## math




Volume 46 Number 4
Friday, February 26, 1988

## LookAhead

| Cinema Gratis |  |
| :--- | :--- |
| Mar 2 | Nukie's Lullaby <br> Mar 9 |
|  | Fanny and Alexander <br> Hardware Wars |
|  | What's Up, Tiger Lily? |
| Fed Flicks | AL 116 |
| Feb 26-28 | Ishtar |
| Mar 4-6 | The Believers |
| Mar 11-13 | Hamburger Hill |
| mathNEWS |  |
| Mar 7 | Submission deadline - 7:00 |
| Mar 7 | Production night - Issue 5 |
| Mar 11 | Next mathNEWS out |

## Theorem of the Issue

(This theorem originally appeared in the February 16, 1973. issue of mathNEWS)

Three Navaho women sit side by side on the ground. The first woman, who is sitting on a goat skin, has a son who weighs 140 lbs . The second woman, who is sitting on a deerskin, has a son who weighs 160 lbs . The third woman, who weighs 300 lbs ., is sitting on a hippopotamus skin. What famous geometric theorem does this symbolize?

Answer: The squaw on the hippopotamus is equal to the sons of the squaws on the other two hides.

## Luxurious Fourth Floor to Open Soon

mathNEWS has just received a copy of the blueprints for the new and improved fourth floor of the Math building.

The plans include such amenities as racquetball courts, hot tubs, and a sauna for the exclusive use of professors and graduate students. Also slated to open is a franchise of the hot new "Synthetic Fabrics 'R Us" cleaning chain. This will give professors the option of wearing the same suit indefinitely, if they are not already doing so.

Said a spokesman for the Math faculty, "Well, we said screw office space. The Davis centre has a food fair, and a lounge with a bar. We just wanted to do that shiny atrocity one better."

Also to be installed are Nautilus machines to keep our profs in tip-top condition. Says the spokesman, "We can't afford to lose our edge in international competition. We already have four professors slated for the summer NSERC olympics, and they need the facilities."

When asked why undergrads were not to be allowed to use the new facilities, the spokesman replied, "Well we have to keep the riff raff out, you know." This reporter was also informed that bouncers were to be hired away from Fed Hall, and that they are to be used to make sure that "order is maintained" at the new facility.

Greener

## Graduating MathSoc Workers

On Thursday March 3 at $3: 30 \mathrm{pm}$, a picture of past and present MathSoc workers who are graduating will be taken for the yearbook. Please try to attend. For more details contact Deborah Knight at 884 9117.


## Prez Sezz

In case you haven't noticed, Math Winter '88 sweatshirts have been on sale all week and the will be on sale until Wed. March 2 at MathSoc. The sweatshirts cost $\$ 20$ and T-shirts cost $\$ 10$. They come in three colours: white, blue and pink. Samples of these shirts can be seen in the display case in the MathSoc office!!!

Friday, March 18th, MathSoc presents IMAGES IN VOGUE at Fed Hall. Cost: $\$ 7$ for feds. Tickets will be available soon (Since I wrote this Monday, they might even be there today, so check in MathSoc.)

Tuesday, March 15th is Campus Day. We have also named it "Pink Day." Wear your pink tie and you can cash in on specials at he $\mathrm{C}+\mathrm{D}$.

Lisa

## MGC Speaks!

Florida Info - Any minute now
Sweatshirts - Any minute now (may have arrived this week!)
Help needed - Selling local yearbook ads, see Sonia or Mark

> - Yearbook submissions, put in box in MathSoc

Grad Photo Retakes - Mar. 10, $11 \$ 5$ for proofs, signup outside MathSoc

Intent to Graduate Forms - Due THIS MONDAY (or you don't graduate), available from registrar

MGB - tickets on sale Mon.-Wed. next week only!! \$60 a couple for a lavish meal, band, pictures etc... table reservations will be the following week

Tuxes - must be fitted immediately (today)
For more info see the MGC board outside MathSoc or the MGC display case.

The ghosts of NGC

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Editor: Tom (MegaMan) Vandeloo

## Concern Over CS 132

In the past few weeks it has come to the attention of the Math Society that many students are not pleased with CS 132. I, myself, am very disappointed with the course and by the time this is in your hands, I may or may not be registered in it.

I have contacted Dave Cameron of the Board of Academic Affairs of the Federation of Students and he feels that something can be done. I also feel that something should be done and have been designated by the Math Society to do just that.

What is wrong with CS 132? I have outlined some of the problems below. While these have not been discussed with everyone in the course I have talked with 20 or 30 persons in the course as well as a few upper year students. They all agree with me that we are being "shafted" with this course and that it should be changed.

1) Course Notes: Dave Cameron has spoken with Professor Booth who told him that these were sent to the bookstore with a price tag of $\$ 15$. He could not explain why they now cost $\$ 23$.
2) Labs: From what I've been told by other sources (whom, I admit, may be wrong) forcing students to pay for their assignments goes against University policy. The labs are not available in the library and therefore we must pay the $\$ 23$ if we want to get any lab marks.
3) Lecture Notes: These are often late (i.e. we received notes for lectures 1 through 9 just before lecture 9 . At the time of printing of this issue, we will have written a midterm and taken lecture 15. As of lecture 13 we have received no further notes). Having the notes before the lab sessions is something I'm sure the students would benefit from. Also, the lecture notes are sometimes incomplete with missing diagrams or lecture information (eg. pages 1-2, 1-3, 2-2).
4) Introductory Course: CS 131 and 132 are supposedly introductory courses. Many people feel that this is not the case. For example, Data Structures was the topic for 4 weeks and I believe that many students still don't honestly understand what a data structure is.
5) Tutorials and Labs: We are told to read the labs carefully before attending the tutorial. This is often impossible as we usually receive our labs during or after the tutorial! This gives us only two short days to prepare for the lab session.
6) Accounts: Our accounts are turned off during other lab sessions, thereby making it extremely inconvenient for us to use our accounts for pre-lab preparation.

This list is not exhaustive, nor are they all graven on stone as serious problems. However, to have any affect on the administration your input is needed! Please feel free to discuss this with me at any time. If you want to help please write down your name and I.D. number (if you wish) and write specifically your criticisms and suggestions about CS 132 and drop them off in the MathSoc office. If we get enough support the faculty will respond and something will be done about the course. Remember that the entering class of ' 87 will be testing out new CS courses every year. If you feel your education is being compromised, please let us know.

Ashley Taylor More commonly 'Bailor' 1st year Class Rep

# The Free Trade Agreement 

## The Consequences - Part I

The first effects of the FTA will be very small. This must be the case because the tariff reductions are being phased in over ten years and will proceed at a slower rate than in previous decades. Also, most of the treaty's other provisions are being phased in over various periods of time. Moreover, some of the provisions with respect to energy and investment do not represent substantial changes from government policy which has been in place for several years. For example, we are already relatively open to U.S. investment in Canada and are actively exporting energy to the U.S. Finally, sudden dramatic changes seem unlikely since the FTA represents a logical evolution of Canada's trade policy, not a radical break with the past.

As time passes, however, jobs will be lost and Canadian companies will close under the pressure of rising American competition. If you believe workers should be protected even though the income they earn cannot be spent on what they would freely choose to buy, then this is a disaster. If you believe that workers should produce what consumers will freely choose to buy, then the closing of inefficient and uncompetitive Canadian firms will tempt you to rejoice. With respect to inflation-corrected prices, there should be a very modest average decrease. Remember that we are not going from high tariffs to zero tariffs but from falling tariffs to zero.

Of course, almost all studies indicate the the number of new jobs created under the FTA will exceed the number lost. However, for the immediate future the number of total new jobs from the FTA represents a relatively small increase compared to Canada's normally high rate of job creation (a 19 per cent increase in employment since 1978).

Notice however that our present rate to job growth is occurring within the context of our existing, quite wide, access to the U.S. market. This represents the principal benefit of the FTA: it helps assure us the access to the U.S. market that we already have. This assurance is not perfect and the U.S. still has a constrained right to restrict our exports to them (as we have to restrict their exports to us). The FTA makes it more difficult for them to withdraw access and leaves them more open for retaliatory responses on our part.

## Next: The Consequences - Part II

Larry Smith

## Feds

Wow! There will be a student march on Queen's Park on Thursday March 10. Buses from UW will shuttle students to and from the march via the Brunswick House. Anyone interested in running a Guniness World Record size room jamming during this same week? Please contact the Feds. (note-the Feds live in the alcove in the CC.)

The Feds are now accepting nominations for the 'Student Leadership Award'. There is one award per faculty and a few campus wide.

## Upcoming events include

- Spice - Tonight at Fed Hall
-St. Patrick's Day events at both bars. (line up early for the 'Shelter)
-Images In Vogue, Fed Hall Mar. 18
More info. available from the Fed office or the Fed Board outside MathSoc. DID YOU KNOW-the transfer fee for switching out of
co-op no longer exists.


## Prof Quotes

Well folks, here we are more than half way through the term and those profs just keep getting sillier and sillier! Pretty soon we're going to have to set up a special task force and lock a few of them up in little extra-dimensional broom closets on the sixth floor. Till then, though, we'll just keep printing the cream of the biweekly crop (so we can keep tabs on the rampant rise of insanity, you understand). Anyway, here's this week's batch - read 'em and giggle.
"We either did this example before or I got up in the middle of the night and did it on the board at home. But I don't have a board at home so I must have done it before."
F.O.Goodman, MATH 220B
"Pipe down! Otherwise I'll get someone to punch you out"
S.W.Kardasz, ECON 102
"This theorem is true! At least I'm pretty sure."
G.Sinnamon, MATH 134B
"If the prof is not careful, this course kills people with boredom. It's worse than AIDS."
G.Tenti, AM 365
"It's guesswork. If you want to be fancy, call it physics."
G.Tenti, AM 365
"By and large, academics are all happy to shoot off their mouths."
C.Small, STAT 240
"If my wife's giving me a hard time then you'll all fail."
J.Baker, MATH 240A
"It's terrible to grow old and lose your parts ... disintegration by parts, that is."
J. Baker, MATH 240A

## A Few Minutes With Randy Looney

I'd like to talk to you today about snow. Did you notice there's a lot of it around this time of year? Why is that? Did you ever notice nobody who's running for president has a mustache? Except for Jesse Jackson. But Jesse Jackson is something different. Not because he's black or anything. There are a lot of black people in the United States. Ever notice there aren't many black people playing hockey in the NHL? Does this have something to do with the ice? There's a lot of ice in the winter. I have ice in my freezer. Don't you hate it when you have some frozen strawberries and they leak out and make a big red stain in your fridge? I like strawberries. Ever notice everybody who forgets to turn their headlights off remembers to lock their car doors? Why is that? I have a car. My wife is driving it today. My wife can't drive. She's going to run it off a bridge or something someday. Ever notice you never see Jesse Jackson driving a car? Do you think Mike Wallace wears a hairpiece? I don't know. Maybe I'll sneak into his office someday and find out. You know, I don't miss Dan Rather at all. Somedays he didn't wear deodorant. I think Ed Bradley is pretty cool. Ed Bradley is black. Do you think he likes strawberries? Darryl Strawberry is black, too. He plays baseball. Ever notice you can never find a $7-11$ store that has clean floors by the coffee machine? My friend runs a $7-11$ store. His name is Abdul. I saw him shovelling snow in his driveway yesterday. See you next week.

## Feds Announce Revised Canada Day Events

In response to the budget fiasco with regards to Canada Day this past year, the Feds have announced a slate of new events guaranteed to ensure everyone a good time, and keep everything under budget. The highlight of the celebration will be the Village Green Concert. BEnt has hired renowned country \& western musician Lennie Zwanich and his magic jew's harp, who will play his renditions of the Grateful Dead's past hits.

A number of new world records will be attempted this year. The Feds are hoping for a record turnout when they try to beat the mark for mayonnaise volleyball. A team from Germany played for 73 hours in a vat of Hellman's in 1981. Barring that, a glue-eating contest will be held as well. The record belongs to Gunnar Ivansson of Denmark, who ate 7 pounds in 1973 before his intestines clogged.

Massive supplies of cheap or free food are out this year, but the Feds are providing free sticks for a marshmallow roast. Also promised are quantities of fried poultry, depending on how the nets at Columbia Lake hold out. Budget cutbacks have cut the beer supply for this year, but several gallons of homemade hooch are being donated by local bootlegger Fast Charlie Spinks. Charlie, blind since he was 31, will entertain the students with his amazing hand shadows of famous Russian literary giants.

Expensive guest speakers are out, but the Feds promise their own slate of interesting visitors. Mabel Greely will speak on the history of crochet in the St. Agatha area, while local politician Phil "Zoom" Reiger will give a talk on his new party, the National Alliance of Trees, which hopes to give the vote to blue spruce and poplars by 1990. Doug Wright will probably have something to say as well, but the Feds are still optimistic.

Overall, the Feds promise a fun time for all. Be sure to keep this July 1 open, as it will be a time to remember.

The Space Cowboy

## UltraClassifieds

Wanted: Extremely complicated maze patterns. Submit to the 4th floor redesigning committee (formerly the 6th floor redesigning committee)

For Sale: CS 132 Text, Notes and "U" Labs. CHEAP!! Contact Bailor at attaylor(e watdcs

Attention Math Squash Players: Get in shape so we can beat the engiqueers in the squash tournament at the end of term.
Alcoholics Anonymous will hold a free introductory session for those concerned. Wine \& Cheese to follow.

Imprint is desirous of acquiring a student majoring in spelling, preferably one knowing how to spell "dealth", oops, "dealt". ELPE is a prerequisite.

Happy Birthday to a certain Act Sci prof who celebrated his nth birthday yesterday, conditional upon his giving us all a good mark on today's midterm.
LOST: One Irish MathSoc president, answering to the name Darryl O'Ricker. Lost somewhere between Chatham and Toronto. If found. please call Kelly.
Mary-Jane - please call Darryl - he wants (to hear from) you.

## Campus Question:

Well the last time we asked our campus question, lo and behold, we got a bunch of serious answers! Come on you guys, get real. If we wanted serious answers, we'd ask them in the Imprint. Anyway, on to our facsimiles of answers.

Turn it into the first olympic size cow chip throwing facility. A new home for Kinko's.

Iva Twist
Remove it completely and Bea Cool
I. Kant

Move the psychology department there, so there will be more good looking girls in the MC.
A tidal pool and a triple loop roller coaster.
$\begin{array}{ll}\text { A new home for the math C\&D. Rocker } \\ \text { Make it into a holideck (from Star Trek). } & \text { J.C. Penny } \\ \text { A garbage disposal for Imptint/a spelling clinic for Imptint staffers. M. Mart }\end{array}$
Joe Blow
Next Question: What should the next campus question be? Submissions accepted until Monday March 7, 1988.

## The Waterloo Winter Olympics 1988

For those of us who can't go to Calgary, we can still take advantage of mother nature's snowy charms to stage our own athletic events.

Serving Tray Luge: This sport, played on the icy hills of Columbia Otympic Park, is a traditional strength of East-V1, but any Villager with a touch of larceny and no sense of personal safety has a chance at a medal, or at least a cast.

Waterloo Biathalon: Competitors start out at the POETS, drink 5 beer, ski to the Bombshelter, quaff 5 pitchers, ski to Fed Hall, down 5 shooters, and then ski to the Grad Club and consume 5 zombies, and finally ski back to control at SCH. Points are deducted for ...er... accidents along the course. You must finish or be disqualified. WARNING: The athletes who compete in this event, like last year's medallist John Herbert, are trained professionals. Do not try this in your own home.

Parking Lot Skate: This event has two components, compulsories and freestyle. Compulsories require such complex technical moves as the triple-flip and fall-on-your-axle and the slither-under-a-VW-bug, while the freestyle emphasises fluidity of form and artistic merit in time with an appropriate musical score (like Alice Cooper's Cold Ethel.) This year also features Vehicular Parking Lot Skate as a demolition-er-demonstration sport.

Snowplow Hurdles: Adapted from the Summer Games' Obstacle Bikes, this winter favourite pits the speed and agility of students against the trained warriors of Plant Ops.
$\mathbf{7 0 \%}$ and $90 \%$ Bell Curve Jump: Competitors attempt to slide the furthest along these dangerous curves using only a flimsy midterm, without getting their noses too brown.

Jimmy (the Geek) Campanis

## Babes in Yuppieland

A couple of weekends ago in Toronto, I ran across a place called "Yuppie Kids" while on my way to a bar (The Idler Pub, if you're curious). I only gave it a brief glance, enough to see that it was a children's clothing store. Lord knows what else it contains. Anyways, I had better things on my mind at the time (a snifter of blueberry tea).

At the bar, I began to speculate on the things they would sell at that . $\qquad$ place. I came up with the following:
'Play Dough' - Make sure your child is introduced early on to the concepts of high finance with 'Play Dough'. 'Play Dough' - it's play money, and every bill is guaranteed to be at least a $\$ 20$. Recommended for yuplets age 2 and up.
'Advanced Play Dough' - It's the same concept, but now your child can practice advanced high finance - with his own American Express card. Recommended for yuplets age 4 and up.
'The Bimmer-Box' - Kids, start your own collection of toy BMW's. With the 'Bimmer-Box Car Set', you can collect your own private collection of BMW's, from the 320 i all the way to the 763 . Recommended for yuplets age 3 and up.
'The Prelude Box' - For those kids who can't yet afford the 'Bimmer Box', we have the 'Prelude Box Set' and so you can collect the line of Honda Preludes (while waiting for your first BMW). Recommended for yuplets age 2 and up, whose parents' combined yearly income is less than $\$ 80000$.
'The UWO Patch Kids' - Kids, hire your own UWO patch kid. Each comes with his or her very own personalized MBA certificate. Recommended for yuplets age 1 and up.
'Little Miss Marketing' - Set a good example for your upwardly mobile young girl with this doll set. Comes with her own doll-condo and furniture, which you can renovate over and over again. Options include her office at IBM, and her S.O. Brad. Recommended for yuplets age 4 and up.

CYBERman

## MPERUMS TO ORDER

(Rolo-Playing and War Games)

$10 \%$ Off Weth This Ad
Valid Until Thursday
March 10th

## New Breakthrough in Image Recognition

Waterloo has achieved yet another first in the rapidly expanding field of computer science - the Programmable Target Acquisition Device. This new invention, inspired by the heat-seeking missile, uses radical new image recognition techniques to create a missile that can be programmed to target anything! Possible uses for this new weapon are:

A keener seeking missile - for getting rid of those annoying pests at the front of the class.

A redundant lemma seeking missile - another pest which tends to end up at the front of the class.

An engineer seeking missile - to make the world a better place.
A country music seeking missile - to help reduce noise pollution.
These are just a few of the many uses of what is sure to be an instant success everywhere.

Earl Skorn

## The Safety Van

words: C. Sneer, Arka, Alain

music: Ivan
You can ride if you want to
You can leave your friends behind
'Cause when the van comes by
And if you don't ride
Then you'll be left behind
Stay behind if you want to If you're a late night movie fan
If that's what you want
Then do what you want
Or take the Safety Van.


REFRAIN: You can ride, you can ride
It's perfectly up to you
You can ride, you can ride
What do you want to do?
You can ride, you can ride
It won't cost you a cent
You can ride, you can ride
Ride to your heart's content.
So if you caaaaaaan, take the Safety Vaaaaaaan
So if you caaaaaaan, take the Safety Vaaaaaaan
It's the Safety Van
It's the Safety Van
S-S-S-S, A-A-A-A, F-F-F-F, E-E-E-E, T-T-T-T, Y-Y-Y-Y
VAN - VAN - VAN - VAN.
copyright 1988 by Hats Without Ivan

## A Regular Light

by Greener (a pseudonym)

I can still remember the first time that one of my friends found out that I was a regular student. It was during my first $U(W)$, and co-op interviews were just around the corner. My friend just came up to me and asked, from out of the blue, "Hey Greener (a pseudonym), what jobs are you applying for?"

He could never realise the anguish which that question would generate in me. I tried to evade the question in the hopes that he would go away, by he was persistent. Finally, I broke down and told him: I was not in the co-op program - I was regular. He tried to be civil about the whole situation, but I could see that in his eyes I was less of a person.

At that moment I made a vow that I would be open about my regularity, that I wouldn't try to hide it from others, that I might even put a " 90 " on my school jacket, that I wouldn't feel like a burden on this campus every time I walked through Needles Hall and saw the suited masses eagerly awaiting their IBM interviews.

It's been hard going. No co-op will ever know the feeling of having to explain to your friends how your summer job washing cars gave you some useful experience towards your CS degree. No co-op will ever spend hours trying to explain to someone else how you didn't think that co-op was a good option when you entered university.

So this column is for all of us who will never know the joys of writing our fourth work report or the exhiliration of moving 300 miles every four months. I hope that all of the regulars who will secretly read this in their Friday morning classes will have the courage to "come out" to their friends and not have to pack up and move at the end of each term just so people won't think you're funny.

Finally, a notice that there will be a Regulars of Waterloo (ROW) coffeehouse in CC 310 tonight for any regulars wishing to meet people of the same scholarly persuasion.

Next: The spiritual and biological roots of Regularity.

## New Albums by Old Veterans

## Un-record reviews

Robbie Robertson-self titled. Robbie Robertson pushes forward the limits of cool with his first solo album. At times backed by U2, Peter Gabriel and Manu Katche, Robbie Robertson maintains (surprise!) the high standard of honest expression which contributed to the Band being so widely acclaimed in the previous decade. The album is emotional, with powerful imagery.

Michael Brecker-self titled. This session musician's virtuoso saxophone has appeared on over 400 albums, from Bruce Springsteen, to Dire Straits, to Miles Davis. He leaves his fusion playing with Steps Ahead and returns to jazz as the medium of his first solo album. John Coltrane's influence is quite evident. Michael Brecker is aided by his old friend Pat Metheny on guitar.

Van Morrison-Poetic Champions Compose. Van Morrison presents us with his strongest album in years. His personal ballads such as 'I Forgot That Love Existed' and 'Someone Like You' are as fresh and inspired as his early works with the Street Choir. The smooth melodic instrumental tracks have a jazz flavour, and are at times supported by interesting bass harmonies. This album is as strong a statement as his previous career peak reached by Moondance.

Chocolate Decedance

## CE/CS - Who's Who?

Last issue, a mathNEWS satire mistakenly equated Co-operative Education with Career Services. The two are not equivalent. Journey with us now as we travel to Needless Hell on ... mathNEWS' of Omaha's Wild Kingdom.

## (Theme music)

Canoeing through new territory is always exciting, but especially so when it's two men against the unknown. I'm Stu Perkins, and together with my buddy W. Jim we're about to enter the world of Needless Hell.

The two canoes enter through the back of Needless Hall, and shoot through a brief passage to emerge beside the registrar's office. The strong current carries them directly into the rapids on Ira's stairs, and W. Jim's canoe nearly overturns as the two craft hurtle down the twisty rapids.

Whew, that was exciting. I'll wait here and share a drink with the receptionist while W. Jim explores the Pit.
W. Jim paddles cautiously into the pit, aware of the gaze of hungry co-ops milling about just under the surface. W. Jim does his best to look like a PSC job, hoping to be ignored. Suddenly, as W. Jim explores near the vending machine, comes a mysterious noise.

## PSH-THOCK! PSH-THOCK!

Whatever that was, it almost took W. Jim's arm off. Worse, I'm finished my drink. Time to get on with our journey.

The two canoes paddle into the right-hand side of Needless Hell, entering the Co-operative Education side of the complex. Passing the cashier's office, they check out the General Office. Here students can examine their co-op files to make sure that their work-terms and reports have all been properly recorded. W. Jim looks at his, laughing at the silly comments his co-ordinators have made, and the explorers proceed onward. Passing the information counter where co-ops can inquire about job information, Stu and W. Jim proceed into the winding Officippi River.

My, W. Jim, this certainly is exciting. Let's listen to the sounds of the local fauna.
"...my first co-op job, and, though I don't have much experience, I'm a hard worker and ..."
"...prefer a real Arts job, I suppose technical writing..."
.....4th year CS. Perhaps $\$ 520$ a week would..."
"...Teaching salaries are lower, say, $\$ 175$ a week..."
Well, W. Jim, that's the flavour of C.E. Let's go across to C.S. I'm sure things will be a lot different there.

The adventurers force their craft through a long hallway choked with flamingo-like creatures, perched on one leg and straining to peck at a long bulletin board. Once through, they stop to chat at reception, then enter the left-hand side of Needless Hell.

Here is another world, the world of graduate placement. In more spacious surroundings, the Career Services people co-ordinate the job searches of grads and alumni.

Well, W. Jim, Let's listen and see what's different about life in the more rarefied interviews at the graduate level.
-...my first full-time job, and, though I am in the regular program of study, and don't have much experience, I'm a hard worker and ..."
"...prefer a real Arts job, I suppose technical writing..."
"....Waterloo CS. Perhaps $\$ 35250$ a year would..."
..... Teaching salaries are lower, say, $\$ 175$ a week..."
I'm sorry, Stu, but I really don't think I see the difference. Perhaps we need an NSERC grant to study this further.

Their mission to unravel the complexities of the Co-operative Education/Career Services mystery a shambles, Stu and W. Jim paddle out through the thick clouds of cigarette smoke outside Needless Hell and head home. Tune in next week when mathNEWS of Omaha's wild kingdom looks investigates reports of single-entry, single-exit phenomenon at the BombShelter.

Jungle Gym

## LookBehind

## Fifteen years Ago

Professor Bill Wadge was sacked, apparently because he "hadn't donc enough research in the area of computers" ... a new Honeywell logon scheme was implemented, which rejected both your old and new passwords if you tried to change your password ... DECwriters were the terminal of choice (YECH) ... two weeks later Bill Wadge was joined out on the pavement by some post-docs, or, as officials put it, tt were un-hired.

## Ten Years Ago

The fires started two years before seemed to rage on, with an AM $t$ letin board and a HKLS notice panel spontaneously combusting.

## Five Years Ago

MGB tickets were on sale at $\$ 36.00$ a couple, for March 26 th's bash at (where else) Bingeman Park. MathSoc considered raising its fee from $\$ 2.50$ to $\$ 5.00$ (and apparently they did it, too!)

MathSoc Presents
Images In Vogue
March 18th at Fed Hall

Tickets - $\$ 7$ /eds



Fred Says:
Have you got your Winter ' 88
Sweatshirt yet?

## The Tale of Stat 470

Not for the Weak of Heart or Mind

Jim Sxtlypl noticed something suspicious this particular morning. The Stat 470 class he was attending was noticeably smaller than at the start of the term. Jim, being a true keener, was concerned. This was the first time Stat 470 was offered, and Jim hoped for a big turnout of students. He thought it would be an interesting course. In laymans's (ie. non-keener's) terms, that meant the course was difficult as hell.

The prof, Dr. Swaggart (no relation), arrived seven minutes early and began coating the boards with various probability distribution functions. "Today," he said, "we will investigate something that I discovered in my PhD thesis in 1921. We take the eighth moment of the Dirichlet distribution, and express it as a function of the parameters..." Jim's attention was diverted to the person seated beside him. He was quite pale, and his hands were shaking. It looked like he was about to suffer a heart attack.

Suddenly, a student spoke up from the back of the class. "Sir," he asked, "what the hell are you talking about?" Dr. Swaggart glared at him. "Did you not read chapters 17-33 of Charleston's text on ChiSquare Sampling last night?"
"Well, I had an assignment due..."
"Get out!" Dr. Swaggart barked. "I hate slackers. I hope you Jon't expect a credit in this course!" The student grabbed his papers and scurried out. "Now," he continued, "we perform a contour integration on this function and..." His speech was interrupted by a blood-curdling scream. Another student bolted up, grabbed his head, and shouted, "NO MORE! I CAN'T TAKE IT!" He collapsed in a heap and was ushered out of the room.
"Hmph!" Dr. Swaggart mumbled. "When I was an undergrad, we were a lot tougher...So, continuing, we then sum over the region bounded by the parameter space, and find the local minima of the transformed random variable..."

Jim again looked over at the person beside him. His face was red and contorted, with sweat pouring off his brow. Then, as Dr. Swaggart performed an eight-parameter maximum likelihood estimation, the student's head exploded forward, causing Dr. Swaggart to throw his chalk in disgust.
"Can none of you handle this method?" he asked angrily. "When I taught back in Britain, we had to go to an eighteen-term covariance before anyone's head exploded!" He gathered up his notes and began to leave. "Read chapters 56-113 of Charleston and do the questions at the end of each chapter for next Monday. And be prepared for class next time! I don't want any more fatal injuries."

Jim sat alone, wondering if maybe he had made a mistake by taking this course. As he stood up to leave, he felt a little dizzy. Nothing too serious, he foolishly thought. A few aspirin could cure any stats problem. But that's only in theory...

Dr. Sardonicus

Warning: this article was not actually typed in. It jus: sort of grew into our filespace. Read with extreme caution.

# Too Terrible a Tale to Tell!! <br> (but here it is anyway... ) 

Here's the setting:
The Place: A vile, dark swamp just outside of Point Pelee.
The Year: A bit after 1066, but no quite 1914.
The Time: Around mid-morning.
The Characters: Ron, a small black amoeboid creature. Phil, a clump of moss with bad breath.
Agnes, a talkative platypus mutant.
The Mission: To find the true meaning of life on Earth.
Just as we join our three weary travellers, they are woken from their gentle slumber by the screams of a three-legged humanoid having his internal organs rearranged by a very large man with a very big sword. As our friends hurried to the rescue of the tri-ped (it wasn't all that quickly actually; have you ever seen a clump of moss or an amoeba try to run?) they soon realized that they were no match for the interior redecorator. Agnes took the initiative and retreated rather hastily. When they had regrouped some ways away behind a fallen tree, Phil spoke up with this advice "I think..."

Just as Phil was about to enlighten us all, Ron, no longer being able to stand the irritating scream of the victim, pulled a Russian made hand-held surface to air missile launcher from his pocket and annihilated the very large man and his client. Immediately following this outburst of wholesome violence there was a sudden crash of thunder that sent our friends running for cover.

When the clamor had subsided, Phil poked his head out from under one of Phil's pseudopods. He was greeted by the sight of a horde of frenzied orange McDonald's Fry-Guys trying to burrow tunnels into a hunk of green goo that seemed to have replaced the aforementioned swamp. At the next instant the Burger King stepped out form behind a tree with a belt full of hand held cluster bombs.

When Phil, Agnes and Ron regained consciousness the Fry-Guys, the King and all the rest of the scene was nowhere to be found. Actually, they now seemed to be in the middle of a very large field which seemed to run on uninterrupted in all directions, with one exception; as Phil turned around he saw a large book lying on the ground about twenty metres from where they stood. As they approached the book cautiously they could make out the title through the thick layer of dust that had accumulated on it: it read "The Meaning of Life - by Tammy Fay Bakker". Ron, having rushed up ahead of the other two, was about two feet away from the book when he heard a sharp click underneath his foot; they all knew what that click meant: even before they could breathe their next breath a 30 -gigaton explosion erupted beneath them and ended all hopes of ending their quest successfully or of watching Barney Miller re-runs.

The Unwitty One

## mastHEAD

## The Editor Rants On And On

Okay folks, this is really starting to bite the big one. This is the third issue in a row that was written almost entirely by the loyal core of staff members whom we've all come to know and appreciate. However, I think its about time that the other 1500 or so of you thought hard about what you can do for mathNEWS instead of the other way around. We're all pretty tired and our brains are severely drained of good ideas so we need your input. mathNEWS quality reflects its staffers. 'Nuff said.

Dedicated Staffers: Jim Randall, Steve Green, C.J. Fievoli, Bailor, Frank Letniowski, Mary Badgley, Stuart L Hodgins, Dean Michael, Paul Sauve, Joel C. Rocker, David Treble, and Jim \& Gayla Boritz.

Valued Contributors: Larry Smith, The Space Cowboy, Jungle Gym, CYBERman, Jimmy (The Greek) Campanis, Earl Skorn, Greener, One-Armed Phil, Hobgoblin, Lisa, Ashley Taylor, Brett Martin, Dr. Sardonicus, Hats Without Ivan, Chocolate Decadence, The Unwitty One,

Incidental Thanks: DCS, Marion and Graphics Services, Minute Kaisers, and our subscribers.

Remember that next production night starts on March 7th at 7:00. If you want mathNEWS to remain a product of high quality then its your job to see it done. That's a wrap!

# mathNEWSquiz \#4 

## (Or: The Official Squiz

of the Calgary We can't say it)

He's a pinball wizard, there has to be a twist...oh, sorry. The MathSoc radio is finally back on Q and we're all excited. So here we are in the middle of the 1988 Olympics. Great stuff, huh? It's too bad our Canadian guys and gals haven't gotten a hell of a lot of medals so far. Maybe we ought to have held them in Tuktoyaktuk or somewhere where it's really cold. Show those European wimps a real Canadian winter...well, that's all I can think of for a preamble. Let's get to the squiz.

## Canadian Politics

1) What was the name of the manifesto that piloted the CCF (now NDP)?
2) What is the nationality (other than Canadian) of P.E.I. premier Joe Ghiz?
3) What party was Major Douglas associated with?
4) What German female spy brought scandal to a few MPs in the mid-60's?

## Clothing

5) Who was the first U.S. President to remove his hat at his inauguration, signalling a change in fashion trends for the next decade?
6) Who sported No. 5 on his uniform for the Baltimore Orioles for 23 years?
7) What article of clothing did Nikita Khruschev make famous at the UN?
8) What risque garment did Rudi Generich invent?


## Saints

9) What event was St. Dismas a participant in?
10) What year did St. Louis hold the Summer Olympics?
11) What is the name of the lake situated between Lakes Huron and Erie?
12) What town did St. Paul hail from?

Whew. That's done with. And now...last week's answers. 1) Gerry Ford (Oops..excuse me) 2) Cat Stevens (Oooh, baby, baby, it's a wild world) 3) Lewis Carrol (of Alice in Wonderland fame) 4) Leon Trotsky (didja know Richard Burton played him once?) 5) David Brinkley (Christie's father - to hell with heredity, eh?) 6) The Pentagon Papers (Back when scandals were fun) 7) Peter Kent (CBC, folks, CBC) 8) The Rise and Fall of the Third Reich (Did Kurt Waldheim read this?) 9) Les Paul ( $\&$ Mary Ford) 10) Flush toilet (Hey, I believe it) 11) Throat protector (That King Tut thing) 12) Eli Whitney (What the hell is the cotton gin?) And to that end, we have winners! A big round of clap...er, applause for TTWIAHA who whipped off 9 out of the 12 last week. Whoever TTWIAHA stands for can pick up the mathNEWSquizExpert certificate in the MathSoc office whenever they please. Others submissive folks were Derf et AI (8), Cooper Tuff Tongue ( 6 - Stuart, you get worse every week), CYBERman (5), flaccid peter ( $3-!$ ), and Beowulf Shaeffer (2). Leaders in each category were as follows: Pseudonyms - 3 (CY, Derf, TT etc.) Newsmen - 3 (Cooper, TT etc., Derf) Inventors - 3 (TT etc.) Now that that's all over and done with, you may ask, "How can I win the mathNEWSquiz gold medal?' Well, you can't - but you can the mathNEWSquizExpert certificate. Just record what you think are the right answers on a piece of paper or cardboard or concrete or whatever and
give it to us via the LACK BOX in MathSoc (MC 3038) or under the mathNEWS door (MC 3036). Do so before Monday, March 7, 1988, at $7: 13: 22 \mathrm{pm}$. Until then, take care and don't catch anything we wouldn't catch.

One-Armed Phil
The mathNEWSquizmaster

## Top Ten Ways To Lose Service

Or Get Thrown Out

of the Bombshelter

(from the home office in Hogtown, Ontario)
10. Be quiet, considerate and don't order any intoxicating
beverages-hah!!-and if you believe that, go back to
Fed Hall.
9. Be loud and obnoxious.
8. Play musical chairs when it's busy.
7. Drink 7 pitchers in 7 minutes.
6. Punch a bouncer.
5. Pinch a waitress.
4. Pinch a bouncer.
3. Give Canadian Tire money for tips.
2. Bring your own beer.

1. Take all of your clothes off and jump around like a chicken.
Hobgoolin


## Conventional

Across<br>1. NUCLEAR WEAPON (hyph)<br>4. AMERICAN CITY<br>8. KINDER<br>9. ULTIMATE<br>10. UNFAMILIAR<br>11. LEDGER ITEM<br>12. GIVE AWAY<br>15. RELATIVE<br>18. FOUNDATION<br>19. CHURCH LEADER<br>22. MILITIAMAN<br>23. COST<br>24. MIDDLE<br>25. COMPOSER



## Cryptic

## Across

1. A number by the parking area flier (5)
2. Highly slanted French article on the church (7)
3. Mythological creature in an artsy arrangement (5)
4. Half a dozen support the ends that oscillate (7)
5. A structure to shorten (7)
6. Watchful brew of headless art (5)
7. Strange is ever poetic, that is (5)
8. Rotated lease of painter's equipment (5)
9. Influential gift for Adam's loss in existence (5)
10. Account for being out of the flatland (7)
11. Exalted under the fruit (7)
12. Love to exist with Popeye (5)
13. A widow, you must bet (7)
14. Utmost extent of an endless mile back with it (5)

Down

1. Throw an era in a selection from a book (7)
2. Left consumed right-but not at this time (5)
3. A sleepy note of colour (5)
4. A changed vote is foreign (6)
5. A letter of support for the hug (7)
6. Scheme of aliens from other worlds (7)
7. An occurrence the night before, not without love (5)
8. After a shower, a sound rule with the tie (7)
9. Leveling the night? (7)
10. From line ten to be clement (7)
11. Encountered a binary operator as a streak in the sky (6)
12. Founded from low-standing pence (5)
13. Sneak around a public relations bird (5)
14. Basic proposition of a Greek letter and a risen method of operation (5)

## Grid Times

To submit a solution to this grid, just write your name in the space provided and slide this page under the mathNEWS office (MC3036) door or in the BLACK BOX contained in MathSoc (MC3038). The deadline is 19:00 on Monday March 7, 1988. A winner will be pseudo-randomly selected and will receive a special prize.

Favourite Invertebrate: Doug Wright, The GridWord-writing clue re-user (Well, excuuuuuuse me), amoeba, myself, viper, the stuff you find growing in your fridge, brian mulroney, an invertebrate punster-spinelessly addicted to puns, slug, Mr. Adventure, Slugs on Drugs, Ronald Reagan, Gary Hart.

Other comments: "My kind of puzzle" (none other than Jot Biden); "Sex is best when it's x on $1, \mathrm{x} \rightarrow \infty$ "; "What, no mayonnaise"; "The only thing better than an English muffin is a Danish": "How 'bout some snatch 'n scriff clues?"; "Why am I never chosen for the prize?" (Well, first you must be completely correct, then luck is a factor); "I will for chocolate"; "Mental pablum"; "Happy Birthday, Mary. P.S. That was the cat we fed you for your birthday!"; "decimate infidels"; "Not one of your better efforts" (notes from other comments; Colorado is not American? What? Isn't the mind considered synonymous with the brain? etc).

I hope you enjoy this Grid and you'll see me in black print again in two weeks.

# INFORMATION NIGHT FOR 

## 1B MATH STUDENTS

## THURSDAY, March 3/88-7:15 PM <br> ENGINEERING LECTURE HALL - RM 101

On Thursday, March 3/88, starting at 7:15 p.m., in the Engineering Lecture Hall, Room 101, the Faculty of Mathematics is planning an Information Night for 1B Math Students. Representatives from each Department and the Option programs will be making brief presentations. All 1B students are encouraged to attend in preparation for Fall/88 - Winter/89 pre-registration which will take place during the week March $7-11 / 88$. Come and find out what your choices are for year 2 in the Faculty of Mathematics.

Following the formal presentation, there will be refreshments and informal discussion with faculty members. Hope to see you there!

