armour? — CasEd.]

He swings wildly for anti-cabbage man, connecting with a fierce blow! My God, the incredible super gardener, with auto attack action rake and hoe, killed anti-cabbage man! (Insert hurrahs and cheers here) [Are we done yet? — CasEd.]

We are safe now, my dear cabbage. [At least until next issue. — CasEd.] Fear not! The incredible super gardener, with auto attack action rake and hoe, trudges off to wreak vengeance on the no-broccoli cult! [And unsuspecting readers. — CasEd.] God have mercy on them. [Especially the readers. — CasEd.]

Peter “Cabbage is tasty, eh?” Lizak

A Note from mathNEWS

We received a complaint regarding our previous issue about the signature of “Mark ‘Himmler’ Hamilton”. The correspondent wished to know why Mr. Hamilton used the name “Himmler,” expressed strong personal offense at the use, and included a speech given by Heinrich Himmler.

First of all, a bit of explanation. Issue 4 was our “strike” issue, where we wrote that the writers were on strike and that, to compensate, the editors brought in scabs to replace them. In reality, this was a joke; the scabs were really the people being “replaced,” with a decoding key in the mastHEAD. Thus Alia S. Choir was really Greg Taylor, Petra Prozak was really Peter Lizak, and Mark “Himmler” Hamilton was really me, Mike “Hammer” Hammond.

So why did I choose Mark “Himmler” Hamilton as my alter ego? The reasons were twofold. First, I wanted to avoid confusion by using an alias relatively close to my first one. (See? “Mark” = “Mike”! “Hamilton” = “Hammond”! Okay, maybe it’s not as obvious as I’d originally thought.) “Himmler” was meant to be a play on my usual sobriquet, “Hammer”.

Second, as demonstrated by the complaint, the name “Himmler” carries with it a certain amount of baggage. (For those ignorant of history, Heinrich Himmler was the propagandist for Adolf Hitler. His speeches are chock-full of nationalist statements, like, “Whether or not 10,000 Russian women collapse from exhaustion while digging a tank ditch interests me only in so far as the tank ditch is completed for Germany.” He was also a rabid anti-Semite.) The choice of “Himmler” was meant to convey a subtle self-deprecating flavour of being a propagandist for mathNEWS.

Before this complaint, I was unaware of the degree to which Heinrich Himmler was a hate-monger. (I knew he was a propagandist, but I didn’t see that excerpt from a speech until this complaint was received.) I was also inexplicably unaware of the juxtaposition of this name and the Remembrance Day ‘Squid’. I now wish to apologize to all those who were offended by the choice of this name in my alias, and I wish to thank the correspondent for bringing this to my attention.

Mike “Hammer” Hammond

A Very Definite Article

The.

Michael “At least it’s not about Cabbage” Thorsley

General l’Hôpital

...not anti-longed

Electra Lysis walked into Room 231, put down her things and closed the double blinds. Then she flipped on the TV to see what was on the Mr. Rogers™ Cable Neighbourhood. Coming to the realization that there was nothing on the Life (serial) channel, she reached for the remote... as a man burst into the room and stumbled forward a pair of meters. He seized a package from the table. “Ana!” he shouted as he opened it. “You must not use this... lemma merangue pi?”

“That’s a parcel from my grandmother - Gran U. Larity,” Elly stated, perplexed. “She’s into pi and cayenne distribution. Who are you?”

“Er, I’m Max,” was the response. “Trying to intercept a Sir Vay package for Ana. Who are you?”

“Ana Lysis’ sister, Electra. What relation are you to Ana’s steady? That guy’s unnerving... I’m getting worried about heteroscedasticity.”

Max blinked. “I don’t know what that measure meant.”

“I think there’s a pattern in how Ana’s relationships vary,” Elly clarified.

Max shook his head. “Electra? Complex...”

“Meaning,” Elly sighed, “that they never last. I’d estimate - or approximate - it was three weeks with both Stu Dee and Sam Pull. So her time with Sir Vay is almost up.”

“I guess that’s characteristic,” Max acknowledged.

Elly sighed. “It’s getting such that I can’t concentrate on my work... the other day I got a hospital’s normal distribution charts mixed up with student tea distributions!”

“Chi...,” murmured Max.

“My job assessment can’t be good to say the least. So, just what is her latest companion up to?”

“Well, he was upset when he found out Ana was an imperfect model. So he knit a hideous looking ‘sigma’ hat - white, but with lurking variables that will glow in the dark. He hoped to embarrass her and horrify the local population... both those events cueing the breakup of their relationship.”

Elly gasped. “That’s a cue-cue plot! You sure you’re not gaussing?”

“Beta believe it.”

Elly rolled her eyes. “Typical. They always give up on Ana when they observe her modelling is experimental.”

“So... the package?” Max pressed, looking very antsy.

“Oh, the one by the matches has been here since I arrived.”

But as Max turned to get it Ana walked into the room. “Would you believe it?” Ana commented. “I was so rushed to leave I grabbed a wrong ski - isn’t this Ron’s ski?”

“Wonder what the likelihood of this was,” Elly sighed.

To be concluded...

Greg “hologrami” Taylor

Distinguished Teacher Awards

To nominate your outstanding professor, lab demonstrator, or teaching assistant for the Distinguished Teacher Award, contact TRACE, MC 4055, ext. 3132. Further information is available at <http://www.adm.uwaterloo.ca/infotrac>

$$6 + 6 = 66$$

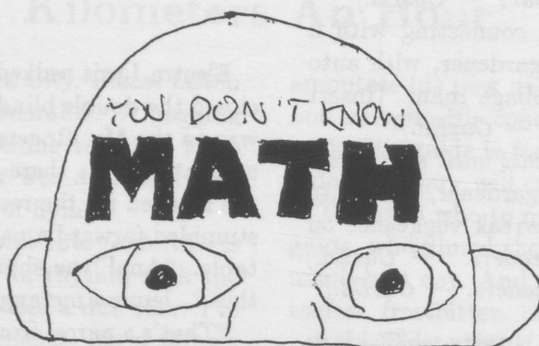
$$\sqrt{-4} = 2$$

$$17^2 = 34$$

$$\frac{42}{2} = 84$$

$$0 \times 7 = \frac{7}{0}$$

$$6!7! = 3$$



The Irrelevant New Game Show



"Can I get a sound check, please?"

"Is there a script around here somewhere?"

"Hey, Cookie, can you take care of these players?"

"Ok. Hey there, players. I'm Cookie, and I'll be here to get some information out of you this evening. First off, how many players are there?"

how many contestants?



<p>If you're playing solitaire, you'll need to check your own answers. Simply continue picking answers until you get the correct answer for each question. You win if you are in the plus at end of the game.</p>	<p>Since there are only two of you, you'll both have to check answers. Alternate back and forth until one of you gets the correct answer for each question. The winner is the player with the highest total at the end of the game.</p>	<p>Choose one person to be the host. The host will cover up the 4 choices for each question. When the choices are revealed, the first player to slap the table gets first crack at guessing the answer. The host will check the answers. The winner is the player with the highest end total.</p>
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"No, you can't skip the instructions."

INSTRUCTIONS INSTRUCTIONS INSTRUCTIONS

"Every correct guess adds the dollar value of that question to your purse (and why you're carrying a purse is beyond me). Every wrong guess will deduct the dollar value. Each player gets only one crack at each question, unless there's only one or two players. If you have lots of players, you can get out the screws as well. If think another player doesn't have a clue what the answer is, turn in your screw and force them to answer! If they get it wrong, they lose the dough, but if they get it right, they get the money, and you lose the dollar value!"

"To check answers, look at the number in brackets after the answer of your choice. Then check the answer section on Page 13. The comment will let you know if you're right or not."

"Also, keep in mind that this is game is a lot more fun if the someone (usually the host) reads the questions, answers, comments, and jingles out loud."

"Ok, cue the lights, start the intro."

"Fade to black please, but this time, could you please think of the toner?"

You may have written other tests; but

It don't mean math now...



"Could someone poke the host please?"

"Hey hey! Welcome to You Don't Know Math, the game show where Math Culture and Mold Cultures collide! Please extinguish all lit items and buckle up because here we go!!"

We're nowhere near done, because here is Question One!

Round 1 **Stressing the Fundamentals** \$1,000

Which is not a real "fundamental theorem"?

1. The Fundamental Theorem of Algebra (15)
2. The Fundamental Theorem of Calculus (39)
3. The Fundamental Theorem of Arithmetic (1)
4. The Fundamental Theorem of Statistics (10)

What a coup! It's Question Two!

Round 1 **Ride 'Em Cowboy** \$3,000

Brian, one of the mathNEWS editors, was caught last night using LaTeX. What was he up to?

1. He was making sure he had enough copy protection. (30)
2. He was putting one of his issues to bed. (20)
3. He was looking at a very nice layout. (11)
4. He was still trying to figure out the last Squiz. (4)

Don't blame me for Question Three...

Round 1 **The Obligatory Sex Question** \$1,000

Which of the following math terms relate to biological reproduction?

1. Multiplication and division (12)
2. Integration and fornication (27)
3. Addition and subtraction (2)
4. Variation and gettin' it on (38)

*I hope you don't need a nap,
because Question Four doesn't give a crap!*

Round 1 **Run-Time & Beef Patties** \$2,000

While in the drive-thru line at Burger World, you decide you want at least twice as many burgers as the guy ahead of you. If he got n burgers, what's your order?

1. $O(n^2)$ burgers and fries (14)
2. $\Theta(2n)$ burgers and onion rings (22)
3. $\Omega(n)$ burgers and a shake (7)
4. $O(n)$ burgers and a hash brown (3)

Staying alive, with Question Five!

Round 1 **Celebrity Data** \$1,000

Which of the following celebrities can be pushed?

1. DEQUE Clark (29)
2. Robert STACK (33)
3. ARRAY Charles (17)
4. FILE Donahue (9)

"Well, that's the end of that round. And not a moment too soon! Let's move onto the next round, where all of the dollar values are doubled!"

Students get their kicks when they have lots of six

Round 2 **Cheerorthogonalization** \$2,000

While eating breakfast, Jimmy wanted to orthogonalize a basis. What cereal should Jimmy choose?

1. Special Cayley-Hamilton (5)
2. Golden Gram-Schmidts (24)
3. Gauss-Nuts (35)
4. Cap'n Cauchy-Schwarz (19)

"I think it's time to go on a Coaxial Class Excursion! Let's go see who we can find to help us with the next question. Hi, Marion. We'd like you to come up with a trivia question about anything you like, and give us four answers to choose from."

"Alright, give me some time to think about it. When do you need it by?"

"Well, we bring the issue by for printing Wednesday morning, so some time before then."

"Okay, give me a call in half an hour."

"Will do! Thanks! Okay, let's continue while Marion thinks of a trivia question."

Question Seven asks 'Got milk?'

Round 2 S & T & A & T \$6,000

If the Sports Illustrated Swimsuit Issue™ stopped featuring supermodels and instead used discrete single-variable probability models, which would be characterized by her independence, individuality, and homogeneity?

1. The binomial distribution in a one-piece (25)
2. The Poisson distribution in a thong (16)
3. The geometric distribution in a bikini (36)
4. The discrete uniform distribution minus the uniform (31)

"Okay, we're back and we're phoning Marion."

(ring) (ring)

"Hello, Graphic Services."

"Marion?"

"Yes?"

"Hi, it's us from You Don't Know Math. Do you have a question for us?"

"Yeah, can you please hold?"

"Sure thing."

(do-dee-do, do-dee-do)

"Hello, okay here's the question!"

Round 2 Makin' Copies \$4,000

How many Graphics Copy Centres are there on campus?

1. Five (26)
2. Seven (8)
3. Four (13)
4. Ten (34)

"Fabulous question, Marion! Thanks a bunch!"

"See ya Wednesday!"

"Alright, now onto our next question...uh oh..."

it's time for a
MUCKING SNICKEROLISH RESTROOM

"Yes, it's time for a jibberish question. What you're going to want to do is figure out what theorem rhymes with the phrase you're about to see. Sound it out, unless there's lots of players. Then you'll all just look really silly trying to mouth out the phrase without making a sound. Sure hope nobody has a camera on them. Anyway, take a stab at this, and deduct \$250 from the pot for every second it takes until someone guesses. Resume the countdown if the player is wrong."

Round 2 Entomology & Comparisons of Beauty

JIBBERISH QUESTION
prepare to rhyme

My fleas seem plainer near them.

\$5,000

...it's from MATH 135
...it has to do with GCDs
...and it's named after a country

(21)

I have some fleam on Question Ten

Round 2 Enterprising Mathematics \$4,000

If Captain Kirk did a voiceover about the voyages of the Enterprise through the set of all vectors \vec{v} such that $T(\vec{v}) = 0$, a good way to begin it would be:

1. "Eigs In Spaaaaace" (18)
2. "Linear Transformers: More than meets the eye!" (23)
3. "Null Space: The Final Frontier" (6)
4. "There is nothing wrong with your set of all nonempty sets..." (37)

"Now, it's normally at this point that we'd have the Math Attack. Unfortunately, our gyroscope is broken, so you can either make do by cutting out little pieces of paper, write answers on them, and move them around, or you can skip it entirely.

"Awright! Let's see how the scores are. Well, well, if this was a real midterm, I think we'd be handing out a couple negative hundreds on this puppy. Well, can't blame ya for trying. It just goes to show you..."

YOU DON'T KNOW MATH

"Great game, guys. Hey, Cookie, can you find out what the players want to do now?"

"Hello folks, Cookie here again. Now, if you'd like to play again simply press the S key, as in 'Sweaty Pecs'. Now, if you can't find an S key to press, well, then you're just SOL, aren't you?"

"Cue the commercials!"

"Have you been in an applied math accident? Have you or someone you loved been injured by reckless differential equations? Get the best lawyers on your side. Call the law offices of Gauss, Yimmer, and Pee. You don't pay a cent, until we find something that rhymes with cent."

"Hey, I've never seen a calculator like that before!"

"That's because it's the new Pal-Bot from Guam Electronics. It's a address book, a date book, a memo-keeper, a to-do list, and a transcriber all in one. I have every lecture and assignment recorded in this baby, so I'll never have to carry binders around again. That's a nice knife, say, you're not mugging me, are you...hey wait, my whole life is in there! Damn! Guess it's back to high school for me."

"I'm hungry, Stu. Is there anything new to snack on in the C+D?"

"There is now! Introducing new MathTie-Num-Num Bits. Funny little tie-shaped bits of graham-cracker and pencil-shaving goodness wrapped in a yummylicious pink candy coating. It really hits the spot at MathSoc meeting or while having a beer at the Bomber. Here try one!"

"Is my teeth supposed to turn pink?"

"Oh yes. Now all the other students know who's a satisfied mathie snacker!"

"Macintosh computers for sale, real cheap. If interested, please contact MFCF care of the University of Waterloo."

"Gee, I hope that there's a sequel."

"Cue the credits!"

Mike "You Don't Know Jackhammer" Hammond
Chadwick "I Lost On Jeopardy" Severn

You Don't Know Math Answers

1. This theorem, also known as the Unique Factorization Theorem *does* exist. Let me guess: MATH 145 was a little beyond your capabilities, right?
2. Addition and subtraction are sex terms? And I bet you think there's something odd in Bert and Ernie's relationship, too!
3. No, that's order "at most"!
4. Yeah, you and me both.
5. The worst to you each morn. You are wrong.
6. The set of all vectors v such that $T(v) = 0$ is the null space And every episode would see a bunch of redshirts killed by a MATH 235 final.
7. Yup, the omega symbol is used for order "at least".
8. Is that right, Marion? "Nadda."
9. "Today on Donahue: incorrect answers and their effects on scores.
10. While you're right, we feel a good fundamental theorem for statistics is: "STAT 231 sucks."
11. You got it. Latex is the tool used to format and layout *mathNEWS*.
12. Multiplication and division are terms used in biological reproduction as well as arithmetic. Gee, don't you wish you'd stayed awake in math class, you horny bastard.
13. Is that right, Marion? "No."
14. Guess you haven't learned exponents yet, eh?
15. Nope, the fundamental theorem of algebra says that all polynomials have a complex solution. If that were any deeper it would suck away what little interest in it that remains.
16. Absolutely. But hot as she is in a thong, I don't know if I'd date anyone named after a fish.
17. Ray Charles is blind. You're merely dumb.
18. "Scotty, beam me up. There's no intelligent life here."
19. Nice try, but no banana.
20. Not really. The issues are over way too quick for Brian.
21. Did you get the "Chinese Remainder Theorem"? I didn't think so.
22. Wow. That's really wrong!
23. "We canna take much more stupidity, Cap'n!"
24. Bingo. Those bases are really crammed with Gram!
25. Bye, nomial. (squish)
26. Is that right, Marion? "Nope."
27. While I'm sure many of you have said "*bleep* this integral," technically "fornication" isn't a math term.
28. That answer is so wrong that you should stop playing right now.
29. No, the defining characteristic of a deque is the ability to add data to either end. Hey, is *that* why he looks so young?
30. Not bloody likely. If anybody is desperate enough to copy from *mathNEWS*, they need it more than we do.
31. Trust me, she's nothing without the uniform. (foghorn)
32. You're really far off on this one.
33. Yep! A stack can be pushed or popped. How you managed to get this right, though, is an unsolved mystery. (Ba dum bum)
34. Is that right, Marion? "Yup!"
35. I tried it for a week, but it was still wrong.
36. You wouldn't want to see the geometric distribution in a bikini. One end starts out tiny enough, but she keeps getting bigger, and bigger, and...
37. "Dammit, Jim, I'm a doctor, not a set theorist!"
38. (in a Barry White voice) "And I love you, baby, with *all* your variation." (pathetic squeak)
39. (crash!) Nope, the integral equals the antiderivative. gee, if you'd known *this*, you might have passed. Uh, probably not.
40. It's at this point that you stop reading the answers.
41. You can't be reading this legitimately since there isn't an answer 41.
42. Listen, if you don't stop reading, I'm going to hurt someone.

I'll Have The Special

Goodbyeeeee... — Part 1

Well, only 2 issues left to go for me until I finish my undergraduate career at U(W). I must say that it's been quite the ride for me being editor for the past 2 1/2 years. I've enjoyed most of it. Some ups, some downs. But still, quite the rewarding experience.

I'm going to start off this first of two parts on something that has meant a lot to me since I've been here. Football. (Yes, sports... I hear you groaning but bare with me.) I drove 10 hours in the snow and bad traffic on the 401 last Friday to see the Churchill Bowl in Ottawa. I sat in the stands with quite the number of other loyal Waterloo football fans cheering on the Warriors. Undergrads and alumni. Why is this so special? Why did I make the trip in the first place? Well, the story goes something like this:

When I first came to U(W) in 1992 (long... long ago...), I didn't care much for university sports. I love sports on the professional level, but on the university level? Nope. Didn't do it for me. Heck, when I got here I didn't care much for university. More school? Ack!

Anyways, I pretty much lived in ignorance of university sports until November of 1994. I went home for one weekend, and while flipping through the channels I noticed Waterloo was playing Laurier in a playoff game. Wow, our football team in the playoffs. Cool. I think I'll watch. (Note: At this point, I had no clue of Waterloo's past football history. That's coming up though.) The game ended in an overtime loss for us. I didn't think much of it afterwards. Ya know, the "Oh well, we'll get them next year" mentality.

Fall 1995 term rolls around. One of my roommates says he's going to game. I decide to tag along. I can't remember the score or who they were playing that day, but I enjoyed myself that day. I ended up going to all but one of the home games that year. I found myself getting more and more into university football. I even went to London to see the Warriors play in the semi-final against Western which I would kinda like to put out of my mind.

At this point, I still really had no clue of the past history of the football program. Now, in the mathNEWS office, all the back issues from 1973 to 1993 are nicely bound for reading whenever you should be doing something important. During the 1980's, the football program wasn't the greatest. Okay, it was the subject of numerous jokes. Observe:

- "Yes, folks, the football Warriors have played two perfect games and dashed my most pessimistic hopes by losing to Mac 60-0 and Guelph 39-0."¹
- "The game is free to U(W) students so come out and watch the bands do battle. It'll be more exciting than the game."¹
- "Last Saturday the curtain came down on another season of Waterloo's longest-lived comedy (sorry, FASS)."²
- "The season ended two weeks ago, so they haven't had the chance to lose recently."³
- (after ending the 33 game losing streak) "I'm shocked. I'm also a little sad, because now I no longer have a reason to show up to these silly games."... "I'm sure this is just a blip and now that they've got it out of their system they can relax and start to do some serious losing."⁴

Then, there's the Warriors Football Playbook which was reprinted on numerous occasions. An excerpt:

- 63 Baker All Ineligible Receivers Go Out for a Pass
- 11 Black Pass to CHCH-TV Cameraman
- 37 Blue Miss Field Goal Attempt on Second Down

For those who came to university in the past 2 or 3 years, the history of the football team is probably lost on you. The "We make it to the playoffs every year. What's the big deal?" mentality. But for me, after reading the things I've mentioned before, I think the last few seasons have meant more.

Last year, I was at the game where the team finally beat Western after something like 25 attempts. Then, they won their first playoff game in a thrilling overtime win against Laurier. And then this year, they won the Yates Cup in Western's back yard. Perhaps this will finally put the rest the ghosts of Waterloo's football past. The consistent losing to Western, the 33 game losing streak, being referred to as the "laughing stock of university football".

I'd like to think that the past few years were for the players who donned the uniform during all those losing seasons and for the alumni who had to suffer with all those losses (including the 72-0 shellacking to Western in 1984).

And that's why I drove for 10 hours in horrible conditions to see the Warriors play for a spot in the Vanier Cup.

Unfortunately, the team lost and they ain't going.

But, it feels like a new tradition has been started.

I feel privileged I was around when it happened.

Next Issue: Goodbyeeeee... — Part 2... My final article as editor and undergrad.

Brian "Calculus Cowboy" Fox

¹ Football Warriors Attain Perfection, mathNEWS, Vol. 39 #3, Oct. 18/85

² Nineteen in a Row, mathNEWS, Vol. 42 #5, Oct. 31/86

³ Football Warriors Don't Lose, mathNEWS, Vol. 42 #6, Nov. 14/86

⁴ Disaster Strikes Warriors Football, mathNEWS, Vol. 51 #3, Oct. 6/89

Letter from the editor

Dear *Imprint*:

I have been on campus for 5 years now. For all that time, not once have I been asked the Campus Question™. This oversight must be rectified as soon as possible.

I hereby request that for the next issue of *Imprint*, you come on over to the mathNEWS office (MC 3041) and ask me the Campus Question™ so that I can finally graduate in peace knowing I answered at least one.

I'm usually in the office most of the day drinking coffee or goofing off so stop by anytime. I await your response.

Sincerely,
Brian "Calculus Cowboy" Fox
m.N.e. 4 life

Subscriptions!

mathNEWS withdrawal pains aren't to be trifled with

Right. Okay, if you're a Regular student or a Stream 8 frosh, then bugger off. This article ain't for you.

However, if you're about to head off for a work term, how the hell are you going to keep your string of Squiz submissions going strong? Well, you could read *mathNEWS* on the web, but there are a couple disadvantages to that:

- You can't read it on the can.
- And we aren't going to tell you the URL (Nyah nyah nyah).

So, the only sane thing to do is to subscribe. You'll receive (postal-strike unwilling) all six issues to your door or P.O. Box. Here's how our brilliant scheme works:

	Canada	US	Overseas
One term	\$7.50	\$10	\$15
One year *	\$20	\$25	\$35

This is the cost of 6 (per term) exciting issues of *mathNEWS*. All prices are in in Canadian funds.

* The "one year" indicates 3 terms that are not necessarily consecutive. That is, if you're at U(W) for the Fall 97 term and off on a work term for the Winter 98 and Fall 98 terms, then you could get a year subscription for Winter 1998, Fall 1998 and Spring 1999. You could pick up the Spring 1998 and Winter 1999 issues in person!

If you can't figure that last paragraph out, don't worry, it's not on the STAT 231 final. But, you can stop by the *mathNEWS* office or email us at mathnews@undergrad.math.

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Building of Misery

With apologies to Sarah McLachlan

You stand in a line,
 Because your OSAP came through.
 You get there at nine,
 And you're stuck there till two.
 You had three interviews,
 But you bombed at them all,
 And you mourn all the hope
 That died there in Needles Hall.
 (It's) A building of misery.

You wait quite a lot,
 'Cause the line is slow as glue,
 But you won't give up your spot
 'Cause your tuition's due.
 You have lined up for two hours
 And you finally get through the door.
 And it's then that you find out
 You need the cashiers down on the first floor.

Oh, you lost so much dough
 Through your big co-op fee
 When you joined in
 That bureaucracy!

Chorus:

'Cause you know it's
 A building of misery,
 Holding out and holding you up.
 Yeah, it's really
 A building of misery,
 You're suff'ring hell needlessly.

You wait down there in the pit,
 The call is three hours late.
 You wait for the page,
 And hold back your rage.

Put up the posting
 On the bulletin board,
 Snubbing bad comp'nies
 (Is) What I can't afford.

Oh, it's so purposeless
 Within the U. of Waterloo.
 It's no surprise the
gaZETTE is there too!

Chorus:

'Cause you know it's,
 A building of misery,
 Piling on and piling it up.
 Yeah, you see it's
 A building of misery,
 They treat you so carelessly.

<repeat chorus and fade>

Mike "Needles Hammer" Hammond

Spermatikos Logos #5

Ok, here we go...

Thanks to everyone who submitted to last issue's puzzle. I regret to inform everyone that we have reached an all time low of 4 submissions, how upsetting. Submitting with one mistake (a typo really, but hey that's what you get for using abbreviations) was Richard Wallace, and submitting a perfect solution were Gigi Garbett, Claire Bilodeau and Greg Taylor. Selected by random draw, this puzzle's winner is Gigi Garbett. Pick up your prize in MathSoc. The correct solution was:

- Deans: Shirley Kalbfleisch (2), Jack Thomson (17), Shirley Scoins (37), Shirley Lewis (41)
- Exec. Asst.: Paul Kalbfleisch (3), Adrian Thomson (16), Paul Scoins (38), Paul Lewis (42)
- Assoc. Dean - U.A.: Adrian Kalbfleisch (7), Shirley Thomson (14), Paul Schellenberg (21), Jack Schellenberg (28)
- Assoc. Dean - E.R.: Ron Kalbfleisch (1), Adrian Schellenberg (25), Jack Scoins (36), Ron Lewis (49)
- Directors (FYS): Ron Thomson (12), Ron Schellenberg (23), Adrian Scoins (34), Jack Lewis (45)

And now on to this week's puzzle... After a triumphant weekend at the model Math faculty competition, the team from the PCSC decide to go out, get loaded and spend a fabulous night in their hotel's casino: Casinopenzo. Between the five team members, who were named Shirley, Ron, Paul, Jack and Adrian, they had \$1800 when the night began, while each person had a different amount of money, and each person's individual stash of cash differed by at least \$30 from everyone else's. Given the clues below can you discover the amount of money each person started with, their first name, the position they held at the Model Math Faculty Competition (one player was the Associate Dean - External Relations), and the order in which they arrived at the casino?

1. The five players first played the slot machines where they all lost exactly one third of their money. One of the five, who had no more money than any other player, gave up and stopped gambling.
2. The remaining four players proceeded to play some craps where they each lost exactly one quarter of their cash. One of the remaining four, who had no more money than any of the other three, gave up and stopped gambling.
3. The remaining three players moved on to roulette where they each lost exactly one fifth of their remaining money. Again, one of the remaining three, who had no more money than either of the other two, gave up and stopped gambling. The two remaining gamblers then found their way to a back room poker game where they both lost their shirts (and all their cash).
4. Ron, who arrived at the casino after Paul, was still playing after Paul (who was neither a Dean, nor an Associate Dean) was done.
5. The second to arrive at the casino was the second to stop gambling.
6. The bus tickets back to Waterloo cost \$55 each. Fortunately, one of the poker players was able to sell their remaining clothing for \$1 and after adding that to the money the other three players retained, the five were able to afford the five tickets home.
7. Adrian (who was not the fourth to arrive at the casino) arrived at the casino after the Associate Dean - Undergraduate Affairs.
8. As Shirley and the other poker player headed for the back room, they noticed that they had \$480 between them.
9. At the termination of the craps game, the difference between the respective fortunes of Ron and the Dean was \$60.
10. Everyone enjoyed the roulette game except Adrian, who had to watch.
11. The Executive Assistant to the Dean started with the most money.
12. The Dean started with three times as much money as Jack (who arrived after the Dean).

And finally: the bonus question - I forgot one last time, so I've come up with two challenging ones for the last two issues. This week's is as follows:

A couple go to a party which three other couples are attending. When the couple went home, the wife remarked to the husband, "Everyone at the party tonight shook a different number of hands but me." How many hands did her husband shake? (N.B. People at parties often shake hands with other guests but never themselves, and never their spouse.)

Good luck, and enjoy. Submissions due on Wednesday, November 26 at 6:30pm in the BLACK BOX or email rjstewart@undergrad.math.

Robin "Seminal, divine, logic puzzle guy" Stewart

gridCOMMENTS

Howdy, folks!

First, one thing to clear up. There was an error in the last grid. I only noticed today (Monday) so it was never posted on the newsgroup. The clue for 47 Across was Adams or Johnson (which would be DONNS) but the actual answer was DONE. However, most people figured out it was just another silly mistake of mine.

The submitters were Claire Bilodeau, Ian "The Word Guy" Facey and Greg Morey & Chris Ingram & Captain Colan. However, only one submission was perfect... and that belonged to Greg Morey & Chris Ingram & Captain Colan... so you get the prize. Stop by the MathSoc office to pick it up.

Only two of the above answered the gridQUESTION. Ian "The Word Guy" Facey answered "Statues of me everywhere.", while Greg Morey & Chris Ingram & Captain Colan had this list of suggestions:

- Completely get rid of the Math building.
- Two words: Spice Girls.
- Plastering mathNEWS all over campus.
- Village Three (located somewhere near Columbia Lake).
- Plants in the CS Labs.
- A lot more secret tunnels and hidden doors.
- Spy Academy building (perhaps in place of old Math building?)
- Move AHS to the Math Faculty.
- More ropes and rope bridges between buildings.
- Fill the Davis Centre with plastic balls.
- Ring Road monorail.
- Water park. [*Kinda cold for that, isn't it? — LatrellEd.*]
- Escalator to nowhere, world's largest magnifying glass and pop-side stick Eiffel Tower.
- Kill all bugs since "The only good bug is a dead bug." (a la Starship Troopers)
- Replace Engineering with a Hooters.

This week's gridQUESTION is as follows: If you were given the opportunity to have any title (i.e. King, President, Dictator, etc.) you wanted, what would you choose?

Well, I hope that last one didn't phase you very much. I figured not too many people know about South American geography. Anyways, this one should be a bit easier on you.

Submissions are due at 6:30pm on Wednesday, November 26. (Please note the date!) You know where: BLACK BOX, mailbox in the MathSoc office, to me in person or email it to bcfox@undergrad.math. Good Luck!

Latrell "GridBoy" Fox

mathNEWSquizz #5

The Big Squiz for our 25th Anniversary

Welcome to the final Squiz of the term. I bet that right now, you are just as relieved as I am that the torture of researching, writing and thinking of new questions for new Squizzes are at an end. However, I had thought that this one be a special one, since this will be mathNEWS' twenty-fifth anniversary. Not bad, eh? I am going to try to make this one a bit more easier than my last... oh... three or four, since I have received complaints about the third and fourth Squiz I wrote. As for the answers for the Squiz, here they are: **World War I:** 1) Greece; 2) The third battle of Arras; 3) Sir Winston Churchill; 4) July 28th, 1914; 5) Three; **Guns and Other Nasty Products:** 1) 1968; 2) The Gatling Gun; 3) the katana is a long sword whereas the wakizashi is a short sword; 4) These are Indian daggers; 5) North China Industrial Corporation; **War Movie Quotes:** 1) "Apocalypse Now"; 2) "Platoon"; 3) "Rambo: First Blood Part II"; 4) "Casualties of War"; 5) "Full Metal Jacket"; **Vietnam:** 1) The Gulf of Tonkin Amendment; 2) The MacNamara line; 3) January 30, 1968; 4) Bao Dai and Ngo Dinh Diem; 5) 36 days; **Wars Long Ago:** 1) Scipio Africanus; 2) Morelos; 3) Urban II; 4) York and Lancaster from the House of Plantagenet; 5) Sir Garnet Wolseley.

Apparently, I have taken a lot of heat, criticism and downright nasty comments about the last Squiz. I received only one submission and that was from Geoff Thiessen, who scored eleven points. So congratulations go out to **Geoff Thiessen** for winning this Squiz and you can pick up your prize at the MathSoc office.

Now, like I said, this will be a special Squiz. In honour of the twenty-fifth anniversary of mathNEWS, I will be giving to the winner of this something **silver**. That's right! Silver. Don't know what, but it'll be something nice. (It won't be tinfoil... I assure you.) (We're thinking a coin of some sort... still working on the details.) But, you must answer these questions first:

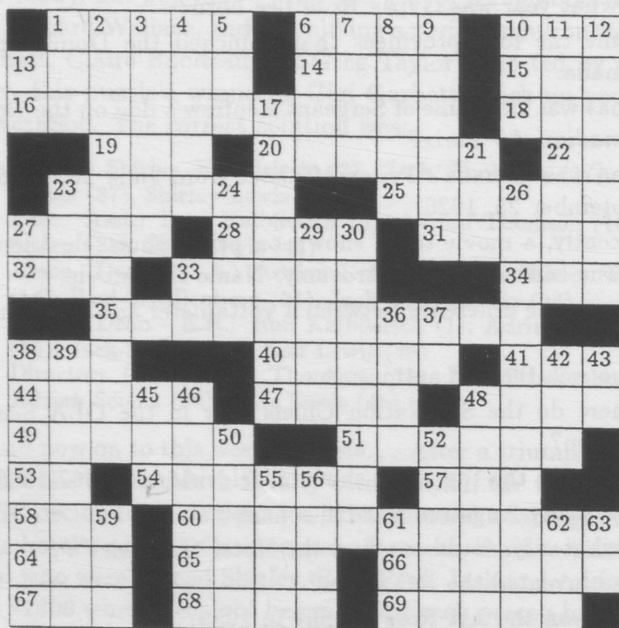
1. Who played Detective Harris on *Barney Miller*?
2. What international group is best known for their song "The Unicorn"?
3. Herb Gray is a member of Parliament from what city?
4. In what city can one find Ankhor Wat?
5. When was the last time the Toronto Argonauts lost in the final of the Grey Cup? (Just the year, please)
6. What is the atomic number of fermium?
7. What western featured Ann Margaret, Kirk Douglas and Arnold Schwarzenegger?
8. What was the final episode of M*A*S*H called?
9. Who defeated Christie as the mayor of Kitchener?
10. What name is given to Sweden's national hockey team?
11. Who were the four Emperors in 69 A.D.?
12. What do the Argentinians call the Falkland Islands?
13. What year did *Gandhi* win the Academy Award for best picture?
14. Niccolo Machiavelli was born in what city?
15. How many months was Eric Cantona suspended for when he kicked a heckling fan?
16. Which main characters are in all the plays of Sophocles' "Oedipus Trilogy", other than the chorus?

17. In 1279, what dynasty was driven out by the Mongols?
18. What biblical city will be celebrating its three thousandth anniversary?
19. Which Greek mythological figure was the central figure in "The Bacchae"?
20. The world's highest dam is located in what country?
21. In what year was Gypsy Rose Lee born?
22. Name the four provinces that launched the Dominion of Canada.
23. What was the name of Sergeant Renfrew's dog on the *Royal Canadian Air Farce*?
24. Who was Canada's Prime Minister from June 26, 1926 to September 25, 1926?
25. Recently, a movie to be shown on prime time television in Russia caused some controversy. Name this movie.
26. What's the difference between a yottameter and a yoctometer?
27. Who was the last antipope?
28. Where do the Six Nation Chiefs play in the OLA Senior division?
29. What was the top rated show on television in 1967-1968?
30. How many Angstroms are in a nanometer?
31. In what city would one find the Hotel "Intourist"?
32. Who invented the DC motor?
33. Who won the Art Ross Trophy in 1995?
34. What classical figure established the taxonomical method of classifying living things?
35. Name the five kingdoms that are used in classification of living things.
36. Who won the 1918 Nobel Prize for Physics?
37. What's the difference between the biblical cubit and the Roman cubit (in inches)?
38. What date will the first Easter Sunday of the new millennium be on?
39. Who is the present king of Spain?
40. What country was once known as the Kingdom of Dahomey?
41. On what date did Brian Mulroney resign as Prime Minister?
42. Who is the current emperor of Japan?
43. Name the five kings that made up the House of Tudor.
44. Who directed "The Bridge on the River Kwai"?
45. Who was the founder of the Jesuits?
46. Who was recently elected as the mayor of Brantford?
47. Who invented the sewing machine?
48. When did São Tomé and Príncipe first enter the U.N.?
49. Name the first woman in space.
50. Where is the headquarters of the Elvis Presley Burning Love Fan Club located?

Well, that is all! All you need do is either stuff your answers in our BLACK BOX, e-mail them to joswan@undergrad.math or submit the answers to me in person. Just remember that submissions are to be handed in at **6:30 p.m. on November 26th, 1997. No exceptions will be made!** And there's a very nice prize for the winner, so give these questions a try. Good luck!

"Long" John "Silver" Swan

GRIDWORD



Grid Clues

Across

- Ridge
- Plate
- Clumsy person
- Skate manufacturer et al.
- Type of saxophone
- An employee of Mel's
- Food store
- Kind of tree
- Roxy Music musician
- Being within
- Pronoun
- Place for socks
- Scandinavians
- Army of the Republic of Vietnam (4 letter abbr.)
- Certain area
- Underappreciated worker
- Murphy Brown's show
- Took
- Commonly found in sports (abbr.)
- Greatest in degree
- Winter activity
- 5 o'clock, 6 o'clock, etc.
- Hot colour
- Meaning five
- Kind of pool
- Hairstyle
- Bunch of rulers
- Argument in an essay

- Russian physiologist monogram (Hint: Worked with dogs)
- Continent
- They're making plans for Nigel
- Negative word
- Written above the line
- The field goal kicking mule (Don Knotts' movie)
- Tombstone scribbling (abbr.)
- Easily bent
- A stop on the way (abbr.)
- Female saints (not in English)
- Having two elements

Down

- French water
- Act of watching over
- NHL's Iron Mike
- Thing with a point on the end
- Country embedded in Italy; "Most Serene — of — —" (abbr.)
- Drat!
- Kinds
- Large beverage container
- Ball park item (2 words)
- Lights out!
- Food, nourishment
- Many groups of trees
- Balderdash! (2 wds., abbr.)
- Pearson and O'Hare
- Mistake
- Lacks moisture
- Town near Padua
- On the surface
- Beach movie actress monogram
- Iran-Contra Colonel North
- See 31 Across
- Journey vocalist monogram
- Guy who left *Entertainment Tonight* for music career
- A form of be
- Part of a mattress
- Don't come in (2 words)
- Pitchers don't want to give these up (abbr.)
- Perform
- What you can do to rope
- Humours
- To tear — ; chew out (2 words)
- Break out
- Beginning for sive and de
- Character from *The Andy Griffith Show*
- Dogs and cats
- They got *SportsDesk*
- Velocity (abbr.)
- Vancouver's version of the CNE
- Atlanta tycoon monogram