Friday, September 15, 1989

## โนด๙th





## LookAhead

| mathNEWS |  |
| :--- | :--- |
| Sept 25 | Issue \#2 production night |
| Sept 29 | Issue \#2 hits the stands |$|$| Cinema Gratis |  |
| :--- | :--- |
| Sept 19 | The Big Snit |
| Sept 26 | A Fish Called Wanda <br> Hell Unlimited <br> Oct 6 |
| Educating Rita <br> The Ride <br> White Nights |  |
| Fed Flicks | AL116 at 7 and 9 pm |
| Sept 15,16,17 | Die Hard |
| Sept 22,23,24 | Dead Calm |
| Shoot to Kill |  |

## SAC Serves Summer Semester

Despite major pleading, bribes of large sums of money, a car phone allowance, and a large house overlooking Columbia Lake, Paul Obeda has decided not to return to Waterloo (So what if he graduated! Doesn't he have any sense of tradition?).
The Co-Operative Education and Career Services Department (it's full name) marched on as usual due to the capable abilities of our offstream companions.
Our first meeting is next Tuesday (in the Needles Hall Employer's Reception Area at 4:30 just in case you wanted to show up), so we can't really report anything yet.
Don't forget to fill out a work-term evaluation in Needles Hall!
Your technically-soon-to-be-but-actually-already-appointed SAC reps

## ISSN 0705-0410

mathNEWS is normally a bi-weekly publication funded by and responsible to, but otherwise independent of, the Mathematics Society at the University of Waterloo. Content is the responsibility of the mathNEWS editor; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or mathNEWS. Send your correspondence to: mathNEWS, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid mathnews@watdcsu on USENET.
Editor: Karen-Don MarkSmith

## Soc Toc

Greetings, Waterloo, and welcome back fo' yet anotha' fun-filled term $o^{\prime}$ ' supa' math events. We'd likes $t$ ' 'stend some warm welcome $t$ ' dis year's frosh, and hope dat orientashun week wuz one o' de best weeks $0^{\prime}$ yo' lives.

Yo' MathSoc 'sec gots'ta not wasted any time in makin' sho' dat yo' social calendar be filled t' de limit. On Friday, Septemba' 29, we snatch ya' t' de SkyDome where de damn Blue Jays roll fo' deir second division title. Sheeeiit. By dis time, de Jays may already gots de AL East crown in deir hands, o' betta' yet, dis could be de damn night dat dey clinch it.

Gots ya' eva' been involved in some bed push? If not, ya' kin participate in dis unique 'sperience on Octoba' 8 , as we push beds around Rin' Road in support o' UNICEF. A mere foe days lata' and it's off t' Bingeman Park fo' de world-renowned Oktoberfest, no 'splanashun necessary. Ya' know? As we haid furtha' into de fall, our crystal ball presents some semi-formal boogy at de damn University Club on Friday, Novemba' 24.
MathSoc elecshun campaignin' begins next week. What it is, Mama! Nominations be bein' accepted until 4:00 PM today. Ya' know? $\mathrm{Fo}^{\prime}$ positions dat be still jimmy, nominashun and instrucshun sheets be available in de MathSoc office, MC 3038. Speakin' o' de office, we still need suckas $t$ ' sign up fo' office hours. If you've gots some time off, wants t' meet suckas fum different years, and kin operate some stapla', den de time sheet be waitin' fo' ya' on de office doo'. Plum pencil yourself in.
Here's t' an awesome Fall '89 term. What it is, Mama! So's long fo' now. Ya' know?

Pat Szwyrlo (Prez)
Craig Cudmore (V.Prez)
Dee Vint (Trez)
with some bit o' help fum Rob Del Mundo

## MathSoc Elections

The following MathSoc class representative positions need to be filled:

- 1A- 4 Stream
- 1A- 8 Stream
- 1N- Regular
- 2 A - Co-op


Mom

- 2N- Regular
- 3A-Co-op
- 3B- Co-op

- 3N- Regular
- 4A- Co-op
- 4 N - Regular
- 3A- Teaching option
- 3B- Teaching option
- 4A- Teaching option


Avat D

If you want to get involved in the greatest student society on campus, all you have to do is complete and submit a nomination form (available in MathSoc, MC 3038) by Friday, September 15 at 4:00 P.M.
MathSoc is fun! Come out and enjoy!

## Computer Science Club

## No, don't go away yet

Are you antisocial? Do you like computers? Do you have any experience with computers whatsoever? Do you enjoy being crammed into a room about the size of a sardine tin with 20 other people and a bunch of equipment that sounds like an idling jumbo jet?

No matter what your answers are to the above questions, we've got a spot for you in the Computer Science Club. For $\$ 2$ in membership fees, it's probably the cheapest reasonable facsimile to a party you'll find and it's open approximately 98 library of books covering virtually every aspect of computing, as well as some books covering non-computing topics. In addition, we have a few computers around. Every member in the club is entitled to an account on watcsc, a minicomputer running UNIX. Watcsc is a node on Usenet, which means anybody with an account can communicate by electronic mail to anybody on any of thousands of sites worldwide. There is also a variety of software packages and computer games on the computer. In addition to watcsc, the CSC operates an IBM PC which is kept principally for uploading and downloading, although it has many other uses (but no graphics-sorry.)
But that's not all. The club also holds a number of meetings every term including a Computer Othello tournament every fall. Contact the CSC (Room MC3036/7, Beside the Math C+D, $\mathbf{x} 3870$ ) if you wish to enter or just want more information.
So if you want a computing device, some computing advice or just a free cup of tea, drop by any time. Literally. It doesn't matter who you are (past Presidents include Engineers and Artsies), just as long as you are here. Stay tuned for posters announcing the first meeting of the term, where we get to elect people (tentatively set for Monday, 25 Sept.)

Calum T. Dalek
Chairman

## Frosh-hiker's Guide to the Davis Galaxy

There's a place on campus that's actually cold in the summer and hot in the winter. It's everybody's friend, The Library. By the end of the term, you'll probably spend more money on photocopies of assignment solutions and class overheads than you will on bar tabs at the Shelter. Incredible, but true.

Before you absorb copious amounts of fascinating facts from the Davis Book Cellar, you have to register your student card. Just hop up to any friendly librarian behind the main desk, and proclaim in a loud voice "I'd like to register my card, for I am a Student, you see." (have your local address handy too) The library needs this info to mail you notices when you (ahem) forget to return books on time.

Obtaining reserve material is simply a matter of looking up the appropriate call number on microfiche (cards are printed by course and by professor), and asking those smiling librarians behind the reserve desk (surprisingly enough) for your joyous bundle of information.

If you're really keen, you can even go on all-expense paid trip (ok, so it's free) of the library if you beg and plead those gleeful souls who work in the place some people call Hell.

Other than the library, some of you might have some classes in the Large Lecture Halls That Have No Names But Do Have Funny Projector Screens That Are Ready To Fall Down Any Minute Now, but other than those aluminum-sided barns, the Food Fair is a place you might want to brave your luck (on occasion, rather infrequently...)
The rest of the Billding is pretty well off-limits to mortal frosh-folk, as your T.A's, profs and advisors are most likely lost in the 6th Floor Innards Maze.
Oh, and don't forget your towel. Happy hunting!
Ranch Hand Mark

## Top Ten Ways to Make an Artsie's Day

10. Allow one to be in your company.
11. Complain about the number of hours in your schedule.
12. Tell them, "Yes, you are a somebody."
13. Tell them a Rec joke.
14. Complain about 8:30 classes.
15. Tell them, "Don't worry, I'll hire you after you graduate."
16. Tell them, "At least you're not in Anthropology."
(Ed Note: don't do this if they are in Anthropology.)
17. Do not fold, spindle or mutilate one.
18. Buy one a drink. But then again, that might end up making your day (or night).
19. Ask them what $2+2$ is and tell them they got it right, no matter what answer they give you.

Hobgoblin
\& The Procrastinator
Your Friday morning friend,

## PRESENTS



Contains a selection of almost 300 quotes from mathNEWS Fall 1985 through Summer 1988.
"The book is... better. . . than. . . cheap draft beer." (Imprint review)

WHEN Now.
WHERE? MathSoc, MC3038.
COST a mere $\$ 4.00 \mathrm{Cdn}$.


## Dragwat

Dum. . . da dum dum...
This is the city, Waterloo. This is the paper, mathNEWS. My name is Sgt. Jo Sundae, executive superlative secretive detective of the WPD, a TLA which in common-people-type lingo means Waterloo Police Department. To maintain a professional-type atmosphere, I will use various sundry TLA's in this tale I intend to tell. Actually, I kind of have an attack of terminal acronyms, having completed yet another glorious work term at glorious IBM, learning about glorious VM, CMS, ADA, COBOL, and various other glorious TLA's (three letter acronyms, to those uninitiate) which I cannot reveal on pain of death by IBM interfacing because I confidentially signed my life away and actually probably can't say any more about that because of this piece of paper I signed and that paper therefore became IBM confidential so like I probably can't talk or like write about it at all so now that I've done that I guess I'll get sued so like that's it for me and this whole article because the BIG BLUE is after me and they're coming to get me and they'll make me use an IBM keyboard for the rest of my life and maybe even worse and the're coming to get me and and and and heeeeeeelp!!!!!!!!!!!!!!

Ahem.
Please excuse, I've just come off a term at IBM...
ANYWAY, welcome to DRAGWAT, our serial this term until various sundry (yes, there's that phrase again. . . you can start counting if you like) editors decide to ressurect and kill Watman again. So here we go...
I had been called by the great entity of the sixth floor, my fearless leader, W, for this term's assignment. I approached the office with great trepidation, remembering past experiences with assignments which had taken me deeply into danger, down in the depths of darkness, delving into dastardly demon-infested dungeons of the CC, when I had infiltrated the Imp'tint itself. At least, I thought, my new assignment could be no worse.

The door slid open to reveal a sparklingly white room, reminiscient of a 50 's sci-fi movie. W stood, gazing meditatively out one of MC's (ack! another TLA!) (Well, TLA could be two-letter acronym, it's just not aesthetic) few windows. The door clanked shut, and she turned to face me.
"Jo", she intoned, "darkness encroaches our fair campus. The forces of evil begin to muster their strength, and mean to destroy all that is right and good in our land. Three strong and noble knights have been sent to stem the dark tide, yet none have returned, and still the threat comes. It has fallen to you to save us. You alone have the ability, the nobility of character, needed to destroy the beast."

I stood and pondered (not ponderosaed) her weighty words. I bowed my head momentarily, and considered deeply. I thought. Finally, I selected the green-inked pen from my breast pocket and the blue-covered steno pad, and flipped open to a page not coated in CS class-induced doodles.
"Just the facts ma'am, just the facts."
W paced. Finally, she spoke again. "Jo, never before has such a thought crossed our campus. Now, it is on the verge of completely taking over the mind of every student. We are in our most desperate hour. Help us, Jo, you're our only hope."

I began to sense the danger had infiltrated even this sanctuary of truth and reason, high on the 6th floor of the glorious fortress of all that is right and good. She continued her speil, as I continued scribbling notes, thankful for my Abstract Algebra course which had taught me copious note-taking. She handed be an IBM laptop, which I took gingerly, as various sundry memories of past work terms sprang to mind.
'The information contained in this unit should aid in your attack, commander. It's our only hope. You must succeed. Have you sufficient transportation?"

I pointed to my delightfully derelict bike just outside the fortress. She stared at it.

She glanced at me. "You came on that thing? You're braver than I thought."

My suspicions grew. "W", I intoned (we don't speak up here, we're serious and sombre), "are you all right?"

She strode towards me, a regal bearing to her walk. Her raven locks entwined themselves according to an unseen force.
"Look, I don't know who you are, or where you come from, but from now on, you do as I tell you, okay?"
My eyes narrowed. My suspicions were finally confirmed when she intoned the following words at a graphics lab programmer who happened by and blocked her path:
"Will somebody get this walking carpet out of my way?"
Yes, W had become a walking, talking, living, breathing, striding, intoing, Princess Leia. I now understood the threat: Someone, or something, had taken mathNEWSś parodies one step too far, and was turning glorious $\mathrm{U}(\mathrm{W})$ into a living parody. Even our own bastion of truth was not invulnerable. Who knows what could happen? Doris Days running rampant, Errol Flynns swashing and buckling, Darth Vaders destroying wayward planets, Loni Andersons teaching class...well, maybe it wouldn't be too bad (equal time for alternate opinions - we can have Mel Gibson teaching class too).

Potential benefits aside, I set my jaw resolutely (I can do that - I'm a serial character) and set off in search of the source. And continued to do so. Actually, first I have to find myself out of the 6th floor, which should probably take 'til the next mathNEWS installment, so there you go.
the snark
"I don't know why people are laughing, is my fly open or something?"
M. A. McKiernan, AM 381

## Prof Quotes

What the Prof actually said

It's been about five years since the first Prof Quote was submitted to mathNEWS, and since then they have been far and away the most popular column in this paper. In fact, this summer, a book of Prof Quotes was released by two mathNEWS ex-editors, Stuart Hodgins and Frank Letniowski, and sold out in a matter of days. The book is now in again at the MathSoc office, so get them before you can't.

Because this is the first issue of term, we haven't had any submissions yet, but do send them in - that's how we make this column up. Here is a selection of what the profs said last term:
"This may be somewhat of a snowjob, but who cares-it's only the first lecture."

$$
\text { M. McKiernan, AM } 362
$$

"The secrets of the universe are eigenvalues and eigenvectors."

> L. Dickey, MATH 134B
"I hate to mention real life in the Physics building."
K. Woolner, PHYS 122
"Why am I using algebra in a calculus course? That's cheating."
E. Moskal, MATH 134B
"So here's an example using infinity-by-infinity matrices. Leave lots of room on your page."
P. Hoffman, MATH 144B
"My goal is to get everybody to switch to an easier course. Then I won't have to give any lectures."

$$
\text { K. Rowe, PMATH } 344
$$

"I really should call this a theorem, but then I'd have to prove it so I'm just going to call it a fact."
C. A. Colbourn, MATH 134B
"In honour of the event at the Bombshelter on Thursday, class will be cancelled on Friday morning."

Whitney, STAT 231
"Whenever I see a variable, such as ' X ', I like to substitute a number, such as ' $A$ '."

Cutler, STAT 231
"Let's give two proofs: one common sense, one mathematical."
McKiernan, AM 362
"If I play with it this way, let's see how hard it gets."
Berman, MATH 130A
"We proved it is true for $n$, so it is easy to show if for $n+1$, since $n+1$ is just a special case of $n$."

Cutler, STAT 333
"Pure mathematicians have wet dreams over this stuff. . . don't quote that in mathNEWS; I'm in enough trouble already."

McGee, MATH 130B
"Spread yourselves evenly, lots of space in between. I would like, for once, to have a computer-marked exam which is something more than a test of you peripheral vision."
K. A. Woolner, PHYS

122
"I know all your names; I know all your faces; I just don't know the bijection in between."
P. Hoffman, MATH 144B
"This is not sexist. It's just that it is usually the women that get pregnant."
R. D. Seim, PSYCH 213
"You can't imagine how difficult it is to get the correct number of peas in a can of chunky soup."
W. Cherry, MTHEL 102
"Then someone comes up to you and says, 'Use the Cauchy-Schwarz inequality, Luke'."
C. Colbourn, MATH 134B
"I'm a beer can collector. So, if any of you are down in Timbuktu, I'd appreciate your bringing me back one empty. I wouldn't mind your bringing one full either."
I. McGee, MATH 130 B
"When mathematicians don't know how to simplify something, they just give it a name."
G. Gonnet, CS 340
"... and anyone can do that, even the authors of the textbook."
G. Gonnet, CS 340
"I like to get in at least one good violent military example a year."
C. Cutler, STAT 231
"If you set the circuit up this way, you get $\frac{0}{9}$ which as you know is 9371. If you don't believe me, cross multiply-it all checks out!"
P. Eastman, PHYS 352
"I looked at the Final the other day and I'm happy to see that we
vered some of the material" covered some of the material."
C. Cutler, STAT 231
"Did I forget to tell you I have a multiple personality?"
C. Cutler, STAT 231
"You're getting tired of this already, but you've got to sit there and take it. Heh, heh, heh."

$$
\text { R. Bartels, CS } 374
$$

"It's not what I say, it's not what I write, it's what I should have said."

M. A. McKiernan, AM 362

## A Delicious Comedy:

A Review of Mayonnaise

Have you thought about sex, love, and sandwich spreads? If so, Mayonnaise may be the play for you. This comedy is the Twin Cities Theatre's second production and the play features many people from UW. The play revolves around two cartoonists Hirsch (Craig Mason) and Alan (Chris Kitowski) and is set in an apartment they share.
The play opens as Alan is preparing for Hirsch's birthday party; however, a blizzard hits Toronto, preventing the guests from arriving. At this point the fun and one-liners begin. Hirsch is undergoing a crisis about turning twenty-five as well as analysing his disappointing luck with women. As Alan tries to cheer Hirsch up, the audience immediately notices the differences between the characters. For example, Hirsch is an insecure, sensitive, and depressed person; whereas, Alan is a confident and sometimes caring person.
The audience learns more about these characters when we are introduced to Cynthia (Darlene Spencer), a neighbour who is trapped inside the apartment building and decides to join the party. Both characters make their move on Cynthia with varied results. The script is appropriate for each character as Hirsch acts nervously around Cynthia and feels awkward about starting conversations; whereas, Alan always knows what to say and he believes that by unbuttoning his shirt, Cynthia will go to bed with him.
The play examines the difference between sex with and without love. Alan portrays the character who goes to bed with Cynthia and later tries to get to know her better and Hirsch is the character who wanders in a blizzard in search of a prostitute and later describes having sex with her a "unfulfilling $\ldots$ as if she wasn't there".
The characters of Hirsch and Alan seem realistic as a result of great acting and script; however, Cynthia's character is not as developed as Hirsch and Alan. However, all three characters remind me of some qualities of people I know, including myself. The script provides some realistic dialogue, contributing to the realism of the characters. The play is a very good comedy and therefore I recommend Mayonnaise (sorry, no rating). Tickets are a mere $\$ 4$ and are on sale at the door. Mayonnaise is playing tonight and tomorrow at 8:00 in Room 180 in Hagey Hall.

Dr. Movies

## ped 89-90 Student Handbook

A Review

Two years ago I had the opportunity to crucify Mike Brown's effort at the $87-88$ Fed Date Book. This year, however, I have found that Steve McCutcheon and Martin Cinzan's effort is almost flawless.

My largest beef with the 87-88 edition had been the advertisements. The placement had been atrocious, and the sheer number of ads was mind boggling. Steve and Martin have, however, managed to keep the number of ads down to a number smaller than I thought could have been possible.

Although I would have liked to see a month at a glance at the start of each month, the list of the days in the month is still far superior to the 8 day week month at a glance in the $87-88$ edition.
The only beef that I had then that I still have now, is the lack of Faculty (ie. Math Undergrad Office), Student Society and Club phone numbers.

I again would like to congratulate Steve and Martin for a job well done (see mathNEWS staff members don't always have bad things to say about the Feds.) I however feel sorry for whomever is going to have to fill in your shoes next year. It will be tough to beat this one.

HobGoblin

## A Battle of Conscience:

A Review of Casualties of War

Welcome frosh and welcome back normal students. Just when you thought it was safe to enter theatres alone, I return for another term of movie reviews. After spending numerous Tuesdays and weekends in Ottawa's theatres, I'm prepared to spend a considerable amount of time in KW's theatres (who needs to study anyways). Unfortunately, the movie scene in KW looks bleak at the moment; for example, King's College Square is re-releasing Road House and Star Trek V. However, such movies as Blue Steel and Black Rain will hopefully be coming to KW this month. All I can say is let the movies roll (the pun was intentional).

Casualties of War is director Brian DePalma's latest film, which is based on a true story that was reported in The New Yorker in 1969. The movie focuses on the actions and members of a unit during the Vietnam war, in particular the inexperienced Private Eriksson (Micheal J. Fox) and Vietcong hating Sergeant Meserve (Sean Penn). The movie begins like any war movie, but it become more serious when several members of the unit kidnap, rape, and kill a Vietnamese women. The first scenario introduces the characters and environment as well as providing some character development; whereas, the second section is the real meat of the movie when Eriksson battles with his conscience and tries to help the Vietnamese female, while befriending his unit. The movie also criticises the army, since Eriksson informs his superiors about the incident, but they do nothing and try to convince Eriksson to keep quiet so that the army avoids bad publicity.

DePalma blends the two sections of the movie well. Although the audience may feel like they are watching another war movie, the first part provides a springboard to show the tensions of war as soldiers watch an overzealous, inexperienced soldier step on a land mine and view a member of the unit being killed by a sniper. This section shows more of the pressures involved in Eriksson's decision and provides a good introduction to the kidnapping. The great acting, including Fox and Penn, adds more depth and intrigue to the movie. The only item that is bad about the movie is the ending. Screen writer, David Rabe, created an ending that almost resembled a horror movie ending and as a result I was waiting for Jason or Freddy to suddenly appear on the screen and start slashing people, killing the movie's accomplishments. Fortunately, my expectations were wrong, but the actual ending left the movie on a sour note. As a result, Casualties of War is a great movie until the ending and therefore I give the movie an 8 out of 10 .

Dr. Movies

## DOCTOR SQUID RETURNS..

with a fashion update

From a wonderful summer in Ottawa, live from the runways in RedFrom a wonderful summer in Ottawa, live from the runways in Red-
mond, Washington, it's Dr. Squid with this term's squid fashion update. (Dr. Squid has switched to arts, finally.) Today the cosmopolitan squid makes its debut.
This year's squid is wearing designer pocket protection fully equipped with the latest in translucent calculators. Pockets are back in style with a delightful variety of cropped polyester trousers colour-coordinated with the C-language reference manual. Oh look, this one's wearing eigenvector underwear! Marvelous work, Alfred.
Ladies and gentlemen, a quick glance to the left runway suggests that red and yellow ties are not immune from the aquatic kingdom this fall. Calvin's even introduced the grey flannel suit to his Squid Collection.
Remember kids, be a squid or just look like one. Dr. Squid is watching you!

## Vapid Fire

If it's not in by 7, we make it up

- A surprise visitor made himself present at last week's math orientation casino night at Fed Hall. Disgraced Cincinnati Reds' manager Pete Rose was described by blackjack dealers and roulette operators as "addicted and obsessive" as he gambled for four straight hours, winning close to $\$ 200000$ in "lucky money". He was ejected from Fed Hall at around midnight that evening when, at the roulette wheel, he bet on "red".
- Finance Minister Michael Wilson awoke early Friday morning astonished to find himself surrounded by a sea of pink ties and shirts on the third floor of the Math building, much to the delight of orientation members and their frosh. Wilson was a key item in last week's scavenger hunt, and had been "borrowed" from Ottawa by the team that eventually went on to win. When Wilson tried to tax the team members $9 \%$ of their total points, he was thrown off of the balcony.
- Waterloo mayor Brian Turnbull recently announced the creation of a new department called the Student Busters. This department is headed by Mr. R.U. Goneyet, and according to him, the plan of attack is "... quite simple. We'll just ban students from living in the KW area, charge students higher prices, and reduce bus services so that they can't attend class." According to Goneyet, the motto for the department is "Every neighbourhood should have a student as long as it's not my neighbourhood."
- According to a recent mathNEWS poll, EngSoc wasted money printing "DUMB FROSH" on the engineering frosh shirts since "dumb engineering frosh" is redundant. This outcome is supported by the fact that all engineers are dumb.
- Last week, Kitchener Transit followed TTC's lead by conducting a severe work slowdown. However, the presidents of the union for the KT bus drivers is severely upset that passengers haven't noticed any significant change in the service.
- Ontario health minister Dr. Seuss has blasted Kitchener Transit over its new slogan "Cheat on your car, have a love affair with the bus." saying it will promote the spread of AIDS. KT countered this by announcing that pamphlets outlining safe bus riding habits will be distributed on all vehicles.

The Mediæval Gladiator, Vapid Flunky and the Procrastinator

## mathNEWS Wants You!

Are you bored? Are you wondering if there is more to life than transcendental functions? Or are you just frosh and don't know any better? Well, if you said yes to any of these questions, then math NEWS is for you. Come on out to our official meeting on Wednesday, September 20th at $4: 30$ in the MathSoc office (that's MC 3038.)
Come on out and see if Karen and Don will tapdance on each other (sorry Bruce.) We need people to write, type, and layout articles. If you are really ambitious we can even show you how to use Latex.
We will be going to Fred's Mall (that's Fed Hall for you frosh) for supper and drinks afterwards, so come on out and sign-up.

Rick McTavish mathNEWSEx-editor

## Best of Last Term

## Watman and Duck Sued!

K-W's favourite caped crusaders were arrested yesterday pending a hearing for copyright infringement. DC Comics has launched a suit against Watman claiming that he has copied their famous "Batman" character. DC Editor-in-chief and President Kubla Khan say, "If some two-bit Canuk Vigilantes think that they can steal our ideas then they have another thing coming."

Watman would not comment but his estimable side-kick, the fowlwonder, Duck was heard saying, "Holy Crooked Comics!" as he slapped his fist into his hand, "What has today's society come to if a kind and generous man can be sued for being the best darn person in the whole world!"

K-W's police commissioner was quoted as saying, "This is a dark day for Kitchener and Waterloo and a blow to crime fighters everywhere."

The Grey Pilgrim

## Life Chemicals Inc.

Those assignments getting you down? Can't understand your prof? Can understand your prof!? We have pills to solve these problems and more.
Need more time to study? We can wake you up. Need more sleep? We can put you out in a wink.

Join the wave of the future. Live the chemical way. New break throughs in chemistry allow us to actually increase brain power through a program of drug use. The most successful Olympic athletes use these, why not you?

> Better Living Through Chemistry

Timothy Leary II

> FREE BURGER

With the purchase of a similar burger, with this coupon.


VALID ONLY ON REGULAR PRICED ITEMS
Expires Oct. 15, 1989

## The Stanley Burger Philosophy



At Stanley's we believe that each customer deserves a great tasting, wholesome meal. Every item on our menu is prepared the olde-fashioned way using only fresh, nutritious ingredients. Our burgers are made with $100 \%$ pure beef, all-natural spices, no added preservatives and are served on bakery fresh buns. We take pride in putting only the best into everything we make.

Experience the Difference of a Fresh Home Made Burger
210 King St. N. Waterloo

## THE GAMES CORNER

Tired of chess and checkers? The Games Corner is a series on games that can be played using equipment already available (so it should fit a student's budget). The column should appear every issue, subject to time, space, and pizza.

Halma is a game invented in 1883 by George Howard Monks, a British surgeon. It was introduced to North America in 1938 by Parker Brothers, but it never caught on. A variant of the game was introduced in the 1930's under the name Chinese Checkers.

Halma is based on moving counters rather than capturing as in checkers and chess. Traditionally, Halma uses a square board with 16 squares on a side (so it can be made using four $8 \times 8$ boards). If there are two players, each begins by placing 19 counters in a section called the yard (note that the counters are identical except that the two sets are of different colours, so checkers or chess pawns can be used). As can be seen from the diagram, there are two yards, one at the top left corner and the other at the bottom right corner. The goal is to occupy the other player's yard, with the first player to accomplish this winning the game. There are only two move types allowed:
(1) A "step." This is a move to any of the eight adjoining squares (like the move of the chess king).
(2) A "hop." This is a jump over another counter (any colour), as in checkers, except the jump is in any direction (orthogonal and diagonal), and the jumped piece is not removed.

If a player makes a hop move, the counter can continue to hop other pieces as long as possible (as in a multiple checker jump) or stop wherever desired. Note that the connected chain of hops counts as one move. It is not compulsory to make a hop move if one is available. Steps and hops may not be combined in the same move. Players alternate turns, moving one counter at a time.

Halma can also be played by four people, each player having 13 counters in one of the corner yards (note that 4 sets of different counters are now required). The yards are shown in the diagram by the broken lines. The four-player game can be played with each player against all the other players, or pairs of players can act as a team (in which case, the first team to place all 26 counters in the appropriate yards wins).

To prevent a stalemate occurring because a player is permanently leaving a counter in their yard, a few extra rules are added. If a counter can leave its yard by jumping an enemy counter, or by a chain of hops that starts with a jump over an enemy counter, then the piece must do so, although once out of the yard it can stop hopping. After a counter has left its yard, it may not rest in the yard again, though it may move through it.

A simpler version of the game that uses an $8 \times 8$ board and 10 counters per player, called Grasshopper, is shown in the second figure.

## Shadow Dragon

## An Apology

We at mathNEWS would like to apologize for the lack of a sexual awareness pullout in this issue. The staff member who destroyed the original is currently taking an extremely cold shower. The pullout's cutouts made him so excited that he drooled all over it, making it unreadable.

We again apologize.
HobGoblin


The Grasshopper Board


The Halma Board

## Arts Goes The World

Johnny failed Calculus
Jenny failed Stats
Name of the programme was Honours Math
Everybody tell me, have you heard?
Arts Goes The World.
Johnny \& Jenny getting smart it seems
Make the switch to the Rec/Arts scene
Where every course is a bird
Arts Goes The World
And every time they wonder
If the switch was right
They end up in Fed Hall
Dancing All Night
Johnny \& Jenny are feeling rather sad
Since they're both now working for Mathie Grads
Their decision was so absurd
Arts Goes The World

## The Musịc Man's Modern Dictionary

The last few years of progress (?) and technical advancement (??) have provided us with a redefinition of some terms from the old days. For those of you who may not have kept up with the developments, here are some of the new commonly accepted meanings:
synthesizer a programmable device which allows the user to fake a small amount of musical talent and/or knowledge
alternative music a conglomeration of noises providing an alternative for people to listen to who have little or no interest in music
drum box the container which the original drum set came in, it is often banged against the wall as a percussion instrument by people who can't afford (or more often, understand) the real thing
bass an instrument for providing a good driving beat for the song, it is easily distinguishable as it is usually played ten times as loud as any other instrument
harmony a collection of notes and/or chords which, along with the bass line, provides a good but simple rhythmic foundation for a song
melody the real meat of the song, it sets a complicated pattern which is pleasing to the ear, and distinguishes it from other songs. Note: not in popular use today.
solo a long period of time during which only one musician plays, showcasing his talent while the other band members grab a beer
guitar a musical instrument often used to produce the melody or a solo, it has been mastered by very few musicians. It is extremely versatile and can be played with the teeth, the edge of a chair, by banging it against a speaker, or occasionally with a pick.
musical speaker a device which emits loud noises which are pleasing to the ear-not to be confused with a political speaker
musicians a bunch of guys who make millions of dollars by standing on stage and having fun
critics a bunch of guys who lack the talent to become musicians, and resent it. They take out their frustrations by attacking those who are better than they, and supporting those who are inferior to anyone else.
rating scale a complicated method invented by critics by which to give a numerical value to a group. To get the real rating, square the indicated value, take the reciprocal, and multiply by 10.
rag 1. a form of jazz music, 2. any publication employing critics with a particularly stupid rating scale.
rock ' $\mathbf{n}$ ' roll an ancient form of music which has been restricted in modern times to home stereos, St. Catharines radio stations, and some nights at the Bomber
thrash a sequence of noises made at extremely high speed - mainly found in homes of young teenagers
trash a sequence of noises made at seemingly random speed and frequency - found at Fed hall and other "modern institutions" for the musically bewildered

## Policy Leak

From reliable sources, mathNEWS has obtained the following secret document from the CS department:
CS assignment policies
For Staff use only

- Explicitly ask for simple and short algorithms. However, ensure that the test programs and driver routines are at least twice as long as the required algorithm, and orders of magnitude more complicated. Make no mention of this extra code in the assignment. This would make the assignment appear unfairly long. Simply ask for the algorithm to be thoroughly tested. Let the student find out what this involves-remember University is a place for learning.
- Documentation: Do not dispel the aura of mystery which surrounds this part of the assignment. Assure students you will instruct them when to provide documentation. Never mention the matter again. Give the impression that a full-fledged manual is required for even the smallest assignment question. Typically, students will panic, and produce documentation until their hands hurt. This is a good work-out, so you shouldn't feel bad. You may also wish to point out, when the assignments have been handed in, that all this paper will surely kill Canadian forests. A guilt-ridden student pays more attention in class.
- Ensure that the marking scheme contains some obscure points, so that no student will obtain perfect marks. Research shows that students will, on average, only spend 20 hours on a CS assignment. Such a small commitment must not be rewarded with high grades. Give a list of specific items to be included in the output. Allocate marks for items which are NOT on this list.
- Advanced mathematics form the basis for interesting numerical analysis algorithms. Your students may not be familiar with the concepts, so you may wish to give a brief (very brief) explanation on the assignment hand-out. A more detailed explanation may be given in class, after the assignment due date.
- Do not waste your time wording the questions. Invent your own terminology or change conventional definitions to suit your needs. The student can figure the question out for him/herself. Remember, University is a place for learning. Note: this rule applies to midterms too.


## New Math Building Proposed; To Be Called The TieDome!



## Courses About Which You Should Know

It may seem a little confusing at first, for those of you just arriving on the campus for you first time, wide eyed and keen to begin, that the course calendar is, well, unreadable. Don't worry, this problem has been noticed in the past, and we here at mathNEWS felt that we should enlighten our new readers as to the courses available at our fine institution. So before you go changing any more courses, sit back and learn about what you are in for with the MATHNEWS COURSE CALENDAR.
PMATH 377 This is one of the favourite courses for third year students in religious studies fields. In fact. Post Modern American Theology (Honours) is a favourite with all students who wish to learn about the religious trends in the nuclear holocaust which will end the modern era, at least according to Prof. Ray D. Ation, who has been teaching the course for the past 5 terms. Topics include "How to pray that the bomb won't get you.", "The joy of X-rays.", and special field trip of Jim and Tammy Bakker's fallout shelter. Those wishing to enroll in the class must pay a lab fee of $\$ 45.00$, which covers the gas mask and lead underwear. Classes are held each Wednesday night at the bomb shelter.

STAT 234 If you have ever felt the need to be able to better help your fellow man, Surgery Techniques And Therapy is for you. From simple topics like Gall Stones to Appendicitis, you will quickly move up through the spinal column to the brain. Amaze your friends and family with your quick reflexes and razor sharp surgical instrumens the next time somebody needs help. Why pay OHIP when you can do it yourself for half the cost?
AM 673 While this is a grad course, Advance Masochism is perhaps one of the few such courses where undergrads are admitted. Of course, for those few undergrads, there is the requirement of being able to spend hours in the lab on projects which are usually controlled by, well, not you. If you thought that C\&O 230 was a course that beat you over the head, let this course beat you over the rest of your body. We're looking for a few good frosh.

CS 476 Many theatre studies students find their hardest course to be Cosmetic Science. Not for powder-puffs, this course is a hardhitting, lip-stick it to ya' kind of course. Topics for the term include the morning application course (the pancake breakfast), the hair care clinic (the uses and abuses of mousses), and the optical application class (a real eye-opener for some). Of course, for any students who have difficulty with this subject, there will be a make-up exam.

## C\&O 274 A must for political science majors, Confusionatorics And

 Obfuscation 274 is the course for the person who wishes to find a high paying job with the civil service. Includes such topics as "How to use 100 words and 5 sentences to convey 1 idea of 0 value.", "Making the most of you lack of talent.", and "Red tape and how to stick it to people." Recent graduates had this to say of the course:I am deeply honoured to have this beautiful building, a wonder of modern architecture, bearing my name into perpetuity.

## Bill Davis

Given the current situation, and the present train of thought, I feel, as soon as possible, so that the situation is resolved, and that the action I just specified is the best available option, as is plainly visible. member of the Department of External Affairs
One finger up!

## Pierre Trudeau

STAT 234L (Lab section) Earn money in your spare time as an experimental subject for STAT 234. This is a one-time only commitment, and gives you complete exemption from exams for the rest of the term (probably longer...)

Remember, at the University of Waterloo, an informed consumer is our best customer.

Marshall Mellow

## Masthead

Hey there, we're back and ready for another term of prof quotes, parodies, and other general slander here at mathNEWS - we haven't been sued yet! And as usual, we've started off with a bang as imagen disappeared at the the crucial 10 PM on Monday night (it's traditionformatters and laser printers are always down for a new editor's first night. So production night stretched to production the day after. .

Anyway, enough complaining-wouldn't want to scare you all away from coming out to help next production night. First things first, we are a new editor this term, and we would welcome any help and Oreos. Mostly Oreos. Actually we are already welcoming and appreciating very very very very much the help of Rick (our old editor who we still like a hell of a lot) McTavish and Stephen (another old old old old (well maybe not that old) editor we also kind of like (well maybe also a hell of a lot)) Smith. These two incredibly wonderful people hung over our shoulders and did all kinds of neat magical wizardry and imparted some of their past knowledge unto us, and even paid in part for this article you now read (Oreos guys...)

All this we stuff, by the way, is not some egotistical sort of royal gibberish. Rather we are in fact a wee we, or at least some of us in comparison to other of us are kind of wee, but we are a we, even if some of us are rather not wee (well, what would you call six foot six?) (sir). An edity, or a co-ed. A he and she we, or an it, or any combination or the above which is egalitarian and non-sexist, genderless, singular, etc, etc, etc. As long as we don't get sued.

Anyway, on to the important stuff, the stuff which we put in because we believe the idea of seeing one's name in print may induce people to come spend their Monday evenings with us. We are amused by and indebted to various persons who came out to snarf pizza and generally help out, and here in living black and white are their names and least favourite colour of Smarties. David Weil (fuschia, puce); Rob Del Mundo (green-those ones aren't ripe yet); Stephen Sproule (yellowthey remind me of engineers); Mark Kerbel (black-black flagged? what did I do?!?!); John Thoms (black-I never seem to be able to find them, same with white); David Nuttall (all); Tina Klein (Smarties????); Rick McTavish (I don't dislike any of them!); The Scammer (radioactive green. . They don't taste good!); Rob Armstrong (the ones with the little m's on them!); Trevor Green (white-looks too much like Aspirin); Brian Marshall (blonde-how can they be Smarties?); Shadow Dragon (red-since the red dye makes a great terrorist bomb); Roger Maxwell (all of them-I like M\&M's); James Coleman (red-don't they give you cancer or something?); Stephen Smith (all Smarties are evil, as are those who consume them).

And of course we could thank ourselves but that would be presumptuous so here's our least favorite colour of Smarties: Don Marks (Village Carpet Green) and Karen Smith (blue-they counteract the aphrodisiac affect of the red ones). We will thank Graphic Services and Gino's Pizza. And now we will go.

Don Karen Marksmith, wee editor at large

## mathNEWSquiz \#1

Greetings fellow Waterloo Mathies. Hope you all had a great sum$\mathrm{mer} /$ work term. But now it's time to get back to the grind of (Yecch!) classes. Of course, one great advantage to school starting up again is the return of the highly acclaimed Squiz. For those of you who are either unfamiliar with the Squiz, or had too great a summer to remember, the rules are simple. Submit your name/pseudonym into the BLACK BOX on the third floor of the Math building by 7:00 p.m. on the next production night (Monday, September 25). The person with the highest number of correct answers wins a dandy prize from mathNEWS. So let's start off with another term of super stumpers!

Baseball

1. What have Julio Franco, Jim Traber and Roberto Kelly all done to the disgust of Blue Jays fans everywhere?
2. What was Orel Hershiser's E.R.A. over the 1988 World Series (won by Los Angeles 4 games to 1) ?
3. Against which major league team does pitching legend Nolan Ryan have the fewest strikeouts?
4. Who was the only major league player to hit more home runs in 1987 than George Bell's 47 ?

## Comic Strips

1. Which Bloom County character won the Mr. America pageant, only to be disgraced when nude photos of him appeared in National Geographic?
2. What is Peppermint Patty's last name in the Peanuts comic strip?
3. Name the four children of Hi and Lois, in the comic strip by Mort Walker and Dik Browne?
4. The son of Alice and Henry Mitchell has a nickname to aptly fit his personality. Who is he?

## CIAU Sport

With which Canadian University would you associate the following team nicknames?

1. Golden Gaels
2. Huskies
3. Marauders
4. Thunderbirds

## Beatles

1. A deranged fan shocked the world on December 8,1980 by fatally shooting John Lennon. What was his name?
2. On April 27, 1964, The Beatles held each of the top five positions on the Billboard's top 100 , including a song that leaped from \#27 to \#1. Name it.
3. Which police force is depicted on the patch on Paul McCartney's left sleeve in the centerfold picture of the Sgt. Pepper album?
4. Which song was banned from the BBC airwaves because of the line "I'd love to turn you on"?

## GridWord Know-How

The purpose of this article is to explain the nature of the odd white and black boxes which appear on the back of the paper, and to inform those more knowledgable of the idiosyncrasies of the GridMaster.
The GridWords are crossword puzzles for which cryptic and conventional clues are provided. Be warned, though, that the solutions resulting from each set of clues are different.

The conventional will be familiar, but it is not easy because of the lower word density in the grid. The cryptic, however, is not the standard crossword that readers of the New York Times will recognise. The Gridmaster is somewhat of a neophyte and is not up to producing something of that standard. The following guide is intended to clarify the clues.

The clues themselves give two definitions for the word: a direct definition and a cryptic definition. This may make the clues sound easy (WOW, two clues for every word!) but the trick is separating the definitions within the clues. At the end of the clue, the length of the word(s) in the solution is given.

When you first read through the clues you may find that some of them are quite silly or nonsensical. They will make sense (hopefully) when you decipher them. The following is a list of types of clues including key words to look for and examples of each type. Note that a clue may be any one or more of these types:

Anagrams One or more words in the clue are jumbled to give the solution. Key words: scrambled, mixed, to, so, around, about, sorted, scattered, confused, etc.
eg. "A beat to slow down" = ABATE jumbled from A BEAT
Construction Assemble the answer from parts of the clues. Key words-lead, start, follow, after, before, on, etc.
'He was the first to build a water barrier' = ADAM, ie. built from A DAM

Double clues Two definitions are given for the word. eg. "An article of French tea" $=$ THE which is an article and which also is the French word for "tea".

Alterations Split words up or switch words around. Key words in, around, split, cut, about, turn, back, up, etc.
eg. "Content and very quiet in the hay" $=$ HAPPY
ie. $\mathrm{PP}=$ pianissimo contained in HAY.
Dropping letters Drop a letter from a word Keywords headless, tailless, etc.
eg. "The head of the host was lost to the wealthy bird" $=$ OSTRICH
ie. HOST lost H added to RICH.
Hidden The answer is hidden in the letters of the clue.
eg. "The band is tantalising from afar" = DISTANT; from banD IS TANTalising.
Other instructions Look for other words that may indicate how to construct the solution.
eg. "Every other oblong marsh" $=$ BOG which is every other letter of oBlOnG.

Even after reading these instructions, you may find that GridWords are quite discouraging. Reading the clues through for the first time may not produce any results. However, going back over them, looking for key words and fiddling things around in your head should allow you to get most answers. Remember, perseverance is the key to successful GridWording!

## Cryptic

## Origin of the Grid

## Revival of the Griddest

This is my inaugural (well, sort of) Grid as GridMaster. During the summer we bade farewell to CYBERman and PSYDA (off to warmer climes) and it falls to me to maintain the tradition. Maybe someone will tell me just what, exactly, that is. I decided, at the end of August when I was gung-ho on making Grids, to try to do both conventional and cryptic Grids. Number of submissions and my level of enthusiasm will determine if this continues.

Solutions may be submitted in the BLACK BOX (MC $3^{\text {rd }}$ floor, across from the comfy lounge) or put under the door of the mathNEWS office (MC 3041). Next production night (the $25^{\text {th }}$ ), two winners will be drawn from the set of correct solutions for the cryptic and conventional Grids. Everyone who submits a solution will get to have their nym (or pseudonym) in mathNEWS and the winners will each receive a phabulous prize. (I think. I haven't checked yet.) A solution for this fornight's GridWord will appear in the next issue of mathNEWS along with a brand new Grid.

I hope the Grid suits. I won't ask for feedback because I shall undoubtedly receive it anyway, Good Gridding...

Lord S'Djawkheril


> Name:
> Favourite Xenomorph:

## Across

1. Record it mixed for the one you owe (8)
2. Separate a portion (5)
3. The abstruse and obscure besot Eric (8)
4. One French lake around one artery (5)
5. Drain the metric tailless communications device (6)
6. Bank help speak with hesitations (7)
7. Redact a particle version (7)
8. Extrapolate French from split (6)
9. Decision makers of a scrambled mind (5)
10. Allergen below red, rave about the object (8)
11. Proclamation directing a short word book (5)
12. Ocular, pustules of ugly edifices (8)

## Down

2. Retract the altered cinders (7)
3. Nationality to share expenses (5)
4. A monitor in top of a major city (7)
5. Current in a deceiver's back is the root of

South Africa's problems (6)
6. Lampoon the continental fatigue (6)
7. Branches in the boonies (6)
13. Approve the termination of the headless animal (7)
14. Income about the location (7)
15. Rubber from the time of directed hesitation (6)
16. I'm a pen, metrical foot (6)
17. Light the arrangement I tinge (6)
19. A fraction of this rodent is a Jovian moon (5)

## Conventional

## Across

1. Argued
2. Pastoral
3. Abandon
4. Lessen
5. Go pale
6. River mouth
7. Recess
8. Opprobrium
9. Monocoherent (light)
10. Outside
11. Conjecture
12. Exciting book

## Down

2. Valetudinarian
3. Hickory nut
4. Instructor
5. Fantasised
6. Fleet
7. Tired
8. Brandy glass
9. Run amok
10. Assert
11. Court fool
12. Turmoil
13. Wild

Comment: $\qquad$

