## Record Breaker

This mathNEWS that you are now reading definitely is a record-breaker. Not only is it the largest mathNEWS ever (by four pages), with its 18 pages, but it also is the ninth issue of the summer term. This exceeds our previous record for summer issues by two.

Since we had photon problems in late July we decided to combine the last scheduled regular issue of the term with the frosh issue. Thus, in a slight break from tradition, the frosh issue will be distributed on campus, as well as to the frosh and the mathNEWS
subscribers. However since this issue appears so late, few people on campus will actually see it\}. Well c'est la vie .

The double issue explains partly why the paper is so big. However, we would have probably have had a large frosh issue anyway, because of the large number of submissions we received. In fact there was some material that we could fit in, and other material that we didn't receive on time. Everyone who worked on this issue or contributed articles, must be thanked for their contributions.

We hope that this increased quantity will also lead to increased quality. Your feedback on this issue is welcome. If you have any comments or would like to help, the first production meeting of the fall term will be Tuesday September 5 th at 7 pm in MathSoc(MC 3038). (I will finish my term as co-editor after that meeting.). The first issue of the fall term will appear the following Friday or Monday.
-jijlong co-editor

Friday, August 11, 1978

## Volume 17, Number 9

## Frosh Issue Number 6

## math NWWN

## MathSoc Frosh Buffet

The annual MathSoc C\&D Frosh Buffet will be held on Friday, September 8th, 1978 from 12:00 noon to $2: 00 \mathrm{pm}$ in MC 5136 (the Math Faculty Lounge). All are welcome, especially Math Frosh.

As is the usual custom at MathSoc Buffets, we will serving such foods as Roast Beff, Turkey, Corned Beef, Potato Salad, Lettuce Salad, Pickles, Olives, Celery, Jelly Desserts, and Bread Rolls. For your convenience free coffee and tea will be provided. We are also attempting to arrange for a cash bar.

A large crowd is expected. Get there early. Tickets will be sold at the door for the follwing prices:

> MathSoc members Math faculty, staff, grads $\$ 2.50$

Others $\$ 3.00$

Federation members
50 cents off

Any Math frosh wearing a Math Frosh 1978 t-shirt (available at MathSoc, and at the door of the buffet) will be entitled to FREE ADMISSION to the Buffet.

Also any official participants in the Math Faculty's orientation program will also be entitled to Free Admission.

Please attend and enjoy a good meal and a good time. It is a great way to get involved in MathSoc, and meet fellow frosh, other students, and profs.
JJ Long
Retiring C\&D Manager

## The Dope on the Ottawa Pubs

1. Expected Frequency and Day of the Week
-every second week, on a Thursday evening.
2. Possible Locations in Ottawa
-Blind Pig (very possible)
-Elaine's
-Black Swan
-Carleton and University of Ottawa
-Molly McGuire's
-Sly Fox
-Fife and Drum
-Bayshore Motel
3. Possible Locations Across the River (Hull)
-Pubs Are Open till 3 am
-Disco Viva
-Chaudiere (Don't Go Downstairs!) -Etc

## 4. First Pub

-To be held at the Blind Pig in the Holiday Inn on Queen St. -first pub is always the best -Thursday, September 7th

## 5. Pub Phone

-should be operational Sept. 1st -new message after each pub
-in Ottawa call 596-4321 (Rick McMullan) if and only if pub phone fails -pub phone 521-9065.

## THE WANDERERS OF TUMINOR PART FOUR

Braggan carefully looked his companions over while the last Pter, with Lacdria aboard, wheeled its way toward a landing on the rocky outcropping. The three human fighters looked extremely strong, a factor which Braggan would have to take into account later on. He turned his observations inward, toward the dark interior of the cave, but couldn't make out much detail beyond a thirty foot radius.

There was a slight commotion behind him as Tandor got the Pters settled. With that task completed, the group moved as one into the cavern.

Lacdria and Nimidor, whose keen cat-like sight could cut through the inky blackness were now giving an account of the cave. It was roughly round in shape with the back end not more than about fifty feet away, the floor was covered with silt and Pter droppings and little else.

The humans and hobbits in the group were not blessed with night-vision and so were dipping their torch-ends in oil.

There was a sparkling like fireflies in the night as tinderboxes were opened and touched to the wet torch ends. Then the gloom was cut away with a roaring of flame.

Tandor was sweeping his torch back and forth in an attempt to take in as much of the cavern as possible.
"This is the Southern tower." he said quietly. "I've never been here before."

Braggan whirled about.
"Then why sir, did you not instruct your dinosaurs to land us at the other tower?"

Tandor scratched his head in thought.
"I don't know, it just seemed natural."

Lacdria looked thoughtful.
"It would appear that the Black Wizard wants us in this tower." He glanced around at the bare rock walls. "And for now we shall just have to do as he wishes."

This announcement had a somewhat unsettling effect on the group, as they fanned out about the cavern to search for some passageway that would lead them deeper into the tower. After about five minutes of fumbling about, Gabriel, one of the elves, called out.
"Over here! Everyone come, I sense something!"

As one, the entire company moved toward the corner where the small elf stood running his fingers over the rough rock wall. As soon as Lacdria, the party's other elf came close, he confirmed that he too could sense something. A moment later there was a click of a latch and a door-sized section

## of rock swung aside.

Before them stretched about thirty feet of smoothly tunnled corridor which then angled sharply to the left. Instinctively the group dropped into a battle formation with Tandor and Wandorf taking the lead, and Idris guarding the back of their entourage. They advanced into the corridor.

As they reached the bend before them, Nimidor heard a grinding sound and turned to see the passageway sealing off behind them. Idris gave a shout, then rushed back and grabbed the leading edge of the rock door. Muscles strained, joints popped and cracked, but the rock slid relentlessly into place, shoving the giant fighter aside without notice.
"We're sealed off!" Mysticum cried. "Trapped!"

In the darkness Braggan gave a wry smile.
"Would this have happened had we landed at the proper tower?"

No-one bothered to reply.
It took Lacdria but a moment to calm Mysticum down, then the group was once again on its way down the twisting corridor.

As they rounded another bend, the tunnel ended abruptly, closing off in a blank wall with two doors in the adjacent walls. Both were locked so Tandor flipped a gold piece and kicked down the one on the right.

With a crash of splintering wood, the door flew open, pulling loose from one of its hinges and twisting the other into uselessness. Through the opening left behind, warm, moist air wafted out. Nimidor sniffed at it and almost vomited there was a stench of decay.

Side-by-side Tandor and Wandorf stepped through the doorway.

Inside it was a room, roughly twenty feet square. In one corner lay a mound of sacks, half of which had been ripped open, and the grain they held spilt on the floor. Lying atop the sacks were three skeletons.

Two of them had been dead a long time, their bones yellow, and clean of flesh. The third was responsible for the putrid odour of the room. From the shape of the body he must have been human, but no other distinguishing features remained. The body was half decayed and there were spots where rats had evidently been feasting.

Mysticum ran from the room and sounds of retching could be heard from the corridor outside. A few moments later, Nimidor and Gabriel followed him.

The other two must have fought to their death, for they still gripped their swords firmly in bony-knobbed fists. Tandor made to give one of the skeletons a poke with his sword when
suddenly its thin brittle arm swept up and parried his blade aside. The skull-head gave a blood curdling scream then with a rattling of bones, the denizen lept at him. Tandor was so shaken that the first blow landed, but was turned aside by his armour. Beside him he heard the clash of metal-on-metal and saw that the other skeleton had lept up to engage Wandorf, the third remaining mercifully inanimate.

The skeleton feinted for Tandor's breastplate then carried the swing up toward his face. Tandor managed to jerk his head back in time to prevent decapitation, but the demon's blade still drew a stinging line accross his cheek. Now, though, the skeleton was at a disadvantage. Having brought his swing upward, he'd left the rest of his body exposed.

Tandor brought his sword down full force and was rewarded by a snapping sound as he tore through the creature's ribcage. It clattered to the floor, a now-lifeless heap of bones.

To Tandor's right, Wandorf was still engaged in combat, but a few moments later, he too had dispatched with his opponent.

The sounds of battle had brought Nimidor, Mysticum and Gabriel running back to the room to hover uncertainly in the doorway with the rest of the group. The battle had been so short that no-one else had had time to react, Idris though, was still concientiously guarding the group's rear.

Tandor wiped his blade on one of the sacks then sheathed it with a ringing of fine steel.
"They are dead." he said evenly. "Let us be on our way now." He made to leave the room but was stopped by Malight, the cleric.
"There is much evil in this... dungeon." he said. "And yet you still wish to continue?"

Tandor peered intently into the cleric's eyes.
"We have little choice, there can be no turning back now that the passage has sealed off behind us. No, your only way out now is to help me free my Master."

No-one said anything. It was all too true.

## (TO BE CONTINUED)



## A Note to the Frosh

First off, I would like to congratulate you on reading the best paper (newsrag?) on campus! Secondly, I am inviting you to come on down to Mathsoc. MathSoc (Math Society) is the somewhat messy, D\&D (Dungeons and Dragons) and Bridge filled room where this paper is devised and where most of the activities you will be doing in Math are planned. It it the best place around to make friends and to all round enjoy yourself. It has a warm friendly atmosphere and you're always welcome. So, just give us a call and become a real MathSochist (MATHSOCHIST?). MathSoc is located across from the third floor lounge, in room MC 3038.

I would also like to invite all of you to write or type an article or two for mathNEWS. Any help is eagerly accepted, if not jumped at. It is hard to produce such a high-quality literary marvel /Alex White: HaHa!] each week without the combined effort of many
people. So any of you frosh with any writing talent, please speak up and give us a hand.

As proof of what I claim, I, believe it or not, am not even a frosh. I am a pre-frosh, not quite in grade 13 yet. I found many very helpful people at MathSoc, and have the time of my life here. Although I am fully devoid of any writing talents, I still manage to help (I hope it is help) to put out a mathNEWS now and then, and it is downright FUN!

So when you get here in September, make the first thing on your agenda a stop at MathSoc. It'll be the best thing you ever did.

One last comment. If any of you frosh get lost, just look for people wearing a T -shirt with a tent and the words "I Help Frosh" on it. They are there to help you in any way they can.
jsgray
resident pre-frosh

## Relatively Speaking

I married a widow who had a grown-up daughter. My father, who visited us quite often, fell in love with my step-daughter and married her. Hence, my father became my son-in-law, and my step-daughter became my mother. Some months later, my wife gave birth to a son, who became the brother-in-law of my father as well as my uncle. The wife of my father, that is my step-daughter, also had a son. Thereby, I got a brother and at the same time a grandson. My wife is my grandmother, since she is my mother's mother. Hence, I am my wife's husband and at the same time her step-grandson; in other words, I am my own grandfather.
Stolen from "Algorithms + Data Structures $=$ Programs" by Niklaus Wirth.




This will be a short column this week as I am busy compiling the results of the last mathNEWS questionnaire (they should be elsewhere in this issue if I get finished in time).
A Man Called Intrepid: The Secret War by William Stevenson $(\$ 2.25)$. This is a nonfiction work which I picked up secondhand for 50 cents (visiting secondhand stores is a worthwhile activity!). This is a book primarily about Allied secret intelligence operations before and during World War II. This is a book well worth reading as it lets you take an entirely different look at this conflict of nations. RECOMMENDED.
The Ophiuchi Hotline by John Varley (\$1.50). This book left me with a lot of mixed feelings. It is a science fiction tending to fantasy about the solar system sometime "in the next millenium.

I thought the the first part was excellent, especially the ideas concerning the social problems of cloning. I was somewhat disappointed in the last part as I tend to dislike fatalistic endings. Dispite its faults I give it a qualified recommendation. Rated: 75.

For Anne McCaffery fans the latest in her Dragons of Pern trilogy (series?) has been published. The book is called The White Dragon and unfortunately, is available only in hardcover at this time. $I^{\prime}$ d recommend it, except that $\$ 11.25$ is a rather large investment for one book. It'd be best to wait for the paperback (or at least cheapest).
Trey of Swords by Andre Norton ( $\$ 1.75$ ). This book is primarily for those who have read and enjoyed her Witch World series. Rated: 70.
-djm

## MathSoc C and D

The Mathematics Society Coffee and Donuts Club Venture, commonly known as Mathsoc C\&D, operates a stand in the third floor math lounge (the "no smoking" side - MC 3001), as well as a coffee break service in the fifth floor faculty lounge (MC 5136) and periodic buffets and pubs (like the Frosh Buffet on Friday, September 8th). Through the C\&D o peration MathSoc maintains a service that provides low-cost high quality food for the students, faculty, and staff of the Math Building.

C\&D has been in operation since 1971. It was set up to provide an alternative to Food Serivces and the Canteen of Canada Machines. Our idea worked so well that it was soon copied by the engineers and artsies. Though perhaps too well. In 1975, faced with financial problems, Food Services started kicking up a fuss. Though there may've been vague threats to close down C\&D, Food Services, decided it was an unwise political move at the time. Instead they decided to go after our sandwich supplier, Mr. Sandwich, in attempt to replace MathSoc's sandwhiches with Food Service's sandwhiches. So far the
attempt has failed, as MathSoc felt and still feels that compared to Food Services: and the suppliers we have had or could've had, Mr. Sandwhich had given us the best deal for the money and have been receptive to our needs. Only time will tell whether that situation will change or whether Mr. Sandwich will continue to provide a high level of service.

On September 11th, it is our hope that C\&D will commence operations for the fall term. The prices of our products will be as follows:

| Coffee | 15cents |
| :--- | :--- |
| Donuts | 15 cents |
| Bran Muffins | 15cents |
| Tea | 15cents |
| Hot Chocolate | 15cents |
| Soups | 15 cents |
| Cold Drinks | 20 cents |
| Submarines | \$1 |
| Bunwhiches | 70 cents |

We hope you will give us your support and keep us operating as a strong and independent student service. We also urge you to make use of the free coffee and donut coupon on the reverse of this page.

## Women in Math

This was the title of a periodic math NEWS feature of a few years ago. The auther eventually stopped writing the column, because he couldn't find enough women mathematicians to write about. Sound familiar?

However I feel the author restricted himself to classical mathematics, he did not take into account the women working today in such applications as computer science, statistics, and optimization.

If you haven't already guessed, the purpose of this article is two fold. One is to debunk the myth of "what women in math", in the hope that more women mathies will get involved with mathNEWS and MathSoc. The other purpose is to encourage someone to take up the challenge and revive the Women in Math (or a similar) series.
jjlong

## CLOSE ENCOUNTERS WITH SOFT CORE

Flora and I were so afraid we had goosebumps all over our body. Her brain shouted "No, no!" but her feet screamed "Yes!".

Roger's breaths came heavier when his glance went to her full, long breasts, very rare to find anywhere. Her breasts were too ample for a twenty year old high school student. Every part of him reached for her. He snorted mentally. Her wince was almost audible.

She was not only well educated, but well versed in philosophy, history, literature and languages. There were thousands of women like herself who spun their flax on wheels of no substance to create a thread that had no design except in their own foolish head. How futile! The effort had bathed her in perspiration even though her dress was of lightweight cotton and polyester.

The cup of tea further relaxed the atmosphere.

In the distance a siren wah-wahhed

## FRIDAY MORNING SEXIST

She was a beautiful blonde in an itty-bitty bikini, but unfortunately, her bottom was bigger than her top.

So imagine her surprise as she strolled down a near-deserted strip of Wasaga Beach to find a clear glass bottle on the shore. She rubbed it and out popped a genie !
"Your wish is my command," said the supernaturnal guy in the turban. "What do you want more than anything else in the world?"

Perhaps she thought about being Miss Canada next spring, for she answered: "I want the biggest pair of boobs in the world."

There was a flash of lightning and a roll of thunder and poof! The bottle and the genie was gone!

But when the smoke cleared, standing on either side of her were Pierre Trudeau and Rene Levesque .

## THE ENGINEERING JOKE

dedicated to eng soc a the largest single joke on campus
Define gross ignorance : 144 engineers.
"Now tell me the truth," said the pollster, "would you rather see your daughter married to an engineer or a to a circus monkey?"
"It depends," said the farmer. "Does the monkey work steady?"

What happened to eng soc a's water polo team? Their horses drowned.
The applicant for the life guard job at the PAC pool was asked, "Do you know how to save an engineer from drowning?"
"No," replied the boy.
"You're hired."
What do you get from the mating of an engineer with a gorilla? A retarded ape.
How many engineers does it take to pop corn? Six: one to hold the pan, four to shake the stove and one to catch the kernels as they come flying out.
What did the engineer do when he found he had used up all his sick days? He called in dead.

## hen I find myself in times of trouble

## MARCIA MATHIE

## comes to me Speaking words of wisdom.

The Marcia Mathie Advice Column is written by our well-known and very well-loved Marcia. Love-life problems? Trouble at school? Looking for a good time? Just write to Marcia Mathie c/o mathNEWS.

## Marcia:

We find that you have not submitted anything to the frosh mathNEWS this term. As you know frosh are the backbone of Math, if they know what they're doing. (Besides, they are so naive, they can be tricked into ANYTHING!

Could you write a column, giving them some advice as to how to handle first year?

## Fuzzy Editor

That's John, always at my back with a whip. I LOVE IT!!! Actually, Fuzzy knows how much I love frosh (about twice a week -ed).

I'm sure you've read all the advice of the other, more mediocre, writers of this rag. Most of it is drivel and it's not worth sifting through to get the one or two good ideas they stole from someone else. The only people who know what's going on are me and Fuzz. (And maybe Prabhakar and Club Soda or whatever his name is.)

Anyway, so all you little frosh want to know how to survive your first year at this lovely institution. Well, actually, Jim Bakker is the best person to ask as he's done it two or three times (At least he can tell you what not to do). The first place you will run into trouble is the line-ups at the PAC. This must be done in order to obtain such things as timetables and student cards. Then there is the line-up at the book store. This one is usually the worst. I managed to get through these with my incredible charm and good looks. Maybe you should use a gun.

After all this standing around, you will probably be hungry. Do yourself a favour and don't eat the at the Village your first night here. It is enough of a culture shock without that. Instead gather together a few friends and go out somewhere else for an enjoyable meal. My personal suggestion is Willie's Too, downtown Waterloo. Other people, like the editor, prefer a place with a different atmosphere the Campus Centre Pub. Speaking of pubs, this may be your next stop. For those of you who aren't picky there is the Kent or Waterloo Hotel in downtown Waterloo. But if you don't feel like racing the flies to your beer, you might try somewhere else. The best thing to do is to pick some up and drink it in your room. You'll have to learn to start conserving money in this manner. You will be glad to know that
there is a pizza place right on campus! You will be disappointed to hear that the pizza they make there is not edible. There's always Mother's or Tony's for good pizza but there are others which don't rate quite so highly in my opinion (although pizza is a very personal thing). Sometime later in the term, I will tell you about the Collinsian theory that Sex is a Pizza). And as you pile into your Village II bed to end your first day on campus, you will realize that it is not really a bed, but a very thin, hard mattress thrown on plywood. Impossible to sleep on and even more ridiculous for the more important uses of a bed (although how you accomplish these uses with a room-mate around is your problem).

That is basically how to survive on campus. What's that you say? I haven't mentioned anything about classes or profs or labs. Well, I'm afraid I don't know too much about those. With an active sexual life, I mean social life, like mine, something has to take a back seat. How do I pass my courses? They're right! You frosh certainly are naive!

Well, that's about all for now. If you should encounter any problems I haven't covered here (and I don't pretend to have covered everything) just drop a line to me into the mathNEWS box across from the math lounge on the third floor or bring it into mathsoc, room 3038 in the math and computers building. The big grey one.

Love Marcia

## Dear Marcia Mathie:

My friends have my best interests at heart, and I thank them for it; but, what they don't know is that I am planning to enter the Priesthood and am practising being celibate so I will know if I can make it. As a priest, that is (poor choice of words). In any case, they have been trying all term to set me up with some nice female; and, while their efforts are appreciated, it isn't exactly the thing to keep my mind on my vows. How do I tell them to stop without letting them know of' my future plans? (I don't wish for them to feel stupid.)

J R St. Croix

## Dear Crotch,

Obviously, you need some way to politely discourage your 'friends' without looking like a nurd. The safest bet is to tell them you have an incurable case of the clap. Presumably they like this female, and would not appreciate having her ruined.

It's funny that it should come up, but I haven't been to confession for a while. Care to make it 6:30??


This column is a semi-regular feature concerning Federation and Society activities. I am JJ Long, a former Math Federation rep (for N years) and a past Federation treasurer (1975). In addition to those positions, I have held most of the positions available in the Math Society. At the present time I am coeditor of mathNEWS and at the same time I am trying to meet deadlines for typesetting the frosh mathNEWS and the Federation Fall 1978 Handbook (at the same time, on the same machine, with different text formatting programs).

Like its name suggests the Federation of Students is a federation of the students in the various faculties on campus. The faculty societies, like MathSoc, are like the various provinces or states. The Federation, which has a council of students elected from the the students in the various faculties, serves as the federal government of the students of the University of Waterloo.

Like MathSoc, the Federation operates on a system of refundable fees. This means its membership is determined by those who pay Federation fees. While many complained when this system was implemented, its certainly has its advantages. It keeps the Federation honest, but it must not be abused. Fees only should
be withdrawn for good reasons. I would strongly recommend that students leave in their Federation fees. While the Federation is still troubled by the two-year-old chevron affair, the chevron no longer dominates everything, and I can honestly say that the Federation is in the best shape that it has been in in a long time. In the areas of education and entertainment things are being done. Much of the credit must go to president Rick Smit. Since his election last October, Smit has restored the confidence lost in the Federation during the previous year when we went through five presidents.

One may rightly ask what benefits one gets from the Federation. Besides the lower pub prices there are many other benefits from Federation fees. Such benefits are: Fed support of Society social events, sponsorship of student theatre groups, protection of Society C\&D stands from administration attacks, the funding of educational projects, sponsorship of "theme" weeks, opposition to educational cutbacks, the ever-popular concerts and pubs, weekly Fed Flicks movies, Fed attempts to improve student housing; I can go on, but I do have deadlines. I urge you to support the Federation financially and to get involved in Federation and Math Society activities.
jjlong

## A Computer Can

10 good reasons why computers can .
A computer can do more work than a person.
One reason that's little known is that it never has to stop to answer the telephone

A computer can do more work than a person.
One more way to explain
is that it doesn't stop its work
to argue and complain
A computer can do more work than a person
and it's easy to see why.
It doesn't sit with its chin on its hand and watch the girls and boys prance by.
A computer can do more work than a person.
One reason it's such a whiz, it doesn't buttonhole passersby to tell them how busy it is.

A computer doesn't take nervous pills All day at the water fountains. And wastes no time with molehills making them into mountains.

A computer can do more work than a person,
because I have a hunch it doesn't spend three hours with a customer at lunch.

A computer can do more work than a person
and one good reason I have seen is it doesn't spend the afternoon half conscious from Martinis.

A computer can do more work than a person
and partly it's matter
of not spending all day angling for the next job up the ladder.

A computer can do more work than a person.
Here's a final explanation.
It wastes no time on fears of being replaced by AUTOMATION.
stolen from a computer magazine


## The MathSoc President Speaketh

On behalf of all the students in the Faculty of Math, I would like to commend you on your choice of university and faculty and to welcome you all for the next 4 years (hopefully). My name is Andy Mueller. You may be wondering what we have in common. Well actually, I couldn't answer that question unless we get together and talk about it, but I will say that the Math Society is what all Math students have in common.

During my days here at the university, I've devoted a good portion of my time working for math students through the society by way of being a class rep for 2 terms, Coffee Club assistant manager for 2 terms, social director for 1 term, acting president for the summer of 177 and this year president of the society.

The Math Society Council consists of students who are supposed to be representative of you by nomination and election and/or acclamation (which has been the case only too often). By this, your voice on the council will be heard, if you are willing to get involved. During the fiscal year, our operation budget is approximately $\$ 12,000$ which is obtained by way of society fees. Since all councilors, elected and appointed are volunteer positions, $100 \%$ of the money is spent, in some way or form, to the benefit of the students which is why I urge you to participate in any way you can think of.

Now that I've layed this heavy on you, I will lighten up and give you an idea of what we do, and some of the problems we encounter.

From our budget, approximately $50 \%$ is spent on social activities. We have a semi-formal each term which is held near the end of the term at different halls in the city. For example, of the last 5 or 6 semis, we've been to the Concordia Club, Waterloo Motor Inn, Valhalla Inn, Bingeman Park, and some lodge out in the boon docks. These semis are attended by 150 or more students who spend a couple of hours dressing up to go out and have fun. At the semi, we provide a cash bar for cocktails, then a dinner to enjoy and prime you for the entertainment, which in the past has been a local favorite "Chelsea Morning". This is the fun side of the coin. On the other side is the headaches of preparation. The hall has to be booked 3 months in advance. The hassles of acquiring the group with their outlandish contracts, ordering the guestimated amount of food and some of the finishing touches like ordering tickets, posters and flowers, all of which dig deeper into our budget relative to each phone call. Now that we have spent about $\$ 1000.00$, we add to that the pubs
which we hold two or three times a term. These pubs used to be booked in the 5 th floor faculty lounge, until some other groups decided they wanted to have some fun. Unfortunately, it cut everyone out of using the ideal pub location. Now we hold our pubs at the South Campus Hall to the tune of $\$ 185.00$ each time where the lounge was only $\$ 35.00$ cleanup fee. From there, we go to other activities such as beach parties, pienics, which are co-sponsored with other societies, concerts (small) featuring local talents (i.e. "Madison Avenue" which turned out to be a great success), bridge leagues, our famous Math Week which has a number of events such as a slide rule contest, a monopoly tournament, a wine and cheese party, an airplane contest, and what ever anyone else can think of, and then on occasion we've held a car rally. Next in line on our budget is our ever popular mathNEWS. During the fall and winter, the mathNEWS people, who are not neccessarily MathSoc people, put out weekly issues for your enjoyment and information pertinent to your life here as a mathie. By the way, if you have any writing talents, we would be more than happy to get you to do something for mathNEWS.

I guess the next most popular item of endeavor is the Mathletics part of our agenda. Each tram we sponsor or entra teams in the intramural program, which includes innertube waterpolo (if you don't mind drowning), hockey teams for the ice freaks, basketball for the stringbeans, ball hockey for those of you who like the colours black and blue, and broomball for those with cast iron shins. Also during the fall, and winter terms the Math Society holds a broomball tournament in which the Math Society team has never won the championship, or the consolation prize. So all you broomball people "WE NEED YOU, PLEASE!"

On the more academic side of the society, we have students sitting on councils throughout the faculty. Examples are Faculty Council, the Standings and Promotions Committee, the Executive Council, the Space Committee, the Curriculum Committee, and the Student Advisory Council for the Department of Co-ordination and Placement. In these committees our representative informs us of items that may effect you academically and in some cases we may be able to prevent rules which are of a bad nature or in other words rules that may screw us up. As well we have our hand in a few other pots such as the Computer Science Club, the Waterloo Science Fiction Club, and of course the Coffee Club.

The Coffee Club started out as just that, a coffee club. If you were to visit our stand now, you would see a vast improvement. Presently our stand sells coffee, tea, kaisers, donuts and muffins. Without showing conceit or modesty, it's the best place on campus to eat and the food is good too.

By now you should be totally brain washed in that mathies are the best and they will be if you help us prove it to the rest of the societies on campus.

In this issue of mathNEWS, which mostly froshies get, there should be a list of events that will be happening this fall. We will also have $t$-shirts for sale (frosh $t$-shirts). Free MathSoc rulers, buttons and rulers will be available in MathSoc, MC 3038, and at the Federation of Students tent.

Remember, you are now a member, be proud of that honour that has been given you and let your friends know it. We are here to stay, so participate and enjoy your years ahead of you.

This is your president signing off with one last word: come in to MathSoc to say hello and talk to us. We like to know you exist. Bye for now.
akfmueller

## Prof of the Week

There isn't one this week. It is not for the lack of quality professors, but because we were unable to get a mathNEWS staffer to interview a prof and write an article.

In the past various mathNEWS staffers, including this reporter, have written articles about popular or famous UW Math profs. Lately though, these articles have been very rare indeed.

It would be good to see more profs of the week. If there is a professor that you have heard of, or will have as your teacher, let us know. Perhaps you can interview him or her, write an article for mathNEWS, and in the process you will get to know the prof better.

JJ Long

Three jolly sailors from Blaydon-on-Tyne
They went to sea in a bottle by Klein.
Since the sea was entirely inside the hull,
The scenery seen was exceedingly dull.


## Message from the Dean

W.F. Forbes, Dean of the Faculty of Mathematics.

I am pleased to have been asked to welcome you, the incoming freshman students of the Faculty, to Waterloo.

I am not sure how much you know about the Faculty, but hope that you will be pleased with what you see, and that you will find that senior students, faculty and administrators will be glad to assist you in whatever way they can. There are many things of which we are proud in the Faculty. For example, our students have done exceptionally well in the Putnam Mathematics Competition, which is written by some 375 Colleges and Universities in North America and we almost invariably place in the top ten. You might also be interested to know that this Faculty has won the North American Computer Chess Championship! In addition, for those of you who are interested in the Chartered Accountancy programme, you might like to know that during 1977, 72 percent of our candidates were
successful in the examinations set by the Institute of Chartered Accountants. There are other things to be proud of, and we are particularly pleased this year that your group is an outstanding good group of first year students in Mathematics and that your average Grade 13 marks were about $84 \%$. Hence, we are expecting great things from. you and are delighted to have such an excellent group of freshman students.

Before too long, various people will impress on you the need to avail yourselves of the many opportunities which are available to you in this Faculty and to make sure that, if you have any difficulties, you see someone who can assist you. However, at this time I would merely like to welcome you again, and wish you all a successful and enjoyable time as you begin your studies at Waterloo.

As Director of First Year Studies in the Faculty of Mathematics, I would like to extend a warm welcome to all of you as you embark on your freshman year at the University of Waterloo. We are fully aware that your first few weeks on campus can be rather hectic ones as you adjust to a totally new environment. However, we also hope that you will take advantage of opportunities to make things as pleasant as possible for yourself. OPERATION MATHSTART, in particular, is intended to assist you in coping with registration and scheduling problems that often face new students and Faculty members in an informal atmosphere. In addition, your Orientation Package contains all kinds of useful information, and I would hope that you take the time to read through this material with considerable care.

At a large university it is easy to get the impression that nobody really cares about you, and as a result, you can become very much a "loner". I would urge all of you not to fall into this trap. There are numerous people around the Faculty and the campus-at-large who are more than willing to help you get started on the right foot. However, with
so many students, it is your responsibility to make new friends, contact Faculty members for assistance, and become involved in campus life.

The amount of work facing you in the next few months is probably greater than most of you have ever encountered before. Nevertheless, if you plan your time carefully, you should be able to give your academic studies their fair share of your hours and still have time left to devote to social and recreational activities. There are innumerable activities on the campus to suit everyone's tastes. The secret is to find a good mixture of enjoying yourself and doing justice to your studies. The actual blend in this mixture will depend largely upon individual interests and academic ability, and these vary considerably from one person to another. Nevertheless, it is vital that you devote some of your time to both scholastic and social activity if you are tit to have a rewarding time at university. I urge you not to delay. GET INVOLVED AND START
WORKING RIGHT AT THE WORKING RIGHT AT THE
BEGINNING OF THE YEAR. BEGINNING OF THE 'LATER'. 'LATER' MAY JUST BE TOO LATE!

## From the Associate Dean of First Year Math

## P.C. Brilfinger, Director of First Year Studies.

## continued from page 13

The haze had lifted.
Jolembwa Klomboliki stood, shrouded by the thick, teeming foliage of the jungle edge, his trusty but loyal primate Molimba steadfastly anchored on his shoulder, shitting down his left arm. Fortunately Jolembwa carried his fragile 35 mm SLR bazooka in a convenient, inconspicuous pouch under his right knee.

Warily they peered through the misty cloudiness that hung, almost ominously, over the bubbling jungle swamp like a misty cloud. He wished he had brought his 63 mm yellow anti-haze Kodak filter, but quickly remembered that at this range he could blast the whole fucking pool into goddamn smithereens. He also wished, somewhat more sensibly, that he had left trusty but loyal Molimba back in the monkey cage.

It was darker now, and yet Jolembwa had not seen any movement, any rippling of the calm swamp waters, still now since the strange gurgling had stopped. Jolembwa checked his watch. Change of shifts. He smiled as the gurgling resumed with renewed fervor, satisfied that this prediction was correct. Molimba, tripping on the local Glymgo-root derivatives (as spider monkeys will in times of personal stress. low Dow-Jones averages, and general conscription), continued to stare glaze-eyed toward the jungle sky. His owner took the opportunity to shove a bazooka shell up his offending oriface.
(Let's see ... he gets attacked, suddenly (it's always "suddenly"), and loses all his weapons and tools. Maybe all his clothes (a huge, irradiated cotton holl weevil...?); he stands, naked, monkey claws cutting into his flesh... he has but one recourse. Hurls the monkey at the thing, blows it all up, he retires and starts a spa.)

## Network Pulse

I am here for another weekend of radio at CKMS and have decided to let you, the readers of mathNEWS, in on some more scuttlebut.

From some of my recent visits here I see that an infectious plague in the form of fantasy games has hit the campus. Not only are long games of dungeons and dragons going on with sponsorship of Mathsoc, but there is now a game available on the Honeywell called "adventure" (first reported in this column). I have yet to play either game, but I know many people who are fervent players. I can't understand the fascination with these games, but maybe it's only because I haven't been infected yet.

Apparently the use of Datapac by people who aren't on campus (like me) this term is the cause of some financial pain to the Mathematics Faculty Computing Facility administration. Don't be suprised to see service from the ports outside of Kitchener-Waterloo restricted to users with a permissions bit (if you don't know about user's "bits", ask a hack, it would take too much space (and my time) to explain it here).

In other MFCF news, sources close to MFCF systems software personnel have let this reporter know that code has been placed in TSS to allow a program's history registers to be dumped to a buffer pointed to by a memory location the user's TSS program prefix area (i. e. addresses below octal 100). This had been done about a year and a half ago, but the code to perform this function had bugs in it. Apparently, if the address of the buffer was destroyed (stepped on), then TSS might die of an address fault or a zop fault by stepping all over itself. This bug was found by a hack currently
very active in the CSC, but who was, at the time, new to UW and very familiar with IBM systems. He was unable to comprehend how the machine's memory protection didn't prevent a user from causing the operating system software (TSS in our case) from stepping all over itself.

Back at work, we have obtained delivery of our 3033 (the new top of the line CPU for the System 370 series). It has a couple of interesting new features in its architecture. These are a new type of integrated console for the system and channel directors. At this stage I am unfamiliar with the details of either feature, but I can say that a channel director is another CPU having the computing power of a $370 / 158$ and it is used to control a group of channels. Up to three channel directors are available on a 303 x series machine, but two are standard. IBM has recently announced that an MP attachment is now available for the 3033, but there has been no announcement to my knowledge of an Attached Processor for the 303 x series machines.

On the distributed processing front, the IBM data processing division entry in data entry machines, the 3790 , looks to be a sure-fire looser. It seems, that IBM doesn't believe in full-duplex for data entry terminals, or in intelligent data entry terminals, so the 3790 doesn't perform up to the keystroke rates that are possible on competitors' systems. Now competitors are coming up with software to make their machines talk to IBM's front end processors as if they were SDLC protocol SNA devices. What augers for the future of IBM? The mind boggles.
-pulse


# Federation President Speaks 



On behalf of the Federation of Students I would like to welcome you to the University of Waterloo. We are the central student union, association, society, council or whatever term you are familar with, but the key word is STUDENT.

What we are is largely determined by what students are willing to contribute, and that doesn't just mean money. The Federation is primarily divided into two aspects and functions.

We are your representatives and spokespersons to other university student governments, as well as participating on the municipal, provincial and federal level. We are linked with the National Union of Students and the Ontario Federation of Students. We also discuss and negotiate with the University of Waterloo administration when we have interests of mutual concerns.

There are many levels of student government at this university such as the faculty societies such as MathSoc, residence councils and athletic advisory committees. The Federation of Students represents all fee paying students at this university.

Aside and separate from the political aspect is student services. The Federation is involved in student services and is planning to expand. We presently operate a student pub, record store, a jean jacket shop, a post office, three aircraft (available for flying lessons), an ice cream stand, a bus service between campus and Toronto on weekends, used book store, a legal resources office, and a birth control centre. We also sponsor and subsidize orientation, concerts, special pubs special events, and clubs and societies.

You will be asked to vote in a referendum this Fall on whether to finance an extension to the Campus Centre building (where the Federation lives) which would allow us to greatly enhance our services, and would include a pub large enough to accomodate the big name Ontario bands for entertainment. The extension would solve the space problem that has retarded expansion of services in the past.

The fee would be $\$ 10$ per term per student, and the extension can be built and made operational within nine months of the referendum. The potential is great and the benefits will be very quickly realized.

Getting involved in the Federation can add a new dimension to life here. The myriad aspects of the organization provide a wide range of ways to get involved.

The Federation is divided into "Boards" which organize different types of events. These boards - Education, Entertainment, External Relations, Communications, Publications and Co Operative Services - are headed by a chairperson, who is appointed by the students council. The chairperson is responsible to a committee of representatives, and their meetings are the first step to getting involved. Any student is welcome to attend and participate in the meetings, and join the project committees which produce the planned events.

You'll find that there are two rival newspapers squaring off here for the support of the students - the chevron, which is the "official" student newspaper at the moment, and Imprint which was formed this summer by students who feel that the chevron is doing an inadequate job as a student newspaper. Many of the Imprint staff used to work for the chevron, and the chevron staff has become very small since the Imprint started up.

The chevron receives $\$ 2$ of your $\$ 12$ per term Federation fee, and for the first time this September students will be able to withdraw their $\$ 2$ from the chevron without withdrawing the remaining $\$ 10$ from the Federation. The Imprint does not receive a fee from students, but gladly accepts donations.

Of course, the Federation's $\$ 10$ portion is refundable also. I hope that you will take the time to survey what you get for your fee before deciding whether to withdraw it. Remember that you have three weeks from registration in which to withdraw your fees, so you will have time to make a sound decision on the chevron and the Federation.

Finally, I hope that you will drop in and meet me if you have the chance someday. My office is in the Campus Centre building room 235 , and you'll find me around just about any day of the week.

Rick Smit, President Federation of Students

## Bakker's Dozen

This is an introductory column meant especially for all the soon-to-be frosh who will miraculously begin to appear on this campus shortly after Labor Day. What it is supposed to introduce you to is "Life on Campus". Instead I will begin by explaining the title of this column.

As you should know by now, a dozen equals 12 items. A baker's dozen has 13 items. But, a "Bakker's Dozen" (pronounced baker's dozen) contains a variable number of items which is solely dependent upon the whim of the author. And now onwards.

If you last longer than two weeks, you will find out that there is "Life on Campus" and there is "Existence on Campus". The difference is that "Life" is more fun.

The next question is, "Where do I find these things?". Since I have some experience in being a frosh (I ain't the "Eternal Frosh" for nothing) I will enlighten you. There are many places to find "Life"; but some of the better known ones are Village 2, The Co-op Residences, and MathSoc (M\&C 3038, ext. 2324). By far the best, usually, is MathSoc. This is a personal invitation to come up and visit. The atmosphere is quite friendly (everyone is welcome) and many activities take place here (and other places we go to). If you play bridge, you can usually find a game going on. Likewise for "Dungeons and Dragons". If you don't, then I will have something else to talk to besides myself. MathSoc participates with great enthusiasm (and occasionally great skill) in many forms of recreation. Things like pubs, broomball games, hockey, and ball hockey (also table-hockey), pinball and even classes (Yes, we do have a serious side). It is a better place to make friends than line-ups; and you tend to keep them longer since you have a place to run into them at.

Now, an advertisment. If you are interested in helping to put out one of the most entertaining newspapers on campus, give us a shout (up in the office). We'd be glad to have you. The sooner you show up here the better: because (seriously) it's a great place. If I didn't love it here I wouldn't try to con others up here.

Live long and prosper.
jrbakker

## unclassif iable ADS

For Sale: An assortment of games. Such as American Civil War(\$3); Cobra(\$3); Plot to Assasinate Hitler(\$3); Scrimmage(\$1); Leipzig(\$9): Dixie(\$3). If interested phone 743-9485 in the evening and ask for Dennis.
Congrate's to HVANDENANDEL who finally became engaged on Wednesday night.
WANTED: Genuine, unretouched photos of Ciaran $\mathrm{O}^{\prime}$ donnell as a young freak (circa 1974) or his original wig. Anonymity guaranteed. High financial incentive. Contact Sgt. Haprin, RCMP, Waterloo County.
For sale one set of slightly used D\&D dice, original cost $\$ 15$ but will sell at give away prices, 10 cents or best offer, contact Yawn Gray via mathNEWS.
19 jan Thu Jul 271978 11:21 M IF YOU WANT TO KNOW WHAT THE "R" IN THE COUNTESS'S NAME STANDS FOR, SEND ME A QUARTER. BUT, IF YOU WANT TO FIND WHAT HER ENTIRE REAL NAME IS (ALL FOUR WORDS OF IT) SEND 50 CENTS. IF YOU DON'T KNOW WHO THE COUNTESS IS, BUT WOULD LIKE TO FIND OUT, SEND A DOLLAR AND I WILL INTRODUCE YOU TO HER. I CAN BE REACHED VIA mathNEWS.
WANTED: instrumentalists \& vocalists for the UofW Concert Band. Stage Band. Concert Choir and various Ensembles. Gain relief from the day to day drudgery of university life by PARTICIPATING in these fantastic, stupendous, tum, thrilling, cultured groups
WE NEED YOU! YOU NEED US!! TOGETHER WE CAN RULE THE MUSICAL WORLD!!!
For further information, contact:
Alfred Kunz.
Modern Languages Bldg..
ext. 2439




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math VEWS welcomes your criticisms, comments, suggestions, etc. All letters should be signed, but if requested, a pen name will be used. Put your Feedback articles in our mailhox on the third floor outside the lounge, or mail it to us on TSS to unerid math NEWS or take it to MC $303 x$ and have it put in our mail slot. or put it in the mail addressed to math.\E.WS. MC 3038.
mathNEWS reserves the right to make changes to letters to improve readablity (such as adding salutations). Letters and other material which make their way into the mathNEWS mailbox are assumed to be for publication unless it specifically says right on the item that it is not for publication.

## Accounting 391 Falling Apart?

dear mathNEWS,
Just a note to some fellow students currently enrolled in Cost Accounting 391. After last week's second midterm (or whatever it really was), are you left with suicidal tendencies? Do you find yourself prowling about the fair land of uniwat, like a wolf in search of the trapper? Are you dismayed at seeing your 391 mark fall to pieces, as well as your 391 textbook? Well, suffer no longer, victims of oppression, for at least you can do something about the latter. It seems that the UW bookstore will either 1) replace your text with a new one or 2) offer you a partial refund as compensation in the event that the pages of your text are separating from the binding. Furthermore, you do not need to present your receipt to be eligible ... (an obvious act of sympathy on their part).
dave richards 2A Math

## CSC Flash!

## CSC Flash!

The Computer Science Club article in mathNEWS is always called "CSC Flash!". The reason for this is rather obscure and lost in the depths of antiquity. Far be it from me to challenge the depths of antiquity -- I have enough trouble throwing bears at trolls. At one time the title was accompanied by a drawing of a camera, which further confused things. Anyway, it would not be an exaggeration to say that the CSC is the most vital and important organization on campus, or even the third floor of the math building. The motto of the CSC is "Concordia Cum Doughnoughtiae".

Well, what can I tell you about the CSC? If you are crazy, you will fit in well; if you are crazy and somewhat interested in computers you will fit in even better. Do you like sleeping? Never mind, that will wear off.

We have an office [mc3037], lots of manuals and magazines, meetings almost every week, beach parties, Mediterranean cruises, excursions to the South Pacific, and a fleet of 1978 Maserati sports cars. We also have an executive of really distinguished computer scientists, most of them recent Ph.D. graduates and several Nobel prize winners. Elections are held at the beginning of each term, and are seven round secret ballot decisions: we normally rent the Niagara Falls convention centre. When the U.S. space shuttle programme finishes, we plan to use the vehicle assembly building in Cape Canaveral, but right now the cost is prohibitive. Membership in the CSC is very open nowadays, last summer we finally relaxed the Latin requirement and many persons not even of noble birth have become associate members. The income tax donation is not nearly as high as it was when we were funding our own manned trip to the Lesser Magellenic Cloud, and now that the tachyon drive has been fully developed, we have cut back on the mandatory $\$ 1000-\mathrm{a}$-plate fund raising dinners.

Recently, the most visible activity of the CSC has been our illustrious lecture series. We have presented evening talks by many very important and world renowned computer scientists, some so important that you may never even have heard of them! When the new airport is approved and completed we should be able to attract even more European speakers with the new Concorde service.

When you are about to start university, you are warned of the various dangers that may befall you, that may impede your progress along the laurel wreathed and honourable path that is so often blocked by Mallard ducks. You are warned about drinking too much hot
chocolate, eating too many chocolate chip cookies, seeing too many movies, and staying out night after night carousing. These, however, are nothing compared to the resultant ills of a disease so horrid, so dreadful, so awe-inspiring that even the CSC is defenceless against it. Hence I now warn you. I refer, of course, to "hacking". Morose complexions, incoherent jabbering, dispair, elation, death, procrastination, these are all symptoms. And loss of sleep. And loss of sleep. In many cases, victims maintain they do not want (or even do not need) to sleep. It is a compulsion.

You may see the poor souls in the heartless grip of this disease in the math building; sometimes wandering aimlessly through the halls, sometimes in odd little rooms staring passionately at computer terminals.

Current research for a cure indicates lobotomy as a possible means of temporary relief.

If you have read this far, you really must be crazy; perhaps you'll even read further. If you are interested in this perverse sort of thing, I shall discuss some computer stuff we seem to have strewn about the math building.

As you may perhaps realize, the University is noted for its computer science programme. unfortunately it's usually not noted for those things which are actually any good. At any rate, they do have a fair bit of hardware. Here in math (and I should point out that CSC is not restricted to we illustrious mathies) there are three "main" computers:

A Honeywell $66 / 60$ (or something like that) with Gecos III and Tss. This is probably the most popular system, and is also know as the bun. While originally a bit clunky, years of use (and I do mean use) have rounded off the corners considerably. You will meet the bun in 2nd and later year CS courses, and earlier if you persist.

There are some red and blue IBM boxes in a two story display case. There are lots of blinking lights and whirring tape drives, and on occasion it looks just like the computer from The Six Million Dollar Man. I hope I have said enough. In recent years an interactive terminal system known as Widjet has been used as a front end for the IBMstuff. This is a bit like a hippopotamus wearing a wart-hog mask. I regret to tell you that you may well have to use this system in any Ist year CS courses you may take.

A pdpll with Unix. This is clearly the nicest system we have unfortunately it is also the smallest. Suffice to say that it is a very nice general purpose timesharing system. You
will use this for some 4th year courses, but can also seek and possibly get approval to use it for special projects. Unlike the above two systems, there is a public userid.

If you have any questions about any of these, or any related topic, or just want to chat, come to the CSC office, and whoever is there will try not to look too bored. If anyone is there. This is liable to be at odd times, sometimes even when the sun is shining. In past terms we tried to make the CSC office a "busier" place with the famous hot chocolate plan, but strict control of hot chocolate by campus security forced curtailment of this.

You may join the CSC upon examination of your credentials and acceptance of your bribe. These may be tendered any time at the office, or at the first CSC meeting of the term. Usually this meeting also includes election of the executive. All CSC meetings are vigourously announced via any medium available and cheap.

Oh yes. I just remembered. The CSC is also the University of Waterloo student chapter of the Association for Computing Machinery (ACM), a prestigious and international professional association. In practice our involvement with ACM is minimal, although they do use us as a reference when applying for loans.

## -RLBiddle



In the next few months you will hear of many words and names. Most of you will not be at all sure of their meanings. So mathNEWS has provided this glossary of commonly used words at Waterloo.

Federation of Students: U of W student union, fee paying students are members.
Math Society: Great organization representing students in the Mathematics Faculty.
Engineering Society: Similar organization for Engineering students, major rivals of Math students.
(Most other faculties have their own societies or "socs")
free chevron: news paper produced form Oct. 1976 to June 1977 by workers on the chevron staff.
REAL chevron: newspaper produced by the Federation to compete with the free chevron from January to April 1977.
Chevron(\$15000): Radical student newspaper paid for by Federation of Students, yet controlled by the AIA.
Imprint: newspaper
staffed by many Federation and exchevron people. Competes against the chevron. Decent, but could be better.
AIA: Secret left-wing Maoist organization affiliated with the Communist Party of Canada (Marxist-Leninist).
CPC(ML): Communist Party of Canada (Marxist-Leninist). Members tend to make a lot of noise.
Neil Docherty: former
chevron editor and an AIA member
Doug Wahlsten: AIA spokesperson and Psychology prof.
Shane Roberts: Federation President during the "closing" of the chevron, later recalled.
J.J.Long( aka: J.J.Longe): former Federation Math rep and present mathNEWS co-editor. Also known as the methuselah (among other things).
Doug Thompson: A past ' retired Federation president. (also known as Thug Thompson)
Ron (*Hugh* or Hexad) Hipfner: former Math student and another past Federation president
mathNEWS: What you're reading now, financed by Math Soc. Pretty bad if froshies don't come out to help us.
Enginews: Off-colour monthly newspaper produced by Eng Soc. Obscene and rascist. (but good to read).
Gazette: Well-written UW Administration newspaper.
POGO: simpleton
pronunciation for Prabakhar Ragde (typistcan be a real STICK in the mud) a well-known mathNEWS staffer.

Duke of Earl of Bunwich: Title of Bruce N. Mills, the anti-social director of Mathsoc.
N-Juneers: The number of Juneers (also known as engineers) one must put together to get a functioning brain.
C\&D: Name for "non-profit" food stand operated by Mathsoc, that earns over $\$ 200$ a week.
John Lee Hooker: Nickname of John Lee, a Science Grad student, who edits the SciSoc news and sometimes writes for mathNEWS.
C.C. Pub: Major drinking establishment on campus, located in the Campus centre.
Chevrag: What most students think of the Chevron.
PRG: physical
resources group (aka: U of W grounds keepers)
Larry Smylie: Well-known -
48 year-old former Fed council rep and presidential candidate. Now a student in I.S. and a PRG painter.
Quite Frankly: I wo ot Smynes musi commonly used words.
CSC: Computer Science Club.
CSC Tramp: Pen-name for A.R. White, a CSC member.
Free Photon: A phototypesetter donated by the Star.
Real Photon: The phototypesetter that mathNEWS is typeset on.
Hack: Person who spends more than thirty hours a day on a computer.
Fed Hack: Person who spends more than thirty hours a day in politics.
Bombout: What happens to all MathSoc events due to lack of attendance by frosh.
MTHEL 100: A bird course.
PHIL 140: A used-to-be bird course.
Bird Course: A course that a bird could pass. Also known as a Mickey-Mouse course.
Prez-Ass: Presidential assistant. More often known as a presidential ass.
Acclamations: Elections in which only one person runs for each seat. Usual for all MathSoc positions.
Fortrash: Computer language, obsolete but still used by people not smart enough to learn a decent language.
Watfiv-S: See Swatfiv.
Swatfiv: Disgusting perversion of fortrash.
APL: Not a decent language.
B: A cheap version of C.
C: A decent language. (nearly)
Crash: What computers do
Nick the Red (aka: Chameleon): Math student and Fed councillor, who originally backed the Federation, then the chevron, then the Federation.
The 75: Popular name for IBM 360-75 computer.
Red Room: Large room on first floor of Math Building where the 75 and other large IBM computers are
AKFM: call letters for MathSoc's illustrious president, Andy Mueller.

3-sickly: Affectionate name for the 360.

Unix: Computer system on sixth floor running on to a PDP 11-45.
'Bun: Popular name for Honeywell computer located on the third floor.
WIDGET: Too awful. I don't want to talk about it.
Watiac: Worst computer ever simulated. Interpreted by a COBOL program. Grinds terribly.
Grind: What computers do when you run big, stupid slow jobs that want a lot of CPU time.
CPU time: What grinding jobs want.
All-nighter: Spending all night to do your assignment.
$\% \$ \& \% \$ \% \$$ : Swear words. Usually used during an all-nighter.
Anti-Cal: Also known as $\mathrm{Cal}^{-1}$. Tells everything you wanted to know about a course. Put out by MathSoc.
Tutor: Someone who mixes you up.
Food Services: Rip off joint, main product is money (to them, not you).
Randy Barkman: Leader of the BRC. Former chevron staffer, Fed handbook editor and Imprint coeditor.
$\$ \& \% \$ \& \% \$ \&$ : What you eat in the village or at food services.
Withdrawal: What you can no longer do after the drop date when you find that you are failing too many courses.
$\$ \$ \$ \$$ : What you need to remain at university.
фф¢c: What you will get when you finish.
Referendum: To tell the federation what you want.
Boycott: To tell the federation that you didn't tell them what you told them.
RJB: Who you should not critisize if you wish to keep your 'bun account.
Apathy: What all students except fed hacks have.
Kanteen of Kanada: the company which supplies the vending machines.
Vending Machines: Perhaps better known as the Third Floor Gambling Machines. Probability of getting what you try to buy is 30\%.
Third Floor Lounge: Also known as the Third Floor Gambling Casino.
Klingon: What you fight when playing Star Trek.
Star Trek: What to play on the 'Bun when you are bored.
Cagey Dykes: Ken is
the craftytreasurer of the CSC.
Bill Deeks: An official
of the UW Administration who is responsible for Food Services.
Rick Smit: Current
Federation president (elected last October).
Collins Mix: Rob
Collins when he writes for mathNEWS (Collins is leader of the CRC)


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| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

1a sack
moisten with dripping
a7 groucho smoked one
a13 Bert's Incredible University (a student's worth)
b1 cary grant, for example
b7 mythical man-eating giant
b12 capital of german republic
cl a dwarf-like being (folklore)
c7 3 consecutive letters
c11 breathing apparatus
d2 tie backwards
d6 Horse Power - Oats
d10 hang loosely
e3 british color
el0 abraham's home
el3 everyone has one
f1 for example
f4 dull metallic finish
f10 bite
g1 dine
g7 why go to university?
h1 more orange
h9 the purse button on a kimona
il victories
i13 jackdaw
j4 Right Ordered Society
j8 rascal
j14 you (archaic)
k1 above (prefix)
k5 an egyptian god
k8 coddle
11 ministers
18 pertaining to ears (comb. form)
112 a spot of paint
ml occur subsequently
m7 student query
mll a mathematical snake
n1 sdrawkcab bean
n6 a flower
n11 homer's epic
01 east in quebec
05 stitched
oll ages
le mexican coins
1 k a fuss
2a adolescent affliction
teacher
2 k arm bones
3a greek philosopher
3 g U of W's gym
3 k set it again
4a the drummer and his drum
4h the folk who make cash registers
stroke
5 a before (poetic)
5e musical note
5 h several of england's kings
6d warm
6 h mathies will have to write three
6 n regarding
7a stupid machines
7 m another student question
8a left alone
8 i marry
9a enlarge without " $w$ "'s
9 g untouched
10a a ligature
10d not the head of the class
10 j latin love
11c lasso
11 j your representative
11 m Acme Interrogation Agency
12b roll
12 f points
12 j how to motivate a bike
13a bell sounds
13 g a contraceptive device
13 k CKMS - 94.5 fm
14a scottish fire
14 g all right
141 scarlet runner
15a neuter
15 g post at bottom of stairs
15 m roads

## Gridword Comments

The gridword editor didn't write a grid comment, so we called out the ghost gridword editor to produce something.

This gridword (so rumour has it) was created by :boff \& company. mathNEWS is on the lookout for more such gridwords. mathNEWS will give the creator(s) of gridwords a free $t$-shirt for any gridword submitted to mathNEWS and published by

Now, for the solving side of things, mathNEWS is giving a away a free t-shirt for the correct solution of this gridword. All you have to do is:

1) Submit it to mathNEWS, M\&C3038 by September 17, 1978.
2) Have a correct solution.
3) Have your entry picked (atrandom) from the stack of correct entries.



## Non Compos Mentis

I regard the heap of papers on the top of my desk with dejection. On top of it is a postcard from a friend who doesn't seem to want to be anymore. The conversion of my Taylor tabling program to a subroutine has failed and I am farther behind than I had been this morning. It is five o'clock and I should be thinking about supper but I don't want to. I don't want to do much of anything. And through the door to the broom closet washroom, past its mirror image opening onto the abode of my semi- roomate, comes the voice of an Ottawa disc jockey (via my radio, which he seems to be expropiating a lot lately), "Here's the surprise I promised you... for the first time in three years, I'm proud to present the talents of Max Weinberg, Miami Steve Van Zandt, Guy W Tallent, Clarence Clemmons, and... " the next few words are lost as I push back my chair, march through the can and pluck the radio from my astonished roommates headboard, carrying it back like a crown, and placing it in the corner that it seemed to work best in; for coming to me in crackly spurts as I lie prostrate on the floor with my head six inches from the speaker is the Springsteen Album I had waited for since April of nineteen seventy-six.

I rivet my attention on the song, tuning out the voice of Milady de Winter out in the hall somewhere, the distant kitchen noises, the rush of water in the sink next door. Sometime during the Christmas 75 holidays I had been lying on the couch at home vegging out to WBEN Buffalo when I first heard this man, recognizing the lyrics from a Time magazine article I had read a few weeks ago. I was straddling the fine line between pop and progressive rock, two months after Elton John had destroyed my faith by releasing Rock of the Westies. An interesting review in my high school paper called Springsteen the next superstar. Hell, I was beginning to feel grown up, a part of things; I needed a new focus. What else could have made me sit up on that couch and listen for four minutes, then run down and set the tape recorder up in preparation for the next time the song came by ? It was the title track from Born to Run, and three hours later I flicked the pause button for the second time, leaned back, and relaxed with an infinite slowness.

The song on the radio fades as another takes its place; but it is the same gravelly voice. Two copies, think

I; it must be out, it isn't just an advance copy or a bootleg of some sort. Relax, now, don't try too hard; you can't expect it to grab you like the first one did. I became obsessed with it. I played it twice a day. When school came back in I surprised myself by going up to the reviewer, a guy totally unknown to me, and asking if I could borrow his copy to tape it.

To my surprise, he agreed, and lent me a few others without even being asked. The rest of the album didn't impress me too much, but I taped it anyway. We got to talking (he had the locker across from me), walking to school together. It was something new to me, being made a protege like this. I was four months out of a Northern Ontario paper mill town, still wet behind the ears. He dragged me not only away from the top $\$ 40 /$ disco trap, but into the social reality of the time. Through it all the album grew on me, and one day when I was at the end of my tether I put it on, and by the end of the second side I could face the world again. It became vinyl uppers to me, an intra-aural shot when nothing else would do, an anthem to rally round. And how could I have relied on anything else through the period when we both wanted his girlfriend and she didn't want either of us? Drowning, I grasped at not straws but at eighteen hundred feet of quarter-inch tape; and miraculously, it held me afloat.
"Thank you, Bruce," says the deejay. "The new Bruce Springsteen album has been released - it's called Darkness on the Edge of Town and we're featuring it in it's entirety tonight at eight o'clock, right here on..." I walk down the hall to visit the guy with the stereo, arrange to use his tuner and cassette deck. I want to shout the news to the world, but there's no-one within earshot that would understand. Anywhere else, there would be.

Somewhere the end of that first year, I remember my friend raising his fist to someone down the hall and shouting "Bruce Springsteen is God!!" We made it into a slogan, greeting each other with the Bruce Power salute. And it rode on, through the wet and disillusioning summer, after which he went into English at UW and I moved up to the last year of high school. I didn't need to play the album anymore, it was engraved on the inside of my skull. I could call up the agonizing sax solo from Jungleland in the middle of Biology class; and I did whenever school got too much.

At seven-fifty I am fiddling with Planchet's tuner, trying to get rid of the static. It' refuses to leave, and I start taping on the stroke of eight, lying back and letting the music rake me over poetic diamonds. We held our dreams through that second year, even when we found out about the legal tangles preventing a fourth album from being recorded. We bought bootlegs, devoured magazine articles and rumours, made up BSIG T-shirts. I died at the beginnning of that summer, was resurrected on the Staten Island Ferry in late August, entered university. I watched his gradual embitterment with school and society, fading in and out of contact like the signal I am listening to.

Gonna be a twister to blow everything down
That aint got the faith to stand its ground
Blow away the dreams that tear you apart
Blow away the dreams that break your heart
Blow away the lies that leave you nothing
But lost and broken hearted
Well the dogs on Main Street howl
'Cause they understand
I can take this moment in my hands
Mister I aint a boy
No I'm a man
And I believe in the Promised Land

Porthos and Athos are in the kitchen with Milady de Winter, who has been rather cruel to me lately. D'Artagnan is off, probably visiting Roxanne, the cute U . of T . engineer who would be Constance if I could remember my Dumas better.
"Get your album taped?"
I nod, place a cassette on the table and slide wearily into a chair.

The magic is gone. The album is good but not great, though I realize that only a masterpiece could have passed through the sieve of my expectations. Where are you tonight, my friend? Do you sit listening with a beer in your hands and tears in your eyes, or are you out enjoying yourself, leaving me the only one left chained to my dreams?

It was a good three years, Bruce, but I think I'll be able to walk the rest of the way. Thanks for being there.
-prabhakar ragde

This column is brought to you with pride bymathNEWS, MathSoc, and your local bottler of

## Collins Mix

First things first. Let me congatulate you on your impecable taste in choosing Math at this wonderful university. Now let me explain what that choice means.

It means you are leaving the real world and entering a place where just about anything is possible. You will find that, that incredible amount of money you have amassed this summer will pay for about one-half of what you need. Then you become dependant upon that wonderful thing called OSAP where, without realizing it, you can sign your life away from 3 to 5 times. But get used to that, within the first week you will get sick of seeing your signature on pieces of paper on which you are making decisions you realize you haven't thought about enough.

In a way this is good, because after the first week, you may not see your name again. From then on you will be $78 \# \# \# \# \# \#$. No one will talk to you unless you can rhyme this number off in 3 seconds and then present proving your card proving it.

Now, after one week, you are basically reduced to a number, capable of standing hours on end without becoming tired, capable of finding the buildings (which at first was impossible), and just plain dog-tired. Don't worry, from here things just get easier (until midterms, which come up very suddenly and I won't scare you with, at this time).

There are a number of things you must watch out for. Avoid believing anything you read in campus newspapers (typist--except this one!) or getting too concerned with them until you get settled in. Beware of profs who tell you that you need more than 2 textbooks for a course. Talk to someone, they're probably a waste of money. Beware people wandering around the residences with tanks of water strapped to their backs. They're looking for you! Consider thoroughly the idea of taking fees back. An average person can get more than his money's worth by attending a few events. Beware of meeting a person of the opposite sex in a line-up \& ending up in love. And above all beware of WIDJET (Waterloo Interactive Debug \& Job-Entry Terminal). Why, you will quickly discover.

Discouraged?
Considering community colleges? Don't panic. After a month or so, it all becomes routine \& you start finding spare time. Filling this spare time in the proper way is what will make your university years the

most enjoyable of your life. Come into the MathSoc office and yell that you want to be a part of MathSoc. You will be welcomed with open arms by an incredibly friendly group of people. If this doesn't work try offering them money, complaining about the Chevron, or suggesting a card game (like bridge). And if all else fails yell "Yoh!" step out of the doorway and follow the stampede to the pub and join in. From MathSoc, you can get anywhere in campus social life and may even get to meet me. But be warned, only show up when you have free time.

To end off I suppose I should reply to Mr. Ragde. Ordinarily I wouldn't
bother with it but after all, you are only frosh. As to his charges, I won't bother. Pogo (as we call him ) is certainly more intelligent than I and a much better writer. His only problem is insecurity bordering on paranoia. This drives him to nasty comments such as his column contained \& belief in such fantasies as "" BRUCE SPRINGSTIEN IS god ". But don't worry about him, he was my best friend on campus last term and if I'm lucky will still be so when we return this fall. Good luck \& drop in \& see us some time.

Rob Collins


GET AS RIĆH AS YOU CAN CO-OP STUDENTS, YOU'LL NEED IT TO PAY YOUR NEXT TERMS CO-OP FEES.

## Results of the mathNEWS Summer Questionnaire

This questionnaire was held on July 18th and 19th. The topics were fees, bombings and papers.

The survey was run by putting copies of the questions on a table outside the third floor math lounge. We found that in the past we had a better response doing it this way than by publishing the questions in mathNEWS. After the questionnaires are returned they are sorted manually and statistics such as those below are produced.

We had 102 valid responses. Of those responses $19 \%$ were female which is less than than overall math average of about $30 \%$. Other . individual information revealed that of fulltime students $69 \%$ were taking six courses, $20 \%$ five or fewer courses and $11 \%$ were taking 7 or 8 courses.
1a) The next time you pay your tution fees will you ask for a refund of your Federation fee? (86 responses).

| YES | $7 \%$ |
| :--- | ---: |
| Probably yes | $1 \%$ |
| Uncertain | $2 \%$ |
| Probably not | $21 \%$ |
| NO | $\mathbf{6 9} \%$ |

1b) Ask for a refund of your chevron fee? ( 85 responses).

| YES | $\mathbf{6 4 \%}$ |
| :--- | :---: |
| Probably yes | $14 \%$ |
| Uncertain | $6 \%$ |
| Probably not | $8 \%$ |
| No | $8 \%$ |

1c) Ask for a refund of your society fee? (86 responses).

| Yes | $5 \%$ |
| :--- | :---: |
| Uncertain | $3 \%$ |
| Probably not | $19 \%$ |
| No | $\mathbf{7 3} \%$ |

2) Recently "Convolutions" (the art object near the Library was damaged by a homb. Do you agree with this action? (101 responses).

## YES

Qualified yes

## 6\%

Uncertain
6\%
Qualified no
5\%
NO
13\%
Now for some bomb comments. "Convolution may not be art (it's debatable but its destruction really disgusts me. Such vandalism is a sign of severe mental disorder."; "Not hombing as it could be dangerous to people, but perhaps some other action."; "while I am pleased that it is gone, I can not condone the manner of it's departure."; "No, but I had contemplated doing it myself."; "Re

Convulsions or whatever it was called: Good bye, and good riddance. But maybe we could have sold it to U. to T. instead of blowing it to smitherines? Bombs are for malcontents, degenerates, and communists to use. University is supposed to stop people from thinking with their glands, not start it."; "The sculpture is the pits. But wanton vandalism is not to be tolerated under any circumstances."

## 1) Would you like to see the publication

 of the best articles from mathNEWS in a publication called "The Best of mathNEWS"? (88 responses).| YES | $\mathbf{5 5 \%}$ |
| :--- | :---: |
| Qualified Yes | $15 \%$ |
| Neutral | $20 \%$ |
| Qualified No | $1 \%$ |
| NO | $7 \%$ |

2) As the publication would be bigger than a regular issue ( 20 to 30 pages) would you be willing to pay for a copy? ( 88 responses).

$$
\begin{array}{ll}
\text { YES } & 27 \% \\
\text { Qualified Yes } & 27 \% \\
\text { Uncertain } & 18 \% \\
\text { Qualified No } & 3 \% \\
\text { NO } & 24 \%
\end{array}
$$

"If you guys bring out an issue of mathNEWS reruns deliberately, I'm getting my society fees back."; "Best of mathNEWS good idea."; "If the publication is too expensive, why not add one page to each mathNEWS issue entitiled Old Jokes?"; "How about the Best of enginews or maybe a cheap quarter page affair called the Best of the chevron."; "Convince me and I'll buy it."

We also received a large number of comments about mathNEWS in general and how mathNEWS isn't as good as it used to be (all you co-op students are lucky you weren't reading mathNEWS last winter). We would like to thank all the people who took the time to voice some constructive comments concerning mathNEWS. The following are a few of those comments:
"How about someone doing a comic strip with local on-campus political figures":
"mathNEWS is not as good as it once was - it has degenerated into a series of columns all giving their own in jokes. At least recently we haven't had columns giving a list of mail received that week. We need a strong editor, so that inane drivel doesn't get in and we need a copy editor, so that grammerical errors are not made, and so that jumbled up thoughts are straightened out.... mathNEWS used to boast of being the best newspaper on campus.

This sadly is no longer true."
"Even though I am a sci-fi fan, I don't think mathNEWS is the place for SF stories as the general math student may not be interested in this. However, do expand and continue your book review on sci-fi books as this appears to be very informative."; "Nowadays, the articles and humour pieces are generally irrelevant and not too funny."; "Extend your articles on campus events and happenings."; "Put more humourous articles in your publication (as this is what probably brings students to pick up mathNEWS)."; "At present mathNEWS is an office memo applicable and only understandable to the MathSoc, CSC, WATSFIC clique!"; "Keep up the good work."
3) On a scale from 1 (terrible) to 10 (excellent) rate the following papers. Answer 0 if you don't read it. One hundred people rated 8 papers. SciSoc News is excluded from the results because only $17 \%$ of those surveyed read it. The table is set up as follows:

1) The papers are listed in order of rank. Rank was determined by summing the scores for each paper.
2) A value of 1,2 or 3 was considered to be terrible.
3) A value of $4,5,6$ or 7 was put in the average category.
4) A value of 8,9 or 10 was judged to be excellent.

Name Terrible Average Excellent Don't $\begin{gathered}\text { Dead } \\ \text { Read }\end{gathered}$

| Imprint | $6 \%$ | $51 \%$ | $31 \%$ | $14 \%$ |
| :--- | :---: | :---: | :---: | :---: |
| Gazette | $9 \%$ | $60 \%$ | $26 \%$ | $7 \%$ |
| mathNEWS | $17 \%$ | $49 \%$ | $28 \%$ | $8 \%$ |
| enginews | $9 \%$ | $31 \%$ | $39 \%$ | $23 \%$ |
| Toronto SUN | $23 \%$ | $29 \%$ | $22 \%$ | $28 \%$ |
| KW Record | $13 \%$ | $22 \%$ | $17 \%$ | $50 \%$ |
| the chevron | $66 \%$ | $23 \%$ | $1 \%$ | $12 \%$ |

Persons who wish more detailed information concerning these questionnaire results can contact djmullin on the 'bun or Dennis Mullin, c/o mathNEWS, M\&C3038.

One final quote from the questionnaire: "Commments is spelled wrong."


## MEMO

## TO: All first year math students

FROM:. Dennis Mullin, ex-mathNEWS editor

## DATE: The ending hours of July

I have been asked as an ex-editor and founding member of mathNEWS to wंrite a few words about mathNEWS and things in general. I'll try and keep it short because I know that there are several excellent articles scattered through this issue that you will enjoy reading more than this.
mathNEWS has been around for five years now. It started with glue, ink, paper, the nearest $2741^{*}$ and a bunch of first year students (7 out of 10 ). Now days, it is put together with a phototypesetter, tape, paper and a bunch of first year students ( 9 out of 20). There are a few more students now in their upper years (because given time most first year students will pass). (there are also some pre-frosh -- ED )

I trust I have made myself sufficently obscure so that you haven't noticed that this is a pitch for you to drag yourself, your ideas and your talents to a mathNEWS production meeting in September. Of the six frosh who showed up last September, three are now regular columnists, one is the subscription editor and the other two still haunt the place. You don't have to be frosh or even in math to join the mathNEWS staff. The only requirement is that you do something constructive (write, type, layout) or something destructive (editting, consuming mN coffee).

The time and place of the first meeting will be posted outside of the third floor math lounge. Be sure and drop by, you might like the feel of being a mathNEWS staff member.

In a more general vein, I suggest that if you can arrange it, come and visit the campus in the week before classes start. The Federation of Students and the Math Society will be sponsoring a number of events and activities that will be of interest to you. In any case, take the opportunity to
wander around campus exploring the facilities (after all you are going to be here for a while and it will be in your best interest to know the place). A few questions you might answer are: Where is the campus centre? Where is the Village Green? Where will your classes be held? Where is the math lounge? Where is the entrance to the library in the math building? Why is the math building often refered to as M\&C? Where is the campus centre bank? The record shop? Federation offices? Where to you get your books and writing materials (a special word about bookstore lineups. The shortest line occurs 10 minutes before a class ends)? Where can you get a free map of the campus? Where are the tunnels which connect various (but not all) buildings? Where is the games museum? Where do you get your library bar code? Where do join the library tours? How can you find and gain access to the darkrooms on campus? When does WATSFIC meet? What is WATSFIC? Where is Health Services? What hours are they open? Where is the University's telescope? Where can you get food? What is C\&D? Does the math society have a mathscot? Why do some people want to burn it? Does the chess club still exist? When will the Fed Flicks be shown? What are they? Where will those movies be shown? What lineups will you have to join? Where can you get parking stickers (over by the smokestack)? What is the CSC? Why is it across from M\&C3038? Why does MathSoc occupy M\&C3038? Where is the room? Where is the third floor? Where are the free rulers?

Don't worry about doing dumb things or getting lost or whatever. You're only frosh once.
-djm
*A 2741 is a terminal/typewritter.

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## MASTHEAD

And this week we had working on mathNEWS: jjlong, (fearless co-editor), jllee (the friday morning joker) and final term graduate science student, is 1 yawn) gray, our typist and resident $D \& D$ hack; djmullin (ex-editor) and saviour of jj's sanity as he arrived in the nick of time to control PHOTON the musically inclined typist cagey dykes, dthedmonds as he wanders off into his work term in scenic Hamilton. Graphists this week included pckelly, john lee, and lccarson, We'd like to acknowledge the submissions by the faculty members: Professor Brillinger and Dean Forbes. This paper was also helped (lee disagrees) by the presence of Doug ("Thug") Thompson who was from New Zealand????? who typed in some articles and in passing $I$ will mention the beleaguered soon to be ex, co-editor of mathNEWS wj (fuzzy) ellis. Also helping were columnists Prabakhar (pogo) Ragde (a future editor?), rob (CRC) collins, James $r$ Bakker, rl (CSC) biddle, and peter (PULSE) stevens. Thanks also go out to kandry (ceng) mutheardy, fed prez Rick Smit, and MathSoc Prez andy (AKFM) mueller for their literary submissions. Thanks also to marcia mathie, to Kate (who typed in one, but should have typed in two, of pogo's articles), to gwscully (for staying out of the way), and to johann, arwhite, and wew ince for help with the photon this term. Photographs (which we hope turn out) were from the Math Faculty Freshman Guide, the Gazette, and Antical 1977. Thanks to everyone who worked with us on this record breaker. Hope to see you next term. Time 07:40 08/08/78

