

## LookAhead

## A quick look at what's happening

| Math Events |
| :---: |
| 18-19 Nov MathSoc Elections |
| 29 Nov Sabres Roadtrip |
| Co-Ops Only |
| 18 Nov Confirmation of Employment |
| Cinema Gratis 9:30 in the CC-it's free! |
| 20 Nov Interiors <br> 27 Nov Passage to India |
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|  |
| DCS Courses Free! Contact DCS to register |
|  |  |
|  |
| Call 8854280 for more info and tickets |
| 23 Nov King Stag |
| Other Events |
| 15-Nov Punk- Party-see CltraGlasitied cancelley! 21 Nov 4A students! UCPA Forms Due! (CO-op job applications for grown-ups) |
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|  |
| $\begin{array}{\|l} 25 \text { Nov mathNEWS Articles Deadline } \\ 25 \text { Nov Production Night-come to MC } 3038 \text { at } 7 \text { pm } \\ \text { It's on Mondays now!!! } \\ 29 \text { Nov last mathNEWS of the term hits the streets } \end{array}$ |
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|  |  |
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## Alternative Fund Sources

(1) Market Village "food" to the public. (Possible slogans include "That unforgettable taste" and "It's a new toy every day.")
(2) Develop Village "food" as part of the Canadian Armed Forces' newest program, SDI (Supper Defence Initiative), in which the enemy is to be poisoned in a culinary first strike.
(3) Sell the CS sculpture (should bring in 10 or 15 cents).
(4) Rent out a few engineers to foreign zoos (Engineerus Drunkenstoopori).
(5) Run a lottery to predict the obnoxious colour scheme that will be used on the Bill-ding (CRC).
(6) Take a cut from Stats 230 profs betting their classes over "the birthday problem".
(7) Rent out PAS at night for full-scale D\&D tourneys (This institution takes no responsibility for players lost or damaged ... ).
(*8) Sell "Snowplow" insurance to campus pedestrians. Winter's comin'...
You're Welcome.

## MathSoc Elections

On Monday 18 November, MathSoc elections for the Summer ' 86 executive will be held. You may vote if you are in coop, or are otherwise going to be here in Summer '86.

As a public service, mathNEWS presents platforms from the various candidates running in this election. Be informed, and exercise your right to vote.

## President

## Steven Furr <br> ***

## Dan Lyons

No statement forthcoming at press time.

## Steve Murdoch

No statement forthcoming at press time.
Vice-President

## Grace Chiu

No statement forthcoming at press time.

## Bryon Isaacs

## Mike Bernhardt

No statement forthcoming at press time.

## Treasurer

Rosemary Nyenhuis

Deborah Vrab
*** See candidates' statements beginning on page 5 .

## CSC Flash!

Take twelve tired programmers, ten tireless programs, and endless cups of coffee and CPU cycles - what have you got? The CSC Open Computer Othello Tournament, which took place in MC 3017 last Saturday. With participants from at home and abroad - as far as Carnegie-Mellon University - the competition was stiff. However, all the local entries failed against 'Bill', the program that ate Pittsburgh (soon to be minor motion picture), which won all four of its matches. Jan Gray's 'GrayBlitz' came a distant second, followed closely by Len Popp's 'Othello**0' (for the two or three FORTRAN hacks out there).

The organizers of the tournament would especially like to thank the UW Chess Club for the kind loan of their clocks, MFCF for the kind use of their computers (albeit without explicit consent), Tracy Tims and CL Fisher for getting up at an ungodly hour of the morning to help organise the tournament.

Calum


## Math Dean Resigns

## from UW News Burecut

UW administrators expressed renewed fears today that another serious brain drain to the US may be under way.

The expressions of concern coincided with the announced resignation of Prof J Alan George, dean of Math. He resigns to assume a position as Distinguished Scientist, jointly sponsored by the University of Tennessee and Oak Ridge National Laboratory.
"It's in no sense a vote of non confidence in the university; rather, it's definitely a vote of non confidence in both governments (provincial and federal) and their lack of commitment to quality universities," George said.
"The loss to the university and to the math faculty is very great," said UW president Douglas Wright. "Alan George has been a major force in the development of strategic activities at the interface between mathematics and engineering."
"He has done an outstanding job in all areas of endeavour, as teacher, administrator and as a leading researcher," Wright said. "I fear his loss will have a very damaging effect on morale."

Wright said that George's resignation is just another example of the losing fight being waged by Ontario universities as a result of underfunding.

A native Canadian, George said he took the Tennessee offer because "it was too good to refuse." He will have support for his research including assistance and equipment which will allow him to work at his full potential. He is a recognised authority on sparse matrix research, an integral component in scientific and engineering computation. He is the author of scores of research papers and one book, and has been a principal speaker at mathematical conferences around the world.

UW vice-president academic, Prof Tom Brzustowski, was particularly disheartened by the resignation: "He was one of our top people. I'm afraid this, and two other anticipated resignations of senior members of the ICR, as well as faculty member in accounting, may signal the start of another brain drain to the US"

Brzustowski comments further, "It makes you wonder if they (provincial and federal governments) prefer to have only mediocre institutions."

## Brain Drain

## An Opinion

Dr. J. Alan George has just announced his resignation as Dean of Mathematics to take a position in Tennessee. Several other resignations are expected within the next few months. The University is concerned about the start of another "Brain Drain."

Dean George, after he tendered his resignation, said, "It's in no sense a vote of non-confidence in the university; rather, it's definitely a vote of non-confidence in both governments (provincial and federal) and their lack of commitment to quality universities."

He continued, "In Canada, governments seem unwilling or unable to make firm, long-term commitments to effective support for universities. This uncertainty is, in some senses, as distracting as the underfunding itself. We spend too much of our time and energy in budget cutting and making ends meet, rather than educating our students and pursuing our research, which is why we're here."

Dean George has struck another minor chord in the crescendo of discontent at UW and other universities. I agree heartily with the comments he made in the media release announcing his resignation. Basically, the first wave of aftereffects of government insensitivity is ending and the second is beginning.

Let's look at government unwillingness first. Without long-term governmental support for teaching and research in specific areas universities cannot plan for the future as effectively as they would like. Faculty members will only have short-term research projects and teaching assignments. When those are exhausted, there is nothing interesting for them to do, so they eventually leave for more stimulating activity. Usually this is in the form of jumping to the United States or Europe and accepting a research position there.

If the governments gave long-term support, departments would be able to chart a general course for five to ten years at a time. The faculty members would not turn over at such a high rate because there is work they find interesting to do. Students benefit too, because there are faculty members who can chart a student's progress from first year, introduce them to long-term research projects, and prepare and evaluate them for graduate studies.

Now let's look at underfunding. We are currently experiencing the effects of this-no one has to look further than the nearest fee statement for proof. The computer fee is one symptom of the problem, but another symptom is the budgetcutting which every department is being forced to do. I've never met a researcher or teacher who liked cutting their own budget. Eventually it gets to be too much: little productive work can be done, the researcher gets bored, and eventually leaves.

We all know what can be done with proper funding, so I won't comment further on that.

The first wave of the academic crisis (larger classes, poorer facilities, stopgap fees, etc.) has been with us for a while. Dean George's resignation begins the second wave: even more faculty vacancies going unfilled, and hence even larger classes and a deteriorating quality of education. As academic excellence
continued on page $4 \ldots$
continued from page 3
drops and the faculty members become overworked, even less government support for research will be given or accepted, and the vicious spiral continues downward. A symptom of this is the "Brain Drain," where faculty members abandon Canadian universities for the United States or Europe.

I cannot blame Dean George for leaving UW. One can only take so much of budget cutting and boredom, especially when there is someone else who is willing to give adequate funding and facilities to carry out research in an area one finds interesting and exciting. I hope that he is willing to come back to Canada once his term expires, if there is enough interesting work and the resources to make him content. Meanwhile, we can hope (and write letters to appropriate people asking) that both the federal and provincial governments will see fit to improve funding to all universities to enable them to maintain their current academic standards, and improve on them. (Don't go overboard by staging demonstrations-I think they're more destructive to student credibility than effective in resolving the problem.) Only when facilities and support for research is adequate will the "Brain Drain" be stopped and the quality of education available be as high as it should be.

> W. Jim Jordan

## Applied Math Club Seminars

With the encumberance of midterms now only a memory, the Applied Math Club is once again in high gear.

Yesterday the club organized two different seminars in two different buildings, (which in itself is impressive). Professor Lipschitz of the Applied Math Department spoke on compact disc technology, with emphasis on error correction theory and its use. This was followed by a seminar by professor J. Paldus on Group Representations and their Applications in the Physical Sciences.

On Thursday November 21, Dr. Peter Taylor, of the Atmospheric Environment Service will give a talk on applications of mathematics, entitled "A Little Mathematics Can Go A Long Way". Dr. Taylor's talk will include illustrations of the uses of mathematics in oceanography and meteorology. His reputation promises an event which will be both interesting and entertaining for more than just Applied Mathematics students.

These events mark the last events of this term, but the club is already actively organizing for the Winter term. Memberships are always available and everyone is welcome to all club events.

## Clean Engineer Joke Contest

From the mind of Jim Cogill ( $00 \pi$ ) comes mathNEWS' latest contest. All you have to do is submit a clean (ie. printable) engineering joke and we'll choose the best of the submissions received. The submitter of the lucky joke will also receive some kind of prize, too. Here's a sample joke: How many engineers does it take to screw in a light bulb? Seven, and they all get a credit for it.

You can also answer the question, "Why do engineers wear hard hats?" for extra bonus consideration. Just send your jokes to mathNEWS via the BLACK BOX located on the third floor, and watch next issue for the results.

## A Little Mathematics

## Can Go A Long Way

On Thursday November 21, Dr Peter Taylor, of the Atmospheric Environment Service, will give a talk, entitled "A Little Mathematics Can Go A Long Way", on applications of mathematics, with illustrations from oceanography and meteorology. This seminar promises to be rewarding for all who attend.

This seminar will be held in
MC 6091a,
Thursday November 21 at 4:30.
This seminar is sponsored by the Applied Math Club. All are welcome.

## UltraClassified

(Yeah, it's back! The free personal classified service that's sweeping the campus. Just send them in to mathNEWS through the BLACK BOX on the third floor, and watch this space. This space comes in handy for housing, for sale stuff, personal messages, and lots, lots more.)

Congratulations to Frank D'Ippolito who finally took his hat off after 57 days.

Four single rooms for Jan-Apr '86. Close to Zehrs, 20 minute walk to UW/ 10 to WLU. $\$ 205 /$ mo furnished, full kitchen, utilities and housekeeping incl. Non-Smokers only. Phone John or Joanne 743-5921.

Mission Alert! Report to Rasing-G-MEM-4, Under-Supervisor-in-Training, Mapping and records, Housing Preservation and Development and Mind Control, for immediate assignment Outdoors. Bring no personal equipment other than weapons and reflec. WARNING: This assignment is TOP SECRET, Security Clearance GREEN. Revealing knowledge of this assignment to anyone but Rasing-G-MEM-4 is treason.

Lost: 1 pair of black sunglasses at Math Wine \& Cheese Nov 2. Please return to MathSoc Office MC 3038.


## MathSoc Elections Summer 1986

Here are platforms from some of the candidates running for the MathSoc executive. mathNEWS encourages those of you who will be here this summer to vote on November 18 and 19.

## Steven Furr-President

My name is Steven Furr and I am running for the position of President, because I believe it requires an individual who is committed to improving the quality of a Math student's life at the University of Waterloo. The President of MathSoc is your best representation to the administration and the challenge facing him is to make administration aware of the needs of Math students. I am prepared to meet that challenge.

Student involvement in MathSoc has increased significantly over the past few years, and, consequently MathSoc has become more involved in important campus-wide activities. New problems face students in the near future, including housing issues and incidental fees. This requires that campus groups work closely together, and that MathSoc continues to become more involved. This can only happen if MathSoc has experienced people, particularly in the executive offices.

Currently I am a MathSoc class representative and the Internal Affairs Director of MathSoc. In these capacities I have worked with students, faculty and administration on committees such as the Undergraduate Affairs committee, Student Advisory Council, and the Student Homecoming Committee. It is these commitments that lead me to believe I have the experience required for this position.

## Bryon Isaacs-Vice-President

My name is Bryon Isaacs and I am in 3B Computer Science. There are two reasons why I am running for MathSOC Vice-President: spirit and pride. I have always been enthusiastic about the social aspects of university, and I would like to help inject some of that spirit into our often harried lives. Numerous "Frosh Week" participants will know how much I believe in enthusiasm. I strongly endorse balancing hard work and good fun.

I am proud to be a Waterloo math student and I would like to foster that pride in my fellow students. This pride is not due to the fact that we have the latest technological gadgetry, or that some of us can recite $\pi$ to the $n$th digit. It is a pride that comes from the belief that Waterloo has the potential to be a great, well-rounded institution, and that we are a hard working yet fun loving group of individuals.

My goal is to establish an environment where everyone can contribute and participate. My platform is to be an effective servant of the students-to help you realize your goals. If you believe in these ideals, and share this vision of university life, then on November 18 \& 19, vote Bryon Isaacs for VicePresident.

## Rosemary Nyenhuis-Treasurer

My name is Rosemary Nyenhuis and I am running for the position of MathSoc Treasurer. Since I am a 1A representative on MathSoc and on the Student Advisory Committee I feel that I have gained the experience and knowledge required for a position on the executive of MathSoc. Currently I am enrolled in the Mathematics-CA option program; therefore, I have the bookkeeping skills necessary for the job. Also, I have worked as an accounts payable clerk, where I was responsible for handling the funds of an entire company. Finally, I am honest, hard-working and interested in ensuring that the fees which the math students pay to MathSoc are disbursed wisely on items which will benefit math students and on events which are organized for the enjoyment and entertainment of math students. Therefore, on November 18 and 19, I would appreciate your support by voting for me, Rosemary Nyenhuis for Treasurer. Thank you.

"Think of $x$ as $x$."
George E. Cross
"It's quite clear that these two things can be quite confusing."
Prof Cummings
PMATH 334
"I'm tired. I wanna go home. I don't wanna play school anymore."

- overheard in M234A class
"I have no objection, whatever your orientation is."


## FeedBack

mathNEWS invites your feedback on articles it prints, or on any other subject that just happens to pass. Send them to mathNEWS via the BLACK BOX on the third floor.)
mathNEWS:
Wouldn't it bo ic sine cleaned up the display

sincerely, A Mathie

## To the editor:

My latest observations suggest that certain members of the university population have not the insight required to properly approach a prof for assignment extensions. These members should be told that an angry prof will not give extensions.

Examples of such improper approaches can be taken from my current third year CS class. On one occasion, on the day before the assignment due date, it was brought to the attention of our prof that on the Friday the assignment was handed out class attendance was estimated at $60 \%$ and therefore that weekend could not be counted as time available for work on the assignment. It should be noted that class time is $2: 30$ and we were given 10 days to complete the assignment. A similar approach was used in another course. It is time that these students be told that they are responsible for any material covered in skipped classes-including assignments.

A second example comes from the same CS class. This time a petition was sent around during class for students interested in grovelling for an assignment extension to sign. The ironic aspect of this example is that the prof had already said he would consider granting the extension as previously requested. A petition should only be considered as a last resort or when a prof is being unreasonable.

In my numerous terms at Waterloo I have never heard such weak and uncreative approaches. Those students adopting such methods should sit back and shut up, letting others capable of achieving favourable results ask for the extension.
signed, One wishing an extension

## An Apology

At the request of the Math Society Council, we are apologising for the ways and means by which the Natural Log was obtained for use by the participants of the Havenger Scunt in late September.

In recent years, we have noticed that the Natural Log has taken secondary status to the gayly coloured and slightly nonheterosexual pink rag that (unfortunately) is associated with our faculty and society and thereby, all mathies. It was our primary intention to promote greater spirit in the Math Faculty and awareness of the Log to others in the University community.

Once again, we regret our actions but not our intentions!!!
C.D.K ( t ) J.J.W. B.P.P.

Dear Mark Rudenberg, 1A Math:

1. People ask me why I don't write on music anymore. I don't write on music because no matter how carefully I articulate my views, there are people who take exception to what I say, usually on weak premises. Case in point.
2. I am glad you identified yourself as "1A Math." It is more than obvious that you are not in English.
3. Ashbury Park was a typo. I don't make mistakes like that.
4. I can make myself understood without using foul language. You ought to try it.
5. I know how many albums Bruce Springsteen has released. You read between the lines enough to know I still don't like the man, but not enough to know the rest was pure sarcasm? Funny, that. It was Sandra who thought that he had released sixteen albums, and that she owned them all; I was certain that his albums numbered $\sum_{k=0} \frac{e^{x}}{x^{2}}$. That mathie enough for you? 6. Bruce Springsteen's attitude toward women is not his alone; it is simply part of the American mind-set. It is entrenched, and not easy for the untutored listener to discern. But it is degrading.
6. I did not say that he does not sing about the problems of contemporary America; I simply said that he goes about it in such a ridiculously roundabout way that the message never gets through, and hence is pointless. I know what "Born in the USA" is about, but because of the repetitious and insipid patriotic nature of the song (especially the chorus), very few others do, and so again the message is wasted. That was my point.
7. Yes, the media were among those who applied the odious Dylan comparison, but the idea did not materialize out of thin air. It was Springsteen's whole "American Poet" persona which led to the labelling.
8. I did not say anything about "the worship of rock and roll"; I like decent $r$ and $r$ as well as the next person. What I despise is the ritual worship of WASP rock and roll - the sort that Bryan Adams, Bob Seger, Huey Lewis, Corey Hart, John Cougar Melonhead, Bruce-baby, and the "new" John Fogerty spew at us. The sort of stuff that SCUM-FM plays. It really is mindless jello.
9. In regard to things which I don't know "a damn thing about", I have likely forgotten more things about music in my twenty-three years than you will absorb in your entire miserable lifetime.
10. Do you really think my tastes or interests are so narrowly focussed that you can pigeonhole me into the "techno-pop, mindless crap" category? I thought that dead horse had been flogged to death in Imprint last year. If you go through this world with such blinders on, you will always be a sluggo, and your collar will never turn down.
11. Sure, you're a real fan. You "hopped the bandwagon" when "Born to Run" came out, rather than "Dancing in the Dark". You're not fooling me; you're as much to blame as the current spate of phonies.
12. I know I'm "fucked in the head". People have been telling me that for years. You are the first, however, to have defended it so poorly.
P.S. This argument is over.

Slash Sinatra

## FeedBack

Hi there!!! Just a question: What is REALLY the 'neato' prize you get for winning the Grid Wurd or the Trivia contest, besides a pinch of glory?? Thanx.

## Sincerely yours, Amit Parghi

Well, some of the prizes are mentioned in this issue. Normally, the prize has been a mathNEWS subscription for the Winter. Check the GridComments column for details. To the editor:

Who is this Gooch character? From where did he find his arrogance and his taste in music? If he wants to listen to Rush, fine, but how dare he insult Jane Siberry's music and the mathies who happen to like it!

Personally, I outgrew Rush sometime in high school and now I listen to Jane. If Gooch had been to Jane's recent concert, he would have discovered a diversity among the audience; there weren't only mathies there, but also artsies, musicians and people from many different age groups.

To put down another's musical taste is a sign of narrowmindedness. This narrow-mindedness is really irritating me this term. There was Slash Sinatra's slashing of Bruce Springsteen two issues ago, MathSoc's insistence on keeping the radio tuned to CFNY, and now this, some frosh's opinions on the greatest rock band alive. Give me a break already!

One other thing: why do you people at mathNEWS insist on printing articles by arrogant frosh? Derfy really made me sick this summer and now there is this Gooch character. Please do not do this to your readers anymore!

## M. Tomokato, 3B Mathematics. <br> Armrest Wars

With the theatre-type seating in rooms 2065 and 2066 in the math building I have noticed certain arm-room problems. Namely, the person to the right of me drops their left appendage on my desk. But through the few weeks of experience I have in Waterloo I have come up with ways to cope with this. Here are a few:

- Wait for him or her to scratch themselves with the left hand and then zoom your right arm in.
- Apply constant pressure to their arm with your arm until they become annoyed and move it.
- Forget to shower for a few weeks (also helps if you like to be all alone).
- Ask a stupid question so when everybody laughs at you the person will automatically lean away from you as to not be associated with you.
- Get their attention and make like you have some deadly contagious disease which they will catch unless they remove their arm.
- If they're of the opposite sex and they're good-looking, use the opportunity to start a conversation.
- Bring a large meat cleaver to class.
- The highly recommended way: get frustrated, leave and go back to bed.

WACC

## Somehow, Somewhere, Someone's got to Pay

The title of this article reflects the current tone of the administration when discussing computer fees. It is their pat response to any questions. Wes Graham said it like this at the Fed fee forum (I paraphrase): "We had a budget surplus. We paid costs out of that. We have used that surplus up. These costs were not traditionally tuition. Someone has to pay for them now that the budget surplus is gone." This response still begs the question : "What were, and are, those costs?" No one has yet justified them!

I'm sorry, but I don't want to pay for a 'UW rep.' I'm here as much because I'm good as because UW is. I won't pay for research facilities, from which I derive the sole benefit of some "UW mystique." I'll stand on my own abilities, thank you.

However, if the fees are needed to keep undergrad facilities at UW's level of excellence, I'll pay them. John Downing had a point in last week's Imprint, when he asked "how can we justify sticking [Joe Taxpayer] for more?" and observed that we are benefitting. If the University can demonstrate to me the need for the fees, I'll pay. As a CS major, I am obligated to pay. I demand only two things : full justification for what I'm being charged, and a ceiling on the fee.

All sorts of allegations have been made about where the fee money goes. Some say it's paying for the CRC, Some say for maintenance on donated PDPs and such spinning futilely or doing research, out of the hands of undergrads. Some say that the faculty plans to have an electronic mail terminal on every prof's desk within two years. Where would that money be coming from?? Further, how was this problem allowed to reach the crisis stage? Couldn't anyone see that this "surplus" was being drained? Why was action not taken sooner? If the situation had been explained clearly and fairly to the students, we might have voted to allow the fees, or at least have complained less.

It's not too late for that now. Show me figures. Prove to me that the computer environment here is managed with reasonable efficiency. Show me that we are paying for undergrad services. I want to see proof that I'll be getting John Downing's 'benefits.' No one in the real world pays for something without knowing what it is.

Asa a CS major, I expect that I should pay the highest fees. However, I also expect that Rec or Kin students, who do not use the computers, should not have to pay anything at all. They shouldn't have to subsidize MY education (nor I theirs, for that matter.) No one in any faculty should be paying for more than they receive.

Of course, I'd be more comfortable if I knew that there was a limit on how much good ol' UW was going ask me to pay. A ceiling, differentiated by department, would be a very appropriate idea.

In summary, I ask the administration, will you not justify these fees? Make them fair to all students, in all faculties. Put a limit on them that we can all live with. If you do, then perhaps we will be willing to pay.
But not before.

## Dear mathNEWS:

I have read the writings of Slash Sinatra this term and note a marked improvement in the thought and approach to his writing. Mr Sinatra is quite capable of expressing the fervour of his emotions on various topics which manifest into the content of Slash's Shoebox, and by such giving his columns a life of their own. His insight into issues of interest and concern, while not always of the mainstream opinion, are honest and straight from the heart.

Speaking from the heart does raise some problems, of which Mr Sinatra seems prone to encounter. In his column of Volume 39 Number 4, an ongoing tendency of Slash becomes rather obvious, that he often reduces issues to simply a them vs us story. As part of his 'Elegy', his bitterness over the death of someone he knew is redirected to an anger against the one that took her life. Confessing that I am not familiar with the case, I do note that Mr Sinatra has concluded that whoever stabbed her did so in cold, viscious blood and would do so to anyone else of similar nature under similar circumstances. While I admit that this may be the nature of the killer, it is possible that the victim justt as easily stumbled upon a fight in the park and got caught in the middle. Another possibility is that the stabber was on drugs or not in control of his faculties, and thus did not realise that his or her actions were actually taking someone's life.

The previous issue's two entries consist of Mr Sinatra's discovery of Bruce Springsteen, and an open letter to the President of the University. On the topic of 'the Boss', I thought Slash at least listened to the message of a song before berating or supporting it. His previous beratement of Springsteen is analogous to those who condemn his preferences
of music because they are not of the mainstream. All forms of music, even, God forbid, Country \& Western, have writers and singers who can put together songs of substance and message, and to presume that those receiving visible attention have nothing worth saying in their music is to exclude some important ideas and concepts without a fair chance in the first place. Hey, even Culture Club has carried some important messages in its music!

On the question of unbelievable happenings, I find myself more than, slightly surprised that the 'Open Letter to Douglas T. Wright' was carried in the manner in which it appeared. While many of the points raised are accurate, the manner of presentation was highly irresponsible. Rather than prensenting carefully reasoned and constructive analysis of the situation, Mr Sinatra chose to enrage confrontational fevers on both sides, which, if prolonged, could so polarise and entrench all concerned that a solution may never arise.

To understand the problems the University faces today, one needs to look back upon the University's past. Starting as a co-op engineering program of what is now WLU, UW soon staked a name for itself as the job-oriented Engineering-MathScience University specialising in intensive undergraduate/studies. This has been a major mistake insofar as UW has become little more than a training and research facility for many for professors. Waterloo grew to its status and size fast, probably too fast for it to develop properly. While Engineering and Math were on the forefront of their fields at earlier stages, they have both sorely lost their directions and now wander aimlessly from
one term to the next, slowly sliding into insignificance. [regretefully true. .ed]

UW needs to straighten out its priorities and direction of movement. Co-op is not right for all students, and something should be done to help students decide whether they should be there or not. Courses should be re-oriented from the current job-training emphasis to the examination and reasoning through concepts relating to the field of study. Moreover, UW should stop trying to be everything to everyone. Is it actually necessary to have such a wide array of programs tied in with Computer Science, or rather, since Computer Science contains such a strong background in the other arms of mathematics, maybe it would be better to do away with the straight CS program and send a signal to those High School students who hope to come here and avoid as much math as possible in order to get onto the computers.

Ideally, UW needs a serious rival in Computer Science, Math and Engineering Co-op. Even with the additional facilities it needs (not the ones it's getting, but those it needs instead), UW couldn't hope to handle the demands facing it, There are simply far too many students for the facilities available and manageable at UW. The computer usage fee is a move in bad faith, as is charged, but it is an attempt to cover and ease the tremendous growing pains of a somewhat malformed child of the education system. Until the faculties are willing to change their orientation to smaller, more inquisitive student bodies seeking to understand (rather than simply to be lectured to in huge amphitheatres of lost faces), this expensive medicine will be necessary to keep the University from a slow but very painful collapse and death.
sincerely,
Scooter!

## Dear Gooch:

I object to being told that "most math students have little taste." All math students (and all people, for that matter) have taste. The distinction is that sometimes our tastes differ from yours. Rock on.

Brad Sokol 2B Computer Science

## News Roundup

## (adapted from UW News Bureau material)

- Correspondence courses tight: UW is limiting enrolment in almost a third of its correspondence courses this year. This was done because professors are too busy to handle more students, according to Bruce Lumsden, associate registrar, part-time studies, who explains, "...the professors still have to mark assignments, prepare exams and respond to students' queries."
- H-P buys land: Hewlett-Packard (Canada) Ltd has purchased 25 acres of land on the northwest part of the UW campus near Hallman Rd. H-P is expected to build a manufacturing plant on its new property. Furthermore, the university has expressed an interest in seeing a high-tech business park evolve there.


## A Serious Problem

(The following article was adapted from mathNEWS 22:1, 18 January 1980. Although a minimal amount of editing was done for reasons of relevance, please remember that some of the information that follows came from 1980. However, we feel that its theme is still relevant today, and that it is worth reprinting in light of recent events.)

It has recently reached my ears that there were a number of suicides on campus last year [1979-typ.]. This number is reputed to be in the range of 2 to 146, though its exact value is largely a matter of personal opinion. Actually, I believe that the confusion is due to some of my sources not differentiating between actual suicides and suicide attempts. Be that as it may, the number 146 (obtained through extrapolation), whether pertaining to suicides or just suicide attempts, is rather frightening. (It is my belief (and hope) that the true number of suicides on campus last year was 2.)

This naturally brings us to the question of why anyone in the prime of life, with seemingly everything to live for would want to take his own life. Finding myself totally lacking in this sort of expertise, I consulted those about me most likely to know more about the subject.

Dean of Math W.F. Forbes joins the Chaplain's Office at St Jerome's College in the belief that most student suicides are due to academic pressures and the immenence of failure. A representative of that same St Jerome's Chaplain's Office adds that a student who fails a course can see that failure as a commentary on his entire life. Carol Cameron, counsellor for the York County Board of Education, believes that the feelings of disorientation and loneliness experienced by many students who are living away from home for the first time are the primary cause of student suicides.

These opinions were corroborated in my discussions with Jack Williams, head of UW Counselling Services and representatives of the Clarke Institute in Toronto. However, whatever the reasons for the increase in student suicides, it behooves us to learn how to recognise and deal with people having suicidal tendencies, in order that we may reduce the number of oncampus suicides.

By again consulting my staff of experts, I have determined the major symptom portrayed by the 'average' suicidal. Be on the lookout for people who seem to be withdrawing from society and crawling into their shells, as this is the most prominent trait of someone contemplating suicide. If you are concerned about somebody that you know, try to draw him out of his shell by showing him that you care, and by all means urge him to contact UW Counselling Services at 8851211 ext. 2655.

Greg Bezoff


# Back To The Future? 

> In Flanders fields the poppies blow Between the crosses, row on row, That mark our place; and in the sky The larks, still bravely singing, fly Scarce heard amid the guns below.


John McCrae

Last Monday, November 11, was Remembrance Day. On that day many Canadians spent a moment considering the sacrifice that loved ones and friends made during the Great War. And yet the march of time seems to have distanced many from events that happened so many years ago, so far away. While red poppies appeared on many lapels within our community, a remembrance service was not announced in the student union or the university press. One wonders how many lectures paused for a minute at eleven o'clock on Monday. Perhaps few have had personal contact with those who witnessed the First World War, and that explains our detachment. Seventy years ago the strength of our nation had endured the gas at Ypres and sustained losses at sea. But they had yet to live the horror of the Somme or the futile waste at Passchendale. In an age in which issues of security, defense and the balance of power have once again become topics of popular discussion, young Canadians might take time to reflect on our past before determining our future.

FMG

## MOVIE REVIEW

## To Live and Die in L. A.

To Live and Die in L.A. was a typical American import. It had all the qualities that make a movie successful in the U.S., namely sex, violence and swearing and more of the same. The plot was typical; if you go for revenge, then $\operatorname{dig} 2+\mathrm{k}$ graves. One for yourself, one for the other guy and $k$ for your friends and anyone else who gets in the way. My friend and I took two classy ladies to the show and were embarrased for subjecting them to such a show. L\&D is not for mixed crowds. However it has a good beat and is worth seeing. Once.

## mathNEWS Subscriptions!

mathNEWS, through its Worldwide Subscription Service, makes issues of mathNEWS available to co-ops on work term, or others who will be off-campus (in some cases, waaay off campus). You, too, can have a subscription sent to you for the Winter ' 86 term; Just go to MathSoc (MC 3038) and rid yourself of $\$ 3.50$, your name, and the address at which you may be reached during the next term (higher for outside of Canada; please inquire when you subscribe). Then, watch for issues of mathNEWS sometime in January.

Since mathNEWS is likely going weekly, we'll likely be mailing out the issues every other week; however, if you wish, you can pay $\$ 7$ to have issues sent each week if you so desire.

If you never seem to get a lot of mail, then let mathNEWS correct your postal deficiency. Subscribe today!

## Slash's Shoebox

The following is a partial diary of Mr. Sinatra's recent foray into Manhattan, received just before press time. We deciphered what we could. Enjoy.]
Wed. 6.55 pm . 'Boy' spins. Two big shiny red apples on the desk. Second beer.
8.55 pm . 'Burning Down The House'. Tension. Seventh beer. Ike arrives. He has panic eyes. I relax him with a beer; eyes go glassy.
9.28 pm . Board bus. Fate rears its ugly head. It's gonna be a long ride.
10.59 pm . Stopped in St. Kitts. Picked up Tony Creditcard and wife. Unsure why.
Thurs. 12.35 am . Rest stop. Sign offered 'Turkey Fricassee Casserole over biscuits $3.95^{\prime}$. Ike had a coffee.
4.20 am . Ike breaks out the licorice allsorts. The trip immediately takes a turn for the better.
6.45 am . Dawn. 1272 feet elevation. Stretch out your hands; you can see as far as the eye can see. This is America.
8.24 am. Upper George Washington Bridge. Rush hour. Clear skies. Everyone awake.
9.14 am. Arrive Hotel Empire, 63rd St. an Broadway
10.21 am . Ike and I decide we like the hotel, and that it can stay.
11.03 am . Hit the street. Ike tells me what we're going to do today, and says "That's the plan." I hate it when he says that.
12.10 pm . Lunch in pseudo-deli off 5th. Good food, lousy pickles.
12.30 pm . Visit Swatch North American head office. Groovy old elevator. Cool guy from Swatch thought Toronto was a "neat little town."
1.30 pm. Tour Museum of Modern Art. Saw some good, some bad Soviet films. Ogled at the original Dalis and de Chiricos. Marvelled at the number of people. Decided that New York was bigger even than us. A city full of contrasts, but really not as bad as they say. My libido can't deal with the number of gorgeous women in this city.
6.30 pm . Dinner at 'Mamma Leone's'. Three women left us there and so we gorged ourselves on Italian food.
9.00 pm . Walked up Broadway to the hotel. Watched a filming outside a porno theater. Bought some booze, watched bad TV and read Village Voice.
11.30 pm . Second rum \& coke. Writing postcards; more bad TV.

Fri. 12.30 am . Letterman Show and full physical exhaustion.
9.06 am . Ike crawls out of the shower and hits me over the head with a fungo bat. I go back to sleep.
10.15 am . On with the day. Went and got cheap bagel \& cream cheese and weak coffee. Took pictures of buildings and watched a bicycle messenger slam into a pedestrian. Ike spies Princess Gloria. Over to 5th Avenue, down thru the shops (went through Macy's; bought a watch that is all black and impossible to read), over and back through the garment district, the Jewish area, for a late lunch in Madison Square Park, courtesy the Corner Delicatessen. Some groovy chick as crooning jazz. Watched a one-legged pigeon.
3.30 pm . Meet squirrelly traffic lady at 18th \& Broadway. She demonstrates kneeling bus to us, tying up traffic. Inquires about our origin; proceeds to give Ike detailed description as to where to go in the Village ("Get out your notebook so you can write stuff down!") and the proper way to wear knapsacks. She vanishes in a cloud of parking violations.
4.02 pm . Discovered Greenwich Village, and my life was changed. Found the ultimate used clothing store and went crazy. Wandered amidst the students and the street vendors to St. Mark's Place, jotted down all the places to return to, signed a petition to save a piece of garbage, and found a covey of vampires. Took the subway home and stopped to watch a fire.
8.30 pm . Went and saw American premiere of an excellent movie, 'The Official Story.' The star and director showed up (Ike shakes Norma Aleandro's hand).
Sat. 12.01 am. Went to 'The Saloon' for dinner. Ike had squid and alligator.
We both went for the mud. Back to the hotel for more rum and coke and bad TV.
6.30 am . Wake up call. Ike gets up to answer it and then saws one of my legs off with a rusty chainsaw. I wake up.
6.45 am . Hit the street and walk up to 30 Rockefeller Center. Talk to several rude people, sign a list, and wait in the standby line for SNL.
8.45 am . Was told that there were no standby tickets for Mr. Jimmy and the Oscillating Navel. Quietly withdrew to the hotel and hot showers.
9.50 am. Back on the streets. Had big pretzels with oodles of hot mustard. Walked down to Times Square, watched the getaway for a three-card monte, dodged rummies. Took the subway down to Soho, working our way up
through the Village again. Back in St. Mark's Place, Ike cleaned up on books; I bought a bootleg REM tape from a sidewalk vendor. Hit more bookstores, then took the subway back up to 57 th Street.
7.10 pm . Over to 1st Avenue. Was refused admission to a bad comedy club named after a bad comedian. Walked up to Gregory's, a very intimate jazz club, where we were treated to some middling jazz and meddling inebriated stockbrokers and adverising men. Saw the lasers again and a limo with three drunk women from Long Island who wanted my body.
7.00 am . Wake up call. Ike stumbles around answering it, then throws me out the window down ten floors into the courtyard. Shower, pack, check out. Forget pillow, have to go back.
8.15 am . Announcement of freezing rain and snow in Waterloo county. No one wants to leave, and no one wants to stop in Corning. On out through the Lincoln Tunnel; stop because the driver is lost for the 22nd time. Listen to some of the groovies talking about the Everything But The Girl show, glad I got ElMo tickets so I had more time to see New York. Vow, however, to do more clubs the next time I come.
11.45 am . The rain starts; it does not stop. This is the first bad weather we've had all trip.
3.30 pm . Stop at Ammex shop. Leave Ammex shop. Bus driver makes first intelligent statement, realizing that by speeding ahead of other two buses, our stay at Customs will be shorter. New-found respect for this man, whose intellect compares with lime jello.
4.07 pm . Mr. \& Mrs. Creditcard de-bus.
5.19 pm . Someone forces bus to stop in Cambridge. Big kufuffle over where the bus will stop next, if at all. Bitch, bitch, bitch.
5.35 pm . Hit Waterloo city limits; it starts to snow.
5.45 pm . Campus. Dead bodies spill off the bus.
6.02 pm . Command Central. Crowds gather for the stories. Order a pizza, put stuff away, and try to get my frightened mind to accept the prospect of returning to school. The memories, however, remain.
10.42 pm . Sleep, at last.

Slash Sinatra

## 000000000000000

## Music Survey

Here are the results of the music survey that was conducted in the two third floor lounges supplied with music. Respondents were asked to give their name, id number and choice of radio station to be played in the lounges. There were 189 responses, with the following preferences:
$\begin{array}{lll}\text { CFNY-64 } & \text { Q107-63 } & \text { CHUM-12 } \\ \text { CKMS-10 } & \text { CBC -6 } & \text { FM96-6 }\end{array}$
There were ten votes for American stations including WBUF, WBEN, WRIF, ROCK 102 and WKRP (isn't Cincinnati a little faraway?).

CHYM, CKFM and CHEZ [Ottawa??-proofreader] received two votes each while Q104, CRJO, C100, CKGL, CFCA and CKO each received one vote.

There were four people who wanted to listen to ANYTHING BUT CFNY, but did not leave any suggestions as to what. One person suggested a subscription to Muzak, but that could be expensive. There was one vote for CSNEER, but I think he is a cigar-smoking aardvark who hates raccoons, not a radio station.

If you and your friends feel your favourite station is not getting enough airplay, do what the Americans do: form a lobby group and pressure your class rep. Better yet, be a MathSoc office worker for an hour-guess where the stereo is!
'Thank you' to everyone who helped with the survey, and may there be music for your ears.

Cyril Chen

## Perfect Season Ends

For Warriors

The weather for the season-ending football game between the Waterloo Warriors and the WLU Golden Jocks matched the outcome: dismal. Laurier emerged with a 48-0 whitewash.

The Warriors, despite the score, showed a few bright spots which will be helpful next season (if Coach McKillop and company can hang on to the current players and do some good recruiting). The defensive line blocked a WLU field goal attempt in the second quarter, and, with the help of the rain, caused a couple of fumbles throughout the game. The punter didn't kick anything backwards, and actually got a few good punts away. Unfortunately, the offence couldn't concatenate more than three or four gains and was held off the scoreboard.

Ah, yes, the rain. It was left over from Hurricane Juan.
The rain drove the Laurier cheerleaders and their mascot, Spasmo the Wonder Duck, from the sidelines before the first half was over. The Warriors Band played on, despite the rain and wind and the fact that they outnumbered the rest of the Warrior supporters. At halftime the Band joined the fans under the stands and played an impromptu set to lighten the atmosphere. Nature responded by raining harder. In the third quarter the Band erected a plastic sheet in the stands, sat under it, and continued playing. Eventually the rain abated, and the Band came out again. When the game was over several spectators and cheerleaders said, "You guys were great," "You've got spunk," and other comments using similar complimentary terms. (Seriously. I'm not kidding. Would I lie to you?)

The Warriors amassed a grand total of 34 points during the seven-game season: 3 converted touchdowns, 4 field goals and a single off a missed field goal. They gave up 313 points. I think both figures are OUAA records for futility. They were shut out three times, never lost by less than 25 points and beat my point spread only once, by one point. Two players quit, including Tony Iantorno, the original starting quarterback, in mid-season.

The Warriors Band had a perfect season, too. They beat the "band" from Western, outlasted the cheerleaders from Laurier, flustered the cheerleaders and little twits of kids at York, outclassed the Lady Godiva Memorial Trumpet at Toronto and drowned out the rowdies at our home game in Guelph for a perfect $6-0$ record (they beat Windsor by default and didn't have to face Mac), despite an injury to their regular bass drum player.

What does next season hold for the football team? Well, first the question of "next season" must be answered. If the team continues, look for the defence to be a strong force to contend with, provided they shore up the left side of the secondary somewhat to prevent the big play more effectively. Hopefully the coaching staff can lure a good running back and receiver to aid an inexperienced but maturing offence, with the proviso that Mike Wright learns to throw medium and long passes accurately to players wearing jerseys coloured the same as his own.

For the Band, it's on to basketball, beginning with an exhibition game in Buffalo tonight. Next weekend brings the Naismith Classic, featuring the Warriors, Toronto Varsity Blues, Carleton Ravens, Acadia Axemen, Winnipeg Wesmen, Laurier Golden Hawks, Western Mustangs and Trois Rivieres Patriotes. Waterloo plays Carleton in the late game next Friday in a rematch of the Ottawa tournament final (Waterloo won by 38 points). Tickets for the Naismith are available in the CC all next week, but you need to present your yellow season ticket to get them. See you there!
dwarf

# How to Tell My Parents That I'm an engineer 

It is still 4 terms later and my mother does not know that I am an engineer. My father found out a year ago when he found my hard hat hidden under some computer paper. He took it so hard (he thought I was in accounting).

Well, I have been told that you cannot break bad news like this suddenly to unsuspecting people. You have to do it slowly.

Currently my mother is under the impression that I am taking an engineering elective. She took that hard but accepted the idea that there was no room in Psych 101.

Now, bit by bit, I will "add" engineeering electives. I may have to use some special terminology. Fluid Mechanics will become Applied Mathematics in a Fluid Matrix.

Slowly I am dropping subtle hints that I am truly an engineer. I use a slide rule which clips to my belt, a plastic pocket for pens. But it is too early to give up the tie. I don't know about her heart, it is healthy now but who knows once the pink tie is transferred for a hard hat. (She won't see the original).

I have spoken to other engineers who had to finally tell family and friends the truth and they admit that it is difficult.

A few had to seek absolution from their family priest and some were even exorcised.

But eventually friends spoke to them again, family members ate at the same dinner table once again but all this takes time.

The more successful agree that slow development is the best path. Sudden confessions are dangerous. You are more likely to be sent to a de- programmer than accepted at facevalue.

But I plan to stick with engineering in spite of the shame. And I will probably tell dear Mom at my convocation, then maybe she might be able to accept a graduate son. Only time will tell, I'm afraid.

Kimmo Rautapuro
2B Chemical Engineering
"If you add a number of trivial statements together, you get a theorem."

Prof F.C.Y. Tang MATH 234B

## The Gooch Corner

The death of a goalie: Anytime a young athlete is cut down in the prime of his brilliant career, it saddens us all. True hockey fans undoubtedly share my grief over the untimely passing of Philadelphia goaltender Pelle Lindbergh, who was killed in a car accident recently in New Jersey. Lindbergh's death, at the age of 26 , serves to remind us all of our own inherent mortality. That his team was currently in first place and
that he had attained status as the NHL's top goaltender only serves to deepen our sadness over this tragedy.

In this column, I would like to reiterate my sadness over the recent decision by our southern neighbours to affix ratings to all music purchaseable in stores. This movement reveals a very obvious, intended step towards outright censorship of music, a result which would violate every tenet that that country is founded on.

But Mr Gooch, you may ask, is not a ratings system a perfect method for protecting innocent, impressionable children from violent, satanic or sexually explicit lyrics? Oh ye of dormant brain cells, have you never considered the possibility that perhaps parents could accept that responsibility? Are you really so naive to believe that this movement will stop at that point?

Obviously, I am not entirely convinced that the American government's intentions are as honourable as they may seem. I ascribe to the theory that if given such an opportunity as this, they are certain to try to discover what the bounds of this newly-found power are. They will begin to ban certain albums.

Of course, the initial albums banned would be deserving of such treatment (ie. heavy metal) and those of you with some semblance of taste would applaud such a motion. However, like a festering wound, this album-banning would expand and become more vile. Soon other albums would be banned, but who cares so long as your favourite music remains untouched? But then they would ban your music, effectively jarring you out of your apathy and leaving you asking 'why'.

But Mr Gooch sir, you may ask, you don't really think that the government would be so nasty as to do something like that, do you? Oh ye of virginal, untouched intellectuality, are you so intellectually myopic as not to understand that the government bows and panders to those from whom it is assured votes? If the so-called 'moral' majority can pledge their support if such a motion gets government support, then who's to say what the government will do at their bidding? After all, the music we listen to today is of a very political nature and does little to enhance the images of those in power. So this movement of quasi-censorship very definitely has political overtones.

And what of the 'moralists' who initiated this movement? Obviously they can only be concerned with protecting innocent people from potentially harmful influences, right Mr Gooch sir? With that point, I concur to a limited extent. However, I recall that the Salem witch hunts were inspired by similar ideals. Indeed, whenever I hear such 'moralists' expostulating on the evils of modern society, I think of young women being burned to death and I wonder just what kind of alternative these 'moralists' have to offer.

The witch hunt has begun.
The Gooch

## ElseWhen

 mathNEWS ten years ago...
## (from issue 9:8, 14 Nov 1975)

MathSoc at Work: n'jineers BOMBED: "... At this point it was realized that it had all been a clever plot by the $n$ jineers to gain entry to the [MathSoc] office and grab the pink tie. Effective countermeasures were necessary: it would have to be chemical warfare!

Half a septillion elementary entities of the oxide of hydrogen were collected and transported to The [Math] Building's ramparts. Thus it was that the MathSoc Office Irregulars turned what had been a glorious, triumphal march into a hasty, inglorious, and frankly soaking wet retreat. Up the mathies!!"

Risto Report: "However, the Hallowe'en pub on Friday night was a different story [from a well-attended wine \& cheese-typist.1985]. Although all who attended had a great time, there weren't more than 50 people in the room all night. This reporter had a great time sitting at the door...trying to convince people to come on in when the room behind him was completely empty. Using such lies as "We're just getting started now", "Most people are going to show up later", "The room isn't really as empty as it looks", and "Most people are in the far back corner where you can't see them", and feeling like a fool, eventually he conned some people to come in."

MathSoc Council: "J.J. Long announce his resignation as federation treasurer. All motions were carried practically unanimously, except one: Greg Andrews moved to ask the appropriate committee of the Faculty or University to do something about the building's pigeons. This was defeated by 4 votes to 1 , with 10 abstentions."

## and from issue 9:9, 21 Nov 1975:

Paper Disappears! "Meanwhile, on the TSS scene, the paper war is being fought. Janitors insist on removing ALL the paper from the 2741 room. Last Wednesday events came to a head as all the filed printer output disappeared. Drastic measures were taken and it was recovered the following day."

Math Reading Week? "... [Faculty Council] also discussed having a reading week in each term. Opinions on this issue varied from total opposition to total favour and some who wanted such a week only in the winter."

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Editor: D Richard Kuzell

## GridComments, Part V

Well, we went over the top! THIRTY-FOUR GridWord solutions. Like, possibly a mathNEWS record, even. Well, here are the names of those who submitted a GridWord from last issue:

Thank you all for submitting a solution. Now, here are the user-supplied GridComments:

- From watmath!rbutterworth Fri Nov 1 10:19:49 1985

From: Ray Butterworth <watmath!rbutterworth>
Subject: Gridword.
What do you mean "ASPIC is definitely not a poison."? According to the OED it is the venom of an asp; care to try some and still say it isn't poison? Of course that meaning isn't used very much any more, but even if we take the more modern meaning, try eating at my mother's some time.

- AHA! The Sun Rises, the Birds Sing, the Squirrels bury their heads in their nuts and come up with another perfect GridWord Solution! After missing 2 midterms, 1 assignment and 3 dates (we did eat breakfast though) we better win or Jason's Necro Random Method will show up! - without wax. Rich \& Craig c/o the Squirrels Nest, West Indies.
$\square$ Hmmm, death threats?? However, missing 3 dates does have detrimental effects, even on squirrels.
- "This was such that there exists puzzles more difficult" John Barnett
- 'This was more of a traditional cryptic crossword than the ones I made when I was GridWord editor. (ie. yours are more professional)" - David Welbourn
- 'This was supposed to be the time spent studying for Abstract Algebra"
$\square$ As I type this, this is supposed to be the time spent attending Abstract Algebra.


## - "A piece of PI!" - Gary Matsell

A lot of our GridWorders replied that the last issue's GridWord was too easy. Unfortunately, the vast quantities of comments and the limited quantities of GridWord page space (and typist's time) prevent us from listing all the comments here. Thank you for your comments anyway, and keep in touch.

Now, you've all been waiting for the GridWord winners this issue. Well, sorry but there isn't 2 GridWord winner. Instead, there are three winners. David Welbourn wins a new MathSoc t -shirt, while Zamil Janmohamed wins 22 for 1 deal on 2 mathNEWS subscription (see subscriptions notice elsewhere in this issue), and Mark Haygarth, Karen Keller, and Steve Furr win a MathSoc button of their choice. All winners should come down to MathSoc (MC 3038) to claim their prizes as soon as possible, and that includes previous winners. We now know what the secret prize is!

Be sure to play GridWord. This issue's GridWord will be the last one this term with prizes, so this is your last chance. Send it in through that BLACK BOX on the third floor as usu2l. And see you in GridComments.

Woody Tobias, Sr

And, our correct submitters are: Chris Baird (early bird!), the trio of Mark Haygarth, Karen Keller and Steve Furr, the quadrio of Jack Rehder, Kelly Gysbers, Cyril Chen and Hélène Lacombe, Brad Sokol, Peter Found, John Dubinski, Gary Matsell, Catherine Olinski, Jim Karsten, the walrus (see him c/o the eggman at the CSC), Jim McCaw, Zamil Janmohamed, Scott Hayward, Andre M Roy, Rob Sutherland, Angela Ruiter, John McIntosh, David Welbourn (in Toronto), Herb Kunze, Mark \& Walli, Sean MacDonald, Stuart L Hodgins, John Atwell, Greg Clarke, John Barnett, Peter Simpson, and the ever-so-squirrely Rich \& Craig. Now, those who submitted, yet didn't get it all right: Paul Bonneau, the team of Ben Balboa \& Curly Meriwether, the team of Ron Pfeifle and Paula Strangway, Mike VanLeeuwen, Cornell Carter, the pair of Leanne Henry \& Bernie Alvarez, Jim McCaw, and Gary Matsell.

## Textbook Survey

While we're into surveys, we'd like you to list the three worst textbooks that you have had during your time at UW. Just list your selections below, and send them in to us in conjunction with the many other fine contests and surveys that we're doing this issue. You can send them in via the BLACK BOX or via computer mail at the 'mathnews' account on either the watdcsu or watbun (Honeywell) machines. Watch next issue for the results!

Worst textbook:
2nd worst:
3rd worst:

## Masthead

Thanks to the following for their articles: Al"Go"Rithm, W. Jim Jordan, Rasing-G-MEM-4, The profs for their infinite wisdom, A Mathie, CJB DJP KWP, Slash Sinatra, Sauron, Amit Parghi, M. Tomokato, WACC, Scooter (and we thought you were gone), Brad Sokol, dwarf (for your impressive report on the band fat least basketball should be better. 1), the candidates for their propaganda, The Gonch ( nice piece), Greg Bezoff, FMG, DRK, Bonzai, Curil Chen Dr Terrence Till, Kimmo Rautapuro (life is sometimes truely harsh), The editor, drk, Frank Letniowski ( 34 quiz entries? I don't think that quiz was too tough Frank. I will expect beter next week.), the mathNEWS quiz master, dwarf, Calum.

Thanks to the following for what they did!... D. R. Kuzell for re-integrating mathNEWS. Darren Jones for his article and other typing and his friend Jill for helping him out. Frank Letniowski for selecting the winning grid word by David's selection method with the help of David and Dwarf. Tess Loyson for her layout and cover which was taken off. Nancy Giffen for helping Tess with her cover. Anton Epp for his typing last issue. Sauron for the cover and me for its layout. dwarf for his layout work and other crazy stuff. David Leibold for preliminary typping and last minute imagening. dan schnabel for typing articles, his potatoe chips and piece of cake. Frank Grossman for his trivia quiz and patience when looking for the quiz submissions, Stuart Hodgins for layout work and typing. Genia Vanderkruk for layout and picture of what was going on and ordering the pizza. Thanks again to Graphic Services for their efforts. 'You" solved a lot of my problems (more than you can imagen). Tom lvey for his layout work and typing. Ken Shirriff for his layout work and surgery

Thanks people for showing up last monday and to those 1 missed. Apologies to those who were delayed due to classes etc.

Tom you were luckey we didn't use your picture in this issue but we have it and we will use it if we wish..... Special thanks to everyone for their feedback. Sincere regrets with the loss of our dean but this is not unexpected.


## mathNEWSquiz \#4

1. What was the name of Odysseus' dog?
2. Which rock group recorded an album entitled "Bless Its Pointed Little Head" in 1969?
3. Which phobia is associated with an intense fear of the number 13 ?
4. What was the name of the "Queen of Tattoos" made famous by the following 1939 Harburg and Arlen lyrics:
"On her back is the Battle of Waterloo.
Beside it the wreck of the Hesperus II.
And proudly above waves the red, white, and blue.
You can learn a lot from ...."
5. Associated Press Horse of the half century, Man o'War, won 20 out of 21 races, losing only to a horse named ...?
6. Which province was the last to grant women the vote (in 1940)?
7. Who was gunned down outside the Biograph Theatre in Chicago in 1934?
8. What is "... the middle ground between light and shadow, between science and superstition...", that "... lies between the pit of man's fears and the summit of his knowledge..." better known as?
9. Who did Kirk Douglas portray in the motion picture "Lust for Life"?
10. What memorable event in Canadian sport occurred on September 28, 1972?

Quiz solutions may be submitted on or before November 22, 1985 in the flight recorder (i.e. Black Box) on the third floor outside the C\&D Lounge. Yet another fortunate prize winner will be announced along with the solutions to mathNEWSquiz \#4, plus a brand new mathNEWS quiz, in the next issue of (you guessed it) mathNEWS..

And now (right before your very eyes) the solutions to mathNEWSquiz \#3: Bambi's friend Flower was a skunk (did you hear that Pepe LePeu?); Jeffery Hunter played Captain Pike in the Star Trek pilot; John Lennon had "his face on the cover of the (first) Rollin' Stone" (thank you Dr. Hook) magazine; Newfoundland did not join in the 1958 Tory landslide; Irving Berlin's "Cheek To Cheek" is from "Top Hat"; Victor Hugo penned "Les Miserables"; Jim and Gaylord Perry are the winningest brother pitching act in major league baseball history (did you hear that Joe and Phil?); Vincent Price was the Egghead in the Batman series; Peter Boyle co-starred as "Wizard" in "Taxi-Driver"; and (Canada's very own) Glenn Gould played the piano.
"There is life after Mathematics 230b?" Well, I'm afraid not, but this week's mathNEWSquiz \# 4 winner is . . . . (timpani, please) Maggie Brunton and Victoria Tumelty with a perfect 10 out of 10 . (That's all mathNEWSquiz needs, schizoid submissions!) Perfection is hard to find (ask any algebra marker), but Maggie and Victoria represent a hard act to follow. Congratulations on your superior effort. Your mathNEWSquiz prize will be a special mathNEWS button (once our esteemed editor gets around to producing them). (Note to JG Esq.: the free mathNEWS subscription is post-paid for your upcoming work-term or summer holiday.) Tune in next issue for more mathNEWSquiz.
the mathNEWSquiz Master.


1. Part of the back has to reel this way. (5)
2. A hundred hurt Grace. (5)
3. Salmon, in all, drink liquor. (7)
4. Now herein lies what position. (5)
5. Softly, there are bugs in my trousers. (5)
6. Many in a mixed role as they age. (5)
7. That guy put a plug on the noodle. (4)
8. Feeds to rotate the seat left. (4)
9. By way of six years. (3)
10. Put potassium in to the short boxer's demise. (3)
11. My stomach seems bad around the sign. (7)
12. Take the fish back to the surgeon. (3)
13. Recline, fifty that is. (3)
14. Part of a ship in Quebec. (4)
15. The truck is directed to the weathercock. (4)
16. Depart by the French street. (5)
17. Has Owen checked for the female servant? (5)
18. A year in the finest changed him into an animal. (5)
19. The bull lay around in the sleep song. (7)
20. He set the piece of paper. (5)
21. At least you could get the small blackboard! (5)

## Down

1. Point out the direction in what way? (4)
2. Lied about not moving. (4)
3. Because every other way may let up. (4)
4. Took a large weight up to Mr. Kennedy to be heeded. (5)
5. Applaud a U.S. city in a Canadian rail line. (4)
6. A star exploded up by the English river. (4)
7. Mother took the German soldier to church. (4)
8. An uneven sphere is for a strange guy. (7)
9. Wait on about the store. (7)
10. Take David up with eccentricity to avoid it. (5)
11. That child has to open the lid. (5)
12. The street beer went flat. (5)
13. Romeo could have been a poor tennis player. (5)
14. Reflect the child the same way. (3)
15. A year very quiet for the French fruit. (5)
16. Waters the thick soup up. (4)
17. Britain, in two ways, will use atomic power. (4)
18. Stop left at the laugh. (4)
19. Howls at Hudson, et al. (4)
20. A tune with a raised atmosphere. (4)
21. Change in water because of the strange diet. (4)

Frank Letniowski

