## Editor's Witticisms

Hail to thee, blythe frosh.
If one in twenty of you catch that reference I'll be surprised, 'cause in a year it'll drop to one in a hundred. Majoring in Math does strange things to you. I haven't written in longhand since I started here, and I'm sure I've forgotten how. I didn't read a good book until I got stuck working in a little Upper Ottawa Valley town with one movie theatre, a disco, and a library just across the street. You either fall into the overindulgences of the Villages and never grow up, or you mature too fast wrestling with off-campus life, eating Kraft Dinners and fried bologna, starting to refer to everything in terms of integrals and FORTRAN statements...
(Whoa, there, no point in scaring them with untrue statements. You had more fun in your frosh year than in high school. Take it from the top, and try to be a bit more enthusiastic.)

Hey, there! Welcome to the wonderful world at Waterloo!! You're about to step into a learning experience unparallelled in your lives, a one in a million opportunity to expand your mind and your imagination!!! It's great to have you with us, and I'm sure you're going to have a super time!!!! There's so much to do here, so many people to meet, so -
(Will you stop acting like a cretin? This is supposed to be a balanced introduction to life at Waterloo, and within two paragraphs you've shifted extremes faster than a politician faced with a bad opinion poll rating. Start by telling them what this rag is, and be reasonable, puhleeze!)

This is the frosh issue of mathNEWS If one is on co-op, one gets a chance to meet frosh personally every two years, and to work on this document in alternate summers. This is my first chance to edit a
frosh issue, aided by a cast and crew of assorted motley co-op students, overdedicated regulars, all-year grad students, and unemployed hangers-on. As I write this, exams are going on, and so the quality of the work here is affected not only by who wrote it, but what preoccupations their minds were afflicted with at the time. It's supposed to help you adjust to life here at Waterloo with as little difficulty as possible.
(Well? Is that it?)
What else do you want me to say?
Oh, for crying out loud - this is an introduction to an introduction, so make a few general remarks, impress them with your skilful use of metaphor and simile, and pretend you know what you're talking about)


You may notice a few phenomena within and about you in your first few days here. The first is the instant friendships. They happen with anyone you happen to get thrown together with - the girl in front of you in the lineup, the guy you stop in the hall who's just as lost as you are, the person down the hall blasting out Springsteen. These friendships may last only as long as it takes to find people with interests more coincident with yours, but they can get pretty deep, particularly in the incestuous atmosphere of Village II. Don't question them; it's a sort of "strawclutching" reflex, and quite useful at that.

You may also find yourself becoming overwhelmed, in a sort of Kultur-shock, and regretting you ever came here. In the Villages, you'll get tired of the noise and the beer; off-campus you'll get tired of the dirty dishes and burnt meals. I don't know what I can say about this, except it'll pass. Doing something different sometimes helps - go out for a nice quiet meal, or try some of the alternative we'll hopefully provide in this issue.

I think the main thing I'd like to say is: donT get yourself too settled into one frame of reference. The whole point of university is that it gives you the freedom and responsibility you've craved all through high school. There's no gain in replacing one set of rituals with another. Example in point: when I was taking my seat at the initial frosh meeting (where the Dean and a
bunch of important people greet you and make funny little speeches), a young lady two sections over suddenly screamed, "Hi, Ralph!!" Turning to her companion, she explained, "They're the floor below us they all call themselves Ralph. Hi , Raaaaalph!!!" Ralph, all eight of them, waved back.

Now this is just plain silly. Ralph may have had the right idea, as long as they didn't make too much of it, but the wench was trying to impress others by who she knew. That's uncool, and it doesn't work anyway. Fellow frosh can't be impressed, unless they're real twerps and don't know you're as fumblefooted as they are, and to the rest of the university you are a form of life below artsies, or pond scum, or the stuff that collects between your toes -

## (Ahem!)

Yeah, okay. Sorry, I go off on tangents sometimes. The main thing to remember is that everyone's approachable, and most people will go a fair bit out of their way to help you. (Notable exceptions are 4th year systems design engineers, combinatorics \& optimization majors, and Integrated Studies students, none of whom will be able to make themselves understood to you). It's no crime to admit you don't know what the hell is going on, even if most people think it is.

Well, what else? Don't believe a word of this - after a while at UW you learn not to trust anyone, especially the anonymous
gremlins that write course descriptions in the calendar. Have fun, don't eat too much vending machine food, and remember: everyone's not out to get you. Only some of them are.

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 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 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.


## message from the dean

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 consistently done exceptionally well in the Putnam Mathematics Competition, which is written by some 375 Colleges and Universities in North America and we almost invariably have placed in the first ten. (In 1979 we finished in 3rd place.) You might also be interested to know that this Faculty has won the North American Computer Chess Championship! There are numerous other things to be proud of, and we are particularly pleased this year that your group represents an outstanding good group of first-year students in Mathematics, and that your average Grade 13 marks were above $80 \%$. 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 W. F. Forbes 1979/80

## Message from the Director Of Undergraduate Affairs

As Director of Undergraduate Affairs 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 the 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. It is also a chance to meet other students and Faculty members in an informal social 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 an all-out effort to meet
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 stil 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 to have a rewarding time at university. I urge you not to delay. Get involved and start working right at the beginning of the year. Don't wait until "later". "later" may just be too late!

P.C. Brillinger

## Prezz Sezz

Greetings from on high. It is not often that I speak to the peasantry, and as a consequence I am finding myself at a loss for words. A rare occasion indeed, but I doubt it will last over long. Ah yes, even now my mind fills with erudite eloquence, seeming as if my head must grow to rival Volstagg's girth to contain it all. So let me begin.

To start with, (about a paragraph late, is it not?) my name is Greg (Star) Bezoff and I unaccountably find myself in the role of president of the Mathematics Society. Which brings up the question "What is the Mathematics Society?". To be brief, the Mathematics Society, or Mathsoc as it is more commonly called is a high powered student council serving the needs of math students. The governing body (God, this is boring!) (Yes, I know.) known as Mathsoc Council consists of the Executive (elected and appointed) and the elected Representatives from (hopefully) all regular years and co-op streams.

The Elected Executive (why capitalized?) consists of myself, Vice President Valerie Carr, and Treasurer Drew Post. (Why do I get the impression that nobody is going to read this?) The appointed executive positions are Social Director, Administrator, Mathletics Director, Internal Affairs Director, Education Director, and Speaker, all of
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## Mathematics Society

The Mathematics Society is like a dose of clap; its arrival causes one pleasure, but after a while it can be a pain in the dong. Actually, that's not true, it was just too much of a temptation to open this article with a quote from a Monty Python routine. The Mathematics Society is the student society for our faculty, and you become a member as soon as you pay your fees. The society (Mathsoc, as it is called), can be a lot of fun, or it can be a nuisance, depending on your viewpoint. For the people who hang out in the office from which all business is conducted (MC 3038, also known as Mathsoc, which should be the source of some confusion but isn't), and those who organize and participate in Mathsoc-sponsored activities, the incredible frustrations of student government are balanced off against the pleasures of having created an experience which wouldn't exist otherwise. (Whew! you'll have to get used to these long sentences, especially when I start using semicolons) For others, it is either a great white elephant or a source of occasionally neat experiences. Let's take a look at this beast.

## 1. How do they get their money?

You give it to them. One of the extra fees tacked on to the upper right corner of your fee statement, is something like $\$ 2.50$ a term that Mathsoc gets. The fee is refun-
dable in the first three weeks of the term, if you come into the office and ask for it back. Most people don't; some make a regular point of it.

## 2. What do I get out of it?

For starters, free or reduced admission on all sorts of Mathsoc- sponsored events. These include pubs, a semi-formal thrice a year, wine and cheese parties (the cheapest drunks you're going to find anywhere, especially if you want a touch of class), and the recreational events clustered into Mathweek (a week in the middle of the term where all sorts of strange things happen). The bargains to be found at the Coffee \& Donut (C\&D) stand owe their existence to Mathsoc. This document, and its periodic manifestations during school, are funded by Mathsoc. Also, important things like music in the lounges, the lockers you see on the third floor (very important, those), a lost \& found, WATSFIC, Mathletics and Antical (see elsewhere in this issue) are looked after by Mathsoc.

## 3. So what's the problem?

Well, often Mathsoc seems to be existing only for its own sake. There is often the complaint, universal to all forms of
organization, that the Mathsochists (as they call themselves), are a clique. (They counter with the excuse that it's a clique anyone can join). True, they occasionally do dumb things like vote themselves money for a party, or take little privileges they really shouldn't, or treat the office like their personal lounge, and have one set of rules for themselves and another for the average student. This is nothing you won't find elsewhere in the real world, which you won't hit for four years anyway, unless you're on co-op. But that's another story.

## 4. What can I do?

My advice is to take advantage of the things that appeal to you and not bothering incurring any of the hassles. It's more fun that way. If you want, drop into Mathsoc (not hard to find, it's where all the noise comes from) and talk to the hangers-on. Some of them are rather weird but some are pretty nice, and you'll probably get roped into a game of cards or somesuch (see the D\&D article elsewhere). If you're really feeling masochistic (no pun intended), you might consider running for any of the several Council seats that are coming up in the 1 A and 1 regular constituencies, about October. The turnout for those is habitually so low that you have a good chance of being acclaimed. Be advised, however, that it may have adverse effects on your average.

## continued from page 2

which I expect to be open come September. (Some inobtrusive foreshadowing there.) What this pack of pseudo-politicians attempts to do is organize all manner of social and athletic events and keep a line of communication open between the students and faculty in case the faculty tries to pull a fast one on us. How we do this is best described as a cross between Parliamentary Politics and a Bar Room Brawl. If you find this hard to visualize, attend one of our meetings and all will become clear to you. (Some more subtle foreshadowing.) I could say a lot more about what indispensible services Mathsoc provides, but I believe Prabhakar has written another article for this rag that does just that. Just don't take him too seriously, for it seems that he does not see things quite as they are. (That was brief?)

Anyways, in a slightly more serious vein (adjust glasses, assume expression of extreme profundity) what I really want to say is that you need us and we need you. i.e. We need warm bodies to fill the aforementioned Executive (There's that
goddamn captital E again.) posts in order that we may serve you better. (So that's what he was leading up to.) Besides, Executive (again with that $E$ ) members get all sorts of fringe benefits such as ... well, I'll think of some by the time you get here. And even if you don't think you'd like to get involved in Mathsoc, at least drop by the office (MC 3038) to buy a frosh T-shirt or pick up a free ruler and button (and give me a chance to talk you into something). The worst that can happen to you is getting involved in a game of cards or making a few friends. By the way, don't think you can avoid my words of wisdom by not reading this article as I'll probably be speaking (if you can call it that) at the Frosh General Meeting on Sept. 7.

A few minor points to close out this incoherent raving. I am not schizophrenic. I do not suffer from megalomania. I do not bake little children into pies. I am looking for a new yes-man, as it seems that Mr. Collins will be off working next term.

Excelsior!
Greg Bezoff


## C\&D

C\&D is a coffee and doughnuts (and other goodies) stand providing low-cost , high-quality food for starving students, faculty and staff. It's located in the thirdfloor non-smoking lounge in the Math Building, room 3001 in case you get lost.

C\&D was started in 1971 in an attempt to offset rising prices and falling quality of the vending machines and Food Services fare. The stand was an instant success and has since expanded its services to include submarines, sandwiches on various rolls, soup, hot chocolate, tea, pop, iced tea, cookies and tarts, and muffins. Oh, and matches too (the inedible kind). Prices are set on a break-even basis.

Since opening, math's C\&D has been copied by many other societies, engineering and arts to name just a couple. However, math still remains the undisputed champ. Others may get us in price but not in quality.

If you want to earn a few extra bucks, you might consider coming to MC3039 and signing up to work hours at the stand. More information about when you can sign will be available Sept. 5 on the door of 3039. The pay is $\$ 3.00$ per hour with a three hour per week maximum. The job requires simple skills like understanding a few words such as "coffee", "tea", and "why are you always out of chocolate glazed?", as well as the ability to make change.

Also, if you're really keen, you can apply for manager or assistant manager for the winter term (sorry, the fall positions are already filled). These are salaried positions chosen by Mathsoc council on a term-by-term basis.

The stand opens at 8:15 am and closes at $4: 30 \mathrm{pm}$, Monday to Friday. Prices for this term, I hope, are:

| coffee | 15 cents |
| :--- | :---: |
| tea | 15 cents |
| soup | 15 cents |
| hot chocolate | 15 cents |
| muffins, etc. | 15 cents |
| doughnuts | 15 cents |
| pop, iced tea | 25 cents |
| sandwiches | 85 cents |
| submarines | $\$ 1.10$ |

Any complaints or suggestions can be sent in writing to MC3039 where they will be read and probably ignored. If you learn how to use the mail system on TSS on the Honeywell computer, our userid is c.and.d

So make use of the free coffee and doughnut coupon provided somewhere here to introduce yourselves to our service and I'll see you in September. (Hey! That sounds like a good name for a song!)

## Changing Timetable

Most of the pertinent information about changing your timetable is given to you as part of the package you just received. There are a few things you should realize, however. One is that a master timetable is plastered all over the walls in Operation Mathstart (MC5158, usually), and next to the free coffee and donuts you can get there, it's the most useful thing there, 'cause armed with a calendar you're all set to play "Drop and Add".

You should also realize you can drop and add courses up to three weeks after the start of term (some courses fill up early, though). This means you can sit in on other courses and decide if they're worth it before committing yourself. This is why it's wise not to buy any textbooks until you're certain of your course load. Extra courses don't cost a cent more, and if your average is high enough, you might consider them.

Changing sections (ie, staying with a course but switching times) is possible, but they don't really encourage it for fears of imbalancing classes, which are usually rather full in first year. Nevertheless, if your schedule is really inconvenient, you can get approval for a change by talking to the prof whose section you're switching into (you can get his name from the master timetable) and getting his initials on your timetable.


## The Decline And Fall Of the Conventional Morality

Their game starts in the late evening, when the glow from the ruins across the river begins to rival that of the dying sun. Having wandered across the face of the empty city all day, they meet on the stone steps in front of the great library, and from that point the course of time never varies. She straddles one of the still lions, and he slumps on the middle tier of steps.
"Getting late," she says. Any beauty she had once possessed is almost completely hidden by the filth covering her. She glances at him around a strand of hair glued together by some unknown slime; scraps of soiled paper and numerous variegated stains adorn the folds of her ragged and disintegrating dress. No shoes encumber her blackened feet, bleeding in spots from the harsh asphalt she has encountered in the day's trek. Bits of decaying food are sticking to her face, remnants of bygone meals. She shakes her head into the tainted wind coming from the east, and specks of offal fly off into the street below. "Don't you think?" she adds, teasing the vermin crawling over her arms with a bit of chaff.
"Huh," he grunts. He is hulking, massive; he stares at her from under beetlebrows, his endomorphic torso being held in precarious equilibrium on the steps by short, stubby legs. His hair forms an inverted bowl on top of his head, its growth seemingly halted at the level of his eyebrows. He is vaguely conscious of a sense of deja vu, but having no means to cope with it he simply looks at her uncomprehendingly.

She swings a leg over the stone feline and leans forward, peering out through a forest of slovenly bangs. "Gonna please me tonight?" she asks incitingly, licking her dried and cracked lips. The everpresent flies settle back on her and resume feeding.

The corruption cannot hide her meaning; nor can the dirt hide the prettiness of her eyes. He nods slowly, chemicals combine in his sluggish nerves, and the essential question comes out:
"Where?"
She rises and leaps down to the leftmost set of stairs with a sticky sound. "At the trash dump. The large pile, outside the
building near the northern gate. When the moon rises." And she disappears inside the building, her footprints smearing the dirty grey of the marble steps. He knows the place, spawning ground of the hordes of houseflies that fill his days with buzzing discords.

The next morning he spies her sunning herself in the gutter of one of the concrete canyons in line with the dawn. He sloshes through heaps of paper towards her, and when he is within twenty feet she sits up and notices him. A fresh strand of orange peel decorates her hair; new streaks of grease show on her midriff where the dress has completely surrendered. "Where were you, love?" she says. "I waited all night, but you never showed up."
"I was there," he says firmly, filled with the frustration of possessing nothing but lifeless garbage. He does not understand that he is locked into this moment, that he will never see her, that he never has; "I was there," is all he can repeat, as he sits down and begins to pick squahshed flies off his stomach.

"Actually, I get rather emotional about scrabble."

# Computer Systems On Campus 

## IBM Systems

Many of you aren't coming to University of Waterloo for the first time. You have been here before for the Computer Science Days. These are the days where a whole bunch of prospective frosh are invited by the Computer Science department to get a first hand experience in the field of computing. For those of you that haven't come here before, don't worry. What you missed will be gone by the time you get here. Those of you that made it here, saw a magnificent room, red from floor to ceiling, that contained all sorts of blue coloured boxes with flashing lights. These boxes were the various computers here on campus. (Actually they represent only about half of the computing power on Campus). This is IBM territory (at least that's what most of us call it). Well the Department of Computing Services, in all their wisdom, decided, after about 12 years, that a lot of this equipment was outdated and falling apart (that was a result of the large repair bills in recent months). Anyway, the result of this is that two of the three systems in that room will have been dismantled and hauled away as so much scrap by the time you get here (we can only hope so). These were two of the largest (and the most impressive) systems. These systems that are doomed are the System $360 / 75$ and the System 360/44. The '75 handled almost $75 \%$ of the computing load that DCS received. These systems are to be replaced with the newer (and also more powerful, smaller, efficient, ..shall I go on?) System 3031 computer. This computer is on of the largest that IBM produces, the 3033 being the largest in the IBM line. In August of 1981 we are supposed to be acquiring two System 4341's which are the newest in the IBM line. There is also a System 370/158 that DCS is retaining. This is a large system and will be replacing the ' 75 in the fall.

Currently the ' 75 is running an operating system called OS/MVT. This is a batch (Yecch!) environment system that runs the famed WATFIV compiler amongst other things. This is the system that many of you taking CS courses will be using indirectly. I say indirectly because what you will actually be using to write programs on is the Waterloo Interactive Debug and Job Entry Terminal system (WIDJET for short). You may have already heard a lot of bad things about WIDJET from your friends at Waterloo but it is a step forward from what we had in the past. WIDJET is a terminal system where the user uses a CRT (TV) terminal to type in his/her programs in a form that the computer will understand. This system
runs on Digital Equipment Corporation PDP11's as well as the IBM Series 1 computers. There are presently three WゆDJET systems on campus, two running on PDP11's and one on the Series 1. In the fall term there are plans for adding two more Series 1 systems. This brings the number of WIDJET terminals to well over 150 for use by the students. Of these three will be staying in the Math building whereas two will be in the Engineering buildings. This system allows for changes to your

program; it allows you to 'run' and receive the output from the computer system. It also allows for the program to be saved away where it can be accessed at another time. Compared to cards this is by far the better way to get the programs in a machine readable form. Cards is exactly what we had before the days of WIDJET. When you are ready to run the program (get the computer to do something with it) the program gets sent away to the ' 75 to get executed and after the ' 75 gets through with it, it sends it back to WIDJET. The output can then be looked at from the terminal or printed at a high speed printer. The new 3031 computer is supposed to come here on August 15 so chances are good that the ' 75 will be gone by the time you get here (that's okay...there are a lot of pictres around). The $370 / 158$ will replace the functions of the ' 75 and the 3031 will be replacing the $370 / 158$ in its functions.

What, you may ask, the does the 370 do? It runs the best of the IBM systems on campus. This is the Virtual Machine (VM) system. It may be the best IBM
system but it is also the most expensive system on campus to run. Few first year people get a chance to work on the VM system until at least their third year in CS .so I won't go into the virtues of VM.

The $360 / 44$ (remember that one?..thought I had forgotten about it eh?) is a machine that sadly most of you will never see. It used to run an APL only system. This machine has already disappeared from the room forever, I am afraid.

## Honeywell 66/60

The Honeywell $66 / 60$, known affectionately (or otherwise) as the 'Bun, is the only computer on campus with a name. Purchased several years ago by the math faculty to provide an alternate service to the Computing Center's IBM equipment, it has grown to be the second largest computing facility on campus. Although supplied by the manufacturer with a positively baroque operating system, the 'bun is a fairly comfortable environment owing to the large amounts of locallywritten software (if you don't mind the bad response when 72 users are signed on). The 'bun runs an operating system called GCOS, under which runs a time-sharing system known as TSS. Next to UNIX (with which no other system can compare), the 'bun is probably one of the most comfortable environments to work on at the university.

Access to the 'bun is normally restricted to students in their second years and up, so the frosh is unlikely to get access to it. There are several terminal rooms full of terminals connected exclusively to the 'bun. MC3065 and 3067 each contain 5 teleray terminals running at 1200 baud. MC3019 contains 6 volkercraig terminals also running at 1200 baud. If a fast terminal can't be found (which is most of the time), there are many $150-$ baud volker-craig and LSI-blue terminals in MC3018, as well as several hardcopy IBM 2741's, and one tektronix graphic display terminal. For those people with the foresight to have their own home terminals (or computers), one can access the 'bun via datapac. (If you don't know what that is, don't worry about it).

One feature which makes the 'bun attractive is the photo-typesetter located in MC3019, which is used to typeset books, research papers, and virtually anything else (i.e. this paper). In addition, the 'bun
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has a card reader and punch (for those who still use obsolete media), as well as four tape drives and a line printer. Printer output is filed every hour outside MC3016.

In the lower years at least, the 'bun is a much nicer place to do assignments than the over-crowded Widjet rooms on the second floor, although towards the end of term one may see lineups forming at the 150-baud terminals. At this point, one gives up and decides to use UNIX.

## MathUnix

Unix.
Rejoice at the sound of its name.
A reminder that there are sensible people in the world.
Some of whom are yet involved in computer science.

It has been said that the quality of computer systems in the Math building increases with their height in said building. Unix is on the sixth floor. How many floors does the math building have? Right.

The Unix operating system, for those who have not yet had the joy of discovery, was written at Bell Labs in the early seventies by Ken Thompson and Dennis Ritchie. Early Unix systems were only for the Digital Equipment Corporation's pdp11 computer, were (like all new systems) limited in application software, and were hidden in odd locations at Bell. Nowadays, there are Unix systems for a wide variety of machines, installations all over the world (though most still at universities), and Unix has enough high quality software to sink a battleship. Especially for dealing with programming or programming languages, and for document preparation, the software available on Unix makes things very comfortable. Moreover, the entire system has an combines elegance and economy in a way that is sadly rare. Unix is the nicest practical operating system I know of.

Our installation of Unix (MathUnix) runs on a pdp11/45 in MC 6099 , with the terminal room adjacent. This is a small system MathUnix only supports about 12 'simultaneous users. There are some manuals in the terminal room, and you can buy a small package of documentation at MC 5177. You can peruse or borrow documentation from the Computer Science Club (MC 3037, see article in this paper), and in fact the CSC is in general a good place to ask questions about Unix.

## Math 000

Math 000 is a course that all co-op students must take. It is supposed to intorduce you to the co-op system including such things as resumes, interviews, and work reports as well as what is and what is not kosher in co-op.

The course's biggest plus is the opportunity to ask questions. (And I bet you've got as many as I had.) It brings before you the two people who know most about the co-op system, (and perhaps the only two who know enough), Randy Klawitter and Phil Wright.

The course's biggest minus is the time it is held, Monday at $4: 30$. This is to make sure that everyone can attend but sometimes the lecturer is drowned out by the grumbling of stomachs and the mumbling of students who have a hard Monday as it is without this.

Only one of the lectures, when I took the course (and I use the term loosely), was of no value whatsoever. They brought in an English prof to tell us how to write work reports. Instead he stood up there and, in a barely coherent voice, read sections from his book on how to write a novel. He covered such matters as existentialism, how not to lose an audience over several chapters and how to effectively cover a conversation a person has with himself. (All obviously important for those who must write a 2500 word work report which, for first term students, comes out looking amazingly like 'How I Spent My Summer' with good grammar and spelling.) By the end of the class there were approximately 15 people left (or so I was told).

But all in all I have found the course helpful all through my 2 years in co-op. I guess it really doesn't matter since you have no choice whether or not to take this non-credit course but I thought I'd let you know what you are in for. Good luck in your up-coming term, especially those of you who are going through interviews in first term.

If you are interested in software, you should be familiar with Unix. Moreover, MathUnix needs friends.





[^0]Traditionally, MathUnix has been a rather easy-going place, with userids easily available and no processor time or file space accounting. Unfortunately this has changed somewhat in recent times, and userids are only easily available to faculty members and graduate students. There is only one course, CS 454, that entitles students to Unix userids automatically. Other than that, undergrads must submit a proposal presenting some good reason for a userid, and generally tackle some red tape in order to get started. The procedures are posted in the terminal room, and guidance in best managing the procedure is available from the CSC. The CSC may also be able to suggest some interesting projects for you to attempt as a way of becoming more familiar with Unix.

Because of it's non-existant or shoestring budget, MathUnix may seem a little more informal than other Math building computer systems in its method of operation. There is no operator, and if Unix stops because of hardware failure, it may be hours or even days until things are fixed. Output from the printer is filed only sporadically.

Unix support, that that is done, is done by a graduate student (its a form of "teaching assistantship"), and informally by helpful and knowledgable users. The Computer Communications Networks Group (CCNG) also run Unix (over in their lab in Carl Pollock Hall), and MathUnix software support is often done in conjuction with support of their Unix systems.

## CSC

Not that they'll tell you about the Computer Science Club right away. Oh no. That they'll leave you to discover too late. Much too late. Long after the free passes to Maxim's have expired. Long after the harpsichord is in tune. And after the races. But you'll still be able to sign out the yacht for long weekends. Not that you'll care by then.

The CSC is something different to every person that wears it out. Nominally, it coordinates and organizes all sorts of wonderful activities for the many people at the University interested in Computer Science. Though more informally, but perhaps equally importantly, they also serve as an ad-hoc debating society, attempting to solve all those world issues and fundamental problems of science and technology that seem so pressing at three $o^{\prime}$ clock in the morning, after staring into a terminal for hours. Oft times, these discussion centre about computer science!

From every walk of life, from the far corners of the campus, (sometimes even from the great beyond) people are drawn to become members of the CSC. The magnetic tractor beam stemming from the sixth floor of the Math building works well. Members include professors, graduate students, staff members, and even some normal people. Most, however, are undergrads, and most of them are Math students. Computer science seems to attract wild eyed youngsters (such as, perhaps, yourself) and this enthusiasm usually means that first year students are quite active in the club. This could also be because all the senior club members are often asleep.

Historically, the CSC has organized field trips, films, debates, lectures, baseball games, grand prix motor racing, bobsledding, sky-diving, alligator wrestling, jungle safaris, the quest for the Holy Grail, and the War of Jenkin's Ear. Well, I might have been exaggerating about the baseball games.

This year I didn't even mention manned spaceflight to the Lesser Magellenic Cloud. The CSC doesn't rest on past laurels.

The most visible activity of the club in the past few years has been the programme of guest speakers at meetings. Many quite famous people in computer science have spoken at CSC meetings, some so famous, you've probably never heard of them! There is much interesting work being done at the University itself in computer science, of course, and representatives from various research groups are often dragged in to CSC meetings to justify their folly. CSC talks are usually aimed at the level of "keen" undergrads, but they are interesting to the full spectrum of the membership.

Another important activity is the "CSC Friendly Consulting Service". As the CSC attracts a number of people well versed in the local computer systems, they decided to increase the formality of a policy long informally extant: If people having problems with any local computer system drop by the CSC office, they will get all the help the people in the office can provide. Informal and friendly help is the goal, but of course they can't guarantee anything, and won't help you with your homework unless you are very clever in phrasing your questions. Anyway, if you have difficulties in doing battle with the local automata, drop by the office.

The CSC has a number of resources at its disposal, not even including the resource disposal unit. The CSC office (MC 3037, across from MathSoc) is a hub of activity: the office serves as the "business centre" of the CSC; the location of the CSC library; the "friendly consulting" office; and as a more-or-less lounge for members (rather a tiny one, though).

The library has a large number of computer manuals, a large selection of computer science books (esp. course texts), and a number of computer magazines, journals, and newspapers. All on one wall! CSC members may borrow from the library for short periods of time, and anyone may use it for reference. Also for general reference, but especially for the
consultancy role, the CSC has large amounts of specific documentation for both the Honeywell TSS and MathUnix computer systems.

There are, of course, the odd office supplies around the office which anyone is welcome to use as long as they don't walk away with them: the stapler, the scissors, the kettle, the reapot, the clock, the radio, the dalek. Oh yes, the dalek. Hmmm. I must get to that later.

At the beginning of the term, there should be CSC buttons and CSC tea-shirts purchasable from the office, too. Ask about the yacht while you're there.

And now about the Dalek. If you don't know what a dalek is, you should be ashamed of yourself. The Dalek came to the CSC from the planet Skaro, and acts as official representative and as serjeant-at-arms. More importantly, almost all the junk mail the CSC gets (rather a lot of it, mostly concerning microcomputer software and hardware) it addressed to Calum T. Dalek. If you want to peruse the Dalek's mail, you are quite welcome its beginning to bore him, and a bored dalek the CSC does not want!

Notice I didn't say anything about the yacht.

The Computer Science Club wears a few hats: the CSC is club of the Federation of Students; a club of the Mathematics Society; and (most impressively) the University of Waterloo Student Chapter of the Association for Computing Machinery. (The ACM is an international CS association with all sorts of idealistic goals which I can't remember. Becoming a student member entitles you to lots of nifty junk mail resonably inexpensively. The ACM does not have a yacht.) The CSC is also helped a great deal by the Department of Computer Science, who have lots more money than the CSC, and a bit more sense. They do not have a yacht, either.

And now the pitch. Calum T. Dalek wants YOU. The Computer Science Club hold meetings every fortnight or so, usually featuring a guest speaker. The first meeting of the term also features the termly democratic elections for club executive, plus hints about the new term's exciting events. Attend.


## Rocky Horror Picture Show

Uh... yeah. I'm not quite sure what this is doing in here, or why it exists, but it does, so:

RHPS is a film, a rock musical that was originally a stage presentation in London around 1973. It has your typical miniscule plot, though this one is rather unusual, dealing with an all-Americal engaged couple who happen to stumble into the castle of a transvestite from the planet Transsexual, in the galaxy Transylvania, on the night he unveils his greatest creation, a muscular Frankenstein-type he-man made especially for (ahem!) relieving his tensions. If that doesn't faze you, it's a pretty good spoof on old sci-fi/horror movies, and the music is quite decent. But that's not all..

A cult has grown up around the movie a devoted band of followers who see the movie innumerable times, memorize and even augment the dialogue, and do strange things at showings. For example: the movie opens with a wedding scene at which the cultist throw copious amounts of rice and confetti, and a little later a duet takes place in a thunderstorm called "There's A Light" (not the storm, the song) during which everyone in the theatre who came prepared holds up a lit candle (this is really charming the first time through). Unfortunately, sometimes these people are so noisy that they drown out or anticipate most of the best dialogue, especially if they're high-school students out to get drunk and rowdy.

RHPS is worth it if you can get a quiet showing, which is usually the case at oncampus showings. (Mathsoc has the soundtrack taped if you want to hear it). Avoid the weekly midnight showings around, they're filled with cretins who make the show a central theme in their lives. Sad, but true.

there have been complaints about this large empty seace, mainly from an ex-frosh putting on airs. We would normally have told him where to go, but it is far better that We fill this space with an implicit virulat denunciation of this low form of life and all that he stands for. We trust you will understand.

## Campus Libraries

Libraries in campus life serve two purposes. One, they usually house useful material for essays and assignments: especially when you're taking non-math courses. Also there are copies of textbooks which you can consult in desperation when you can't do your assignment which is due the following morning (or the exam which is tomorrow afternoon).

The second use for Campus Libraries is as a source for leisure-time reading. If you don't like to read (I hear such poor souls do sometimes come here) skip this section. And avoid elective courses. In fact, if you don't like to read, what have you come here for? Expand your mind a bit! To those who do like to read, the Arts Library is the place to go; the fiction and literature sections are the top two floors, with various non-fictional stuff further down (you see where I spend most of my time in there) Warning: it's easy to get lost. Although the Arts Library is clearly and simply arranged, the books themselves impose a formidable barrier to passage. (Once I spent an hour reading a novel by Flaubert, cunningly placed on a corner shelf, while trying to find a a book of Shakespear's plays.)

A quick count reveals a little known fact: there are eleven libraries on the Campus (that I know about, at least.) Here they are:

1) The Dana Porter Arts Library. This is the ivory tower in the middle of the campus, ten floors high. It is said that is was supposed to be twelve but after the tenth the architect realised he hadn't counted on the weight of the books, so they stopped building. The Arts Library houses books on all subjects except Mathematics and Science (and Engineering, for all who care). See below. If you want a good read or you need a book for an assignment in anything from Anthropology to Zebras, there is the place to go. There is are also special services provided: a listening room with a good classical record collection, a microfilm library and a periodical library (these are also in the EMS library, below). The main entrance is on the other side on the cube from the Math Building, into the second floor.
2) The Engineering, Math, and Science Library. This should, of course, be called the Math, Science, and Engineering Library, but whoever thought up the name had their priorities mixed up. It is on the fourth floor of the Math and Computer Building (directions for which you hardly need). There are all manner of technical documents and periodicals there, and shelves of textbooks and reference books for everything in the above subjects. No really juicy reading, though (although Flatland, by I. Square (the 2-dimensional fantasy) is there, which surprised me.)
3) There is apparently a Chemistry library in the Chem II building. I've never been there, not being a Chemistry fan.
4) 5) 6) 7) There are four Colleges on the other side of Laurel Creek each associated with a denomination of the Church; they offer residence and courses for the University, as well as their own. Each has a library. St. Jerome's College and Conrad Grebel College are the largest. I think that University students can always borrow books there; certainly they are allowed in.
1) The Environmental Studies Building has a Map Library, the idea of which fascinates me, although I've never actually visited it. 9) 10) This is pushing it a bit. The ninth and tenth are the Computer Science libraries. One is the Department of Computing Services' Computer Reference Room, MC 1025. It is full of manuals for all sorts of neat things, especially DCS services. The other one is the Computer Science Club's library, elsewhere documented.
2) The University of Waterloo Science Fiction Club (WATSFIC) has a Science Fiction and Games library. You have to be a member to use them.
3) The Campus Centre Turnkeys have a small library along with their other stuff, for the benefit of anyone with a student card.
4) Some of the various national Student's Associations have foreignlanguage libraries (The Chinese Students' is in the bottom of the CC.)

Happy Reading!

## Campus Newspapers

Kind of. -There's no clear definition of this, so I'm going to tell you about all sorts of papers.

The most obvious one is the Imprint. You pay money for this one, about $\$ 1.75$ a term, refundable (as are most of the fees) in the first 3 weeks of the term. They have offices in the Campus Centre, and their issues look fairly professional even if the content doesn't always bear the image out. They're the official UW student newspaper, so I'd better not insult them anymore.

The Chevron used to be our student newspaper. A few years ago the Federation of Students cut off their funds, charging that they were dominated by a group of local Marxist-Leninists called the AIA (standing for Anti-Imperialist Alliance). They were reinstated, went back to their old ways, and were finally defunded and thrown out by a student referendum. They now put out skimpy four-page (we should talk, eh?) issues from an office off-campus, above a variety store in downtown Waterloo. I won't say anything more about them, for fear of biasing you; you can make up your own mind in September, when you see a copy for yourselves.

The Gazette is a paper put out by Information Services, a branch of the Administration. It's famous for the Gazette Notebook, a trivia section on the front page. It also tells you neat things like what your profs are getting in the way of research grants, papers published, and
promotions. It also tells you what's happening at other universities. Inoffensive, but a bit dull at times.

ENGInews isn't really a campus newspaper, but we've been through that. It's put out four times a term by the Engineering Society and features sexist, racist, rude, crude, and disgusting articles, jokes and editorials. It's one of the most popular papers around, to the lay student (?!) and has to be seen to be believed. It's noted for its pictures of the WBS (Welcome Back Stag), a section called Beaver Tales (but let's not get into that), and constant egotrumpeting about the brains and sexual capacities of engineers, all of it very silly.

Other societies put out papers, but the average math student doesn't usually run across them, except for mathNEWS The first three can be picked up on the third floor of the Math Building in front of the lounges, on the day they're published (they're all weeklies). There are two other publications distributed on campus which I suppose I should mention. Today's Student is published somewhere in the States, and espouses a gospel/evangelical pop Christianity view of things which most Christians find rather amusing, if not abhorrent. Herald Of His Coming is even more extreme, being mostly purple recitations of mass conversions and triumphs of faith. The best thing to do with this is take it into Calculus class and spend your time underlining all the phrases which can be taken in an obscene manner when taken out of context.

The Campus Bookstore is the place where almost all of you will be getting your textbooks (to the tune of $\$ 100-\$ 150$ a term). It is located in the South Campus Hall, which is the building that you see first when you enter the campus's south entrance.

The Bookstore consists of two halves, the EMS half downstairs, where Engineers, Math; and Science students select their texts from piles and warehouselike shelves, and the rest, upstairs, where Arts texts and non-course stuff can be bought. Upstairs looks like a regular bookstore.

Things to remember when buying books in the bookstore: 1) Be sure that you're buying the right book for the course you're in, since the refund policy only allows you to get your money back for near-perfect textbooks for courses that were canceled. If you kept the sales slip. And you were enrolled in the course. And the canceled check. And remembered to brush your teeth that morning.
2) Don't antagonise the staff. (Antagonising the staff often means asking questions.) 3) They don't take checks unless you sign them on the back with all the pertinent bureaucratic information before coming to the cash register. If the bank returns your check for any reason, the bookstore charges you $\$ 5.00$. 4) Leave any briefcases, bags, boxes, \&c, in the pigeon holes at the door so that you aren't tempted to steal anything.

Apart from these few characteristics the Bookstore is remarkably like a real shop in a real business district, and the selection is quite good. Also, you don't have to be enrolled in a course to reap the benefits of the discounts on course books (If you can find a course book that interests you incidentally.)

## mathNEWS

is a paper funded by the Mathematics Society. It normally appears every Friday, on the benches outside the third floor lounges. It is on the average about $381 / 2$ by 11 pages, both sides, set in ten point type on the Photon Econosetter controlled by the Math Faculty's Honeywell 66/60. It is supposed to be independent of Mathsoc, but isn't for two reasons: one, they pay the bills, and two, most of the people working on it are involved with Mathsoc in some manner. It tends to be a trivia disseminator / obscure panegyric / Mathsoc gossip sheet that requires the average intelligence of a houseplant to understand. Attempts have been made in the past to shed this image (most recently, a highbrow effort called Eclectia, which failed due to lack of participation), but none have survived. As a result, it is nothing
more than a mild dose of entertainment, comparable to mainlining Coca-Cola or scratching your back, and just about anyone can make the grade as far as writing ability (or lack thereof) is concerned. Witness this paper as a prime example.

Here's how it's put out: sometime late Tuesday afternoon, articles start trickling in (more likely, the editor starts twisting people's arms). Some are handwritten, some are typed into the computer using very simple formatting commands (if you can handle a calculator, or WIDJET, which you'll all have to face, you can do it this way.) The editor goes through them checking for typos (not too successfully, usually), and gets someone to run them off on the Photon. Sometime later thant night, it gets laid out and pasted down, and
little graphics doodled here and there, and Wednesday morning it gets taken over to the nice people at Graphic Services, in the building with the smokestack on it. They call us back Friday morning (assuming no foulups) and we go over and pick up about 1200 copies. We put them out and they disappear.

So what do they usually contain? All sorts of garbage: a gridword (crossword to you uninitiated frosh), personal columns, letters, news of neat happenings, book reviews, trivia tests, and other weird and wonderful stuff. You'll see when you get here. Anyone wishing to write for this scurrilous rag is advised to come into Mathsoc (MC3038) sometime and volunteer. Start going through those old grade-school compositions!

Where does one live when one attends university? Many students (especially freshpersons) live on one of the campus residences (ie the Villages, the Co-op, the Church Colleges, Married Students). However there are only a limited number of places available in campus residences. Many find residence life too restrictive, too rowdy, or too expensive and opt for offcampus living, maybe not in first year, but during sometime in their university lives. Where are the off-campus places that over 10000 of UW's 16000 plus students live?

Well an off-campus student may live in any place in Kitchener-Waterloo, or commute from out of town, but generally offcampus students have a tendency to live in a selected number of off-campus "communities".

The two most well-known off-campus "residences" are Waterloo Towers and the Sunnydale Place townhouses. Waterloo Towers is a 12 storey high-rise located on University Avenue just south and east of Philip Street. The building is almost totally filled with students. The rent is high, but a number of people share each apartment to lower the rent. Despite its proximity to the campus some students avoid the building and have referrred to it as "cockroach towers".

Sunnydale Place is located just north of Bearinger Road and is about a twenty minute walk from the main campus. It can be reached on foot and bicycle via the Radio Waterloo path on the north campus. The townhouses are expensive, but are in fair condition. Normally four or five students live in each unit. The students are usually more affluent than other students as many own cars. Many of them, being ex-villagers, enjoy rowdiness, and Sunnydale parties are one of the reasons Sunnydale has been dubbed Village 3. Basically Sunnydale is a townhouse residence where students are given more freedom and responsibility than they had in the villages.

Less well-known than Sunnydale, but containing almost as a high concentration of students, are the townhouse units located in the Albert and Weber Street area, and those in the Philip and Columbia Street area. These townhouse units are similar to Sunnydale as far as rent and occupancy go, but they are usually a little less rowdy, and in a little better condition. The Philip and Columbia townhouses are about a quarter-mile from campus (just north of the Co-op). The Weber and Albert townhouses are about a mile and a half from campus just north of the Parkdale Plaza (where the nearest liquor and beer stores are).

Besides townhouses, another popular living mode with UW students is the one or two bedroom apartment. There are usually two, three, or four students to an apartment. These apartments range in quality and price.

## Off-Campus Living

Besides from the afore-mentioned Waterloo Towers, there are a number of apartment bulidings and districts which are popular with students. The most famous of these is King's Tower, located in Kitchener on King Street across from the KW hospital. King's Towers is considered the "twin" of Waterloo Towers because of their similar design and age (about 1966). The rent is comparable with Waterloo Towers, but generally the apartments are cleaner. Also because of the $21 / 2$ mile distance from campus (on the Mainline bus route), the building is only about one-half student.

Two other highrises with a significant, but smaller student populations are Richmond Towers I and II (on Regina Street about one mile east of UW) and the Victorian (on Lincoln Road at Weber, about two miles from UW via the North Loop bus route). Generally the rents in these apartments are moderately high, with the Richmond Towers being more expensive, basically because of their design, height, location, and tenants' facilities.

There are also a number of low rise apartment areas inhabited by students. These buildings are usually two to four storey walkups and tend to be located in clusters on or around certain streets. Usually one big developer owns all the low rises in a certain area and appoints a superintendent for every couple of buildings. Some of the more popular districts with students are: Barrie Place (fairly low rent, but thin walls and fairly small, comfortable, early to mid 1960's design, one mile northeast of campus near King and Weber), High Street (similar to Barrie Place, slightly closer to campus, near Columbia), Hazel Street \{silmilar to Barrie Place, one mile from campus just south of Parkdale Plaza, Parkside Drive (more expensive than the other three, but most buildings are of 1970's design with newer appliances and shag carpeting, and thicker walls, obout one mile north of the campus near Sunnydale), Erb Street West (of Westmount) (similar to apartments on Barrie Place, about one mile southwest of campus), Brybeck Cresent (similar in design and price to those on Parkside, but about three miles from campus between Westmount and Belmont, south of CNR tracks in Kitchener), Westwood Drive (similar to Brybeck, just off of Westmount, north of CNR tracks), and Vicmount Drive (reasonable price, 1970's construction, spartan, and a little run down, but solid, at the corner of Victoria and Westmount in Kitchener).

These low rise apartments usually have a student occupancy varying from $20 \%$ to
$80 \%$, depending on the price, distance from campus and the rent preferences of the owners. Generally appliances and utilities are included in the monthly rent of apartments. Tenants are covered by legislation and one can come and go as one pleases. They are usually good for privacy and quiet studying. A problem can arise though if you want to have a party with music and the walls are thin or your superintendant has sensitive ears. There are usually more hassles with apartment parties than with townhouse parties.

Lastly and leastly, we come to the type of accomodation that many students are forced to live in not necessarily by choice, but because they can't find anything else. I am referring to the rented room in a private home. These rooms are rented out at a weeekly rate by the owner of the house. Often four or five students are housed in a basement. While some students find the arrangement agreeable because rents are fairly low (but not always) and generally (but not always) close to campus, others find the relationship too restictive. Often one must be super quiet and is unable to bring friends over to visit. Sometimes coming home late at night after a pub or working late on the computer can be a hassle, especially if there is no private entrace and you have to pass through the main living section of the house where the owners may be sleeping. Often first year students who do not get into residence may live in such accomodation, basically because they do not know the town well and might not know anyone with whom to share an apartment or townhouse. Some may develop a good relationship with the owner and stay there a few years (this living accomodation is the most similar to $\mathrm{a}^{\prime \prime}$ living at home" experience), while others will move to another sort of accomodation at the earliest oppurtunity, or find oneself out of a room if the owner suddenly decides not to rent to students anymore.

So that's a rundown of the various types of off-campus living accomodations and the locations and types popular with students. I neglected to mention renting a house (not a townhouse) as that is not too common and the living arrangement is like that of a townhouse, though the building is privately owned and more expensive. Generally it is a tossup, depending on the type of student, between a townhouse or an apartment as the most popular accomodation. Depending on your contacts and when you look you may be able to find suitable accomodation of one of these types. This may be unlikely at this point in time for a first year student, but look around, you may find something suitable in the future (perhaps some new arrangement). If you are dissatisfied with where you are living now, it never hurts to look for something better.

## Mathletics

Once again it's time for the stupendous, earth shaking, all important report from the Mathletics Desk. Not that there is a Mathletics Desk, but it does sound impressively professional. Actually, I have no business writing this wretched article, but seeing as our current version of Mathletics Director is Polish, I figured I'd save you the effort of trying to decipher his feebleminded babbling.

Getting down to business, I'm pleased to inform all and sundry that all of the Math intramural teams have gone undefeated for the past month. Though that's probabaly due to the fact that the intramural schedule ended about a month ago.

Seeing as I have no actual news to report, and would probabaly screw up any I had, I am left with two choices. I can write a nice little fairy tale about the athletic happenings of the past week or so, or I can tell you about the sort of things that would normally be reported about here, thus using a little soft sell to try and entice you into joining a Mathletics team this fall, which is why I think I was supposed to write this nonsense anyhow.

Having finally decided what the point of this article is to be, I come to the realization that, grossly hungover as I am, I am in no shape to make any sense and should probabaly have let the Polack write this. But, since I'm stuck with the job, I might as well wrap this up as quickly as possible and go crash somewhere.

The Math Society props up a motley collection of intramural teams that participate with much enthusiasm and the occasional flash of skill in such diverse "sports" as flag football, soccer, hockey, ball hockey, floor hockey, broomball, softball, innertube water polo and so on. Some of these (notably broomball and innertube water polo) are co-ed and body contact is not strongly discouraged, thus (predictably) making these activities as entertaining for the players as for the spectators.

Having read this, I don't see how you can possibly stay out of the Mathletics program, so watch for the sign up sheets on the windows of the third floor lounge. Thank you for bearing with my stuporous discourse and goodnight.


## OPEN

Location: between Arts Lecture Hall and Hagey Hall
Description: This one is a strange piece of red and yellow metal. It can best be thought of by picturing R2D2 in drag.

## MAN AND WOMAN

Location: middle of Psych building (wherever that is?)
Description: This is a grey sculpture of a man and a woman (now you know where they got the name.) hanging from the ceiling. You can spend quite a while getting woman to touch man's hand because as woman turns she pushes man away. We managed to do it after 10 minutes. (But then we aren't frosh.) It would probably take hours to get them into a position where they could have fun. It's very reflecting of real life.

BUZBUZIAN or DAVID OF SASSOON (one of those is the title, the other is the artist)
Location: outside E4
Description: This is a blue metal something or other covered in bird droppings and obscenities. There is a ledge close by and if you stand on it about 6 feet away from the thing you will see that it is the initials CS (Civil Sucks).

## EARLY MORNING DREAM

Location: outside E3
Description: It is red metal. (That is the best description I can put to it.) I have heard it said that it looks like a cow on an acid trip.

## JOY

Location: between E1 and SCH Description: This is a stone sculpture of one or two (or maybe three) sort of humanoid types. It looks like a close encounter of the perverted kind.

## SCULPTURE ENVIRONMENT

Location: behind Hagey Hall
Description: This particular work consists of several pieces scattered sort of randomly about the courtyard. They look to be totem poles from the tribe of Indian to first discover Marijuana.

Yes, frosh, we here at the University of Waterloo intend to expose you to some culture (whether you like it or not). So here is a key to those pieces of joy-bringing. sculptures and metal-works that dot the campus like warts on a toad.

## The All New Guide To Artworks On Campus

## QUASAR

Location: inside the front entrance to the Math building.
Description: This is a large brown mass of something or other. With a little imagination you can look at it and see an orgy, a brain, or just a pustulence. I recommend looking for these things in installments as staring at it for a long time can make you sick.

## RELIEF SCULPTURE

Location: between CC and PAC
Description: This is three separate metal works of art mounted on a cement post. After looking at it for a long time you realize that you're not interested in it at all.

## BREAK

Location: outside Math building
Description: Break has been called many things. It can best be described as looking like a large broken egg. (and being as aesthetic as one.) Rumour has it that it was modeled after a dinosaur egg found while building the University.

## TRIAD

Location: outside B1
Description: This is the black iron thing you meet just before going under the link between Chemistry and Biology. It looks like a drunken Civil Engineer's attempt to build a windmill out of old bed-frames.

## CONVOLUTION 69

Location: used to be on a grassy knoll between B1 and Arts Library.
Description: Only a rude wooden platform remains covering an area of cracked and broken concrete stained with the life blood that once was (as it is affectionately called) 'The Worm'. Here is a chance to give a moment of thought to all the great art works ever destroyed by petty vandalism or great theft or fire and pray that such a loss will be prevented in the future. (For the frosh's information, Convolution 69 was a disgusting pink intestinal shaped thing that was mysteriously blown up one night a week after a number of engineers had been using dynamite in lab sessions.)
(it was blown up in $19788^{\circ}$, so why is it
on the cover of your $79-80$ calends?

## Food Services

Food Services. The name sends fear and loathing into the hearts and minds of many a UW veteran. Most people who feel this way blame the quality of Food Services' food, while others fear Bill Deeks, the UW administrator who has periodically attacked the socities' C\&D stands. But what is Food Services? And is it as bad as it is cracked up to be?
Food Services is a campus-wide food conglomerate controlled by the university administration. It is responsible for most food sold on campus. It controls a number of cafeterias and snack bars, but is not responsible for the food sold in the Canteen of Canada vending machines, or most of the society C\&D stands. The department of Food Services, headed by Bob Mudie, is a part of the division of Administrative Services (which also includes, Graphic Services, and Bar Services, among others) which is headed by Bill Deeks. Deeks reports directly,to Bruce Gellatly, the university's Vice-President of Finance.

Food Services can roughly be divided into three areas of operation. These are: 1) the cafeterias, which include the cafeterias in the student villages, and the South Campus Hall Festival Room, 2) the snack bars, which are located in the Campus Centre, the Modern Languages building, the Administration building, and in Village 1 (the night-time Village Grill operation), and 3) the speciality areas which include SCH's buffet-style Laurel Room, and the sandwich and pastry shop in the SCH.

Generally the cafeterias devote themselves to large groups of people. Each
of them can hold hundreds of patrons. Generally the food served in them is the bland institution fare. It ranges in quality from terrible (the pasta dishes) to moderately good (the potatos and salads). Overall the quality is pretty mediocre. However the price, while not rock-bottom, is fairly low, so you may be eating quite a few meals there (especially if you are in the village where the meals are included in the rent price).

The snack bars are a step down in size and a step up in quality from the cafeterias. Some of the food such as the French Fries, milkshakes, and soups are of good quality, while the coffee and tea is passable. However you are advised to avoid the subs, sandwiches, or hamburgs.

Finally we come to the speciality areas. The Laurel Room with its $\$ 3.50$ covercharge for an all-you-can-eat buffet and cash bar in a comfortable setting is usually a good deal. Generally the salads are very good, but on occassion the main dishes have been a little mushy. The Laurel Room is a very popular place for luncheons and suppers with faculty and staff members, but it is small, so you are advised to get a reservation for a meal there. As for the sandwich and pastry shop (which will be greatly expanded this fall, it would be advised to avoid the subs, though the pastries (which are sometimes available in the cafeterias and snack bars) can be quite tasty.

Generally you could rate Food Services in the lower range of mediocrity, with some areas rising above this level at times. You should try each of the three main sec-
tions once to see what they are like. However it would be advised that you also explore off-campus alternatives and nonFood Services alternatives on-campus as well. Generally it would be wise to avoid the Food Services cafeterias if possible and to be selective when buying food at the snack bars.

Since Food Services is such a large operation that generates a great deal of revenue for the university it is considered politically important. Since Food Services has sometimes met with financial deficits (it is supposed to be a break-even operation), Deeks has often looked on the society C\&D stands as a cause of lost revenue. He has tried to get societies to sell Food Services subs at their C\&D stands (EngSoc does, while other societies use outside suppliers) and make these stands pay the university rent. Much of this political action ihas been reported in mathNEWS, The Chevron, and the Imprint, and explains some of the political dissatisfaction with Food Services.

So Food Services does suffer from a great deal of political and culinary dissatifaction. A good deal of that dissent is probably justified, but Food Services may not be as bad as its reputation makes it out to be. Sure there are political hassles and most of the food it not very good, but occasionally Food Services shows the capacity to rise tolevels of good quality (as in the Laurel Room). However they don't seem to rise to these levels often enough.

Welcome ladies and gentlemen to today's 'Fantasy Tour'. This tour will take you through the most interesting piece of architectural work since the Psychology building; Village I.

Village I consists of four quads; North, East, South and West. If you become separated from the tour do not use these as compass points. Each of these quads have six houses except for South which has eight. Each quad wanders away from the main building in its own odd and unfathomable pattern.

First let's go through the main building. Here are contained the most important and most hated parts of village life; the dining halls. There are three dining halls; red, blue, and green. Originally there were to have been four but money caused one not to be built. For this reason only people from West quad must go outside to go to dinner.

On the roof of this building exist a few, but important places. The Village Office is here and it is at this office that you pay any bills you collect (ie. phone bills; friends
over for dinner, fines...). If you do not pay, they repossess your meal card until you do. (It has long been a topic of debate as to whether or not this is really punishment.) Also up here is the tuck shop, a Pizza Palace (avoid at all cost!!), the mailboxes and a couple of pinball machines. Oh yes, I forgot to mention Village Grill downstairs. Best hamburgers on campus.

Now, let's take a look at a typical house. The first thing you notice is the noise. Everyone wants to prove his stereo is louder than everyone else's. This dies down as the term proceeds. The next thing you will notice is that you're lost. You have taken about 10 steps and have become completely disoriented. The EXIT signs don't help. Most of them lie. Don't worry, soon you'll be able to walk through with your eyes closed. (But it only helps a little bit.)

Each house has four floors. The top 3 have a lounge with colour TV, fridge, stove and many seats. Normally floors arrange pop and beer pools. The basement has fewer rooms and instead of a lounge, it has
a laundry room. The Don (that's the house boss), lives on the first floor. There are 2 types of rooms; singles and interconnectings. You pay for the privacy.

There are advantages to living here. You are close to the campus, its libraries and computers. You needn't worry about making meals or cleaning up after them. Mostly it is a great place to meet people, especially for first term students.

There are also disadvantages. The food, for one, is not the best in the world. You do not have the privacy you get off campus. It is too easy to be tempted into partying when you hear it going on. If you do have the will-power to keep on working, at times, the noise can make it impossible.

There is a key to surviving here. Do your work at school and work hard. When that's done you're ready to relax or party hard. There's always a party to be found and they're a good way to keep school from getting to you. And always remember; it could be worse, you could be in Village II.

## Don't Dream It

OK - your fees are all paid, your books are all bought - you're comfortably moved into residence or wherever you're living. Your timetable is all straightened out (you've even remembered to drop CS180 after finding out it isn't a required course.) You're otherwise all settled in and ready to enjoy your first year at UW. Now what? Well hopefully you don't intend to waste too much time on your schoolwork because there is a lot of neat places to ge and crazy things to do on or around this campus. The following is really a sampling of some of them, including a few obscure places you might not have heard about yet.

Let's start with the most obvious - i.e., drinking spots on Campus. Of course there is the Campus Centre (CC) Pub located in the (you guessed it) Campus Centre) This is generally a pretty dull spot, although if five or ten people head down together they can usually have a good time. Despite intermittent proposals for refurbishing the place, the CC is still you're basic beer-pinball-shuffleboard and taped music place, although on weekends there are usually live groups on the stage which can be seen from almost half the seats in the pub. A good place to go after blowing an exam. The other drinking place on the Campus is the Graduate Club, located in the little white house near the Bookstore. In general, undergraduates get in by being signed in by a member, members being mostly grad.s. The drinks are cheap, the atmosphere is unquestionably superior to that of the CC, and the Grad Club is basically just a nice place for a few quiet drinks with a few friends.

In the unlikely event that you're looking at doing something than drinking during your spare time (perish the thought) here are a few other interesting spots to check out:
-Campus Centre games room, Great Hall, Record Store, Stereo, TV rooms.
-the Laurel Room in SCH where you can get an excellent smo rgasbrod for a reasonable price. It's open most nights for dinner and a couple of days a week for lunch.
-Laurel Creek Conservation Area, just north of campus (follow the signs)
-Elora Gorge - great cliff diving, jumping and swimming. Ride your bike and stay for the evening show at the Gorge Cinema.
-Erbsville Go-Kart - for releasing those built-up tensions and frustrations!
That should get you started. Remember, all work and no play will not only make a dull boy, it will also stop him from getting out and meeting people, which is one of the reasons we're all here, right?

## Neat and Null Courses

Null Courses

Neat Courses

Null courses are ones that, for some reason or other, don't accomplish what they set out to do, and are often a waste of time.

CS 180: They advise you to take this course if you're in co-op, but don't mention it isn't even a core course so no one has to take it. It "teaches" the dreaded language COBOL, which no one will use unless they absolutely have to. Some coop employers use it, but they'll teach you if they have to, so there's no point in torturing yourself unnecessarily.

CHEM 122 (math section): They've set up a special section for those of you taking this popular elective, but by putting more emphasis on math it puts less on chemistry. It also has the worst introduction to quantum mechanics I've ever seen. You learn more and have more fun in a science section, and contrary to intuition, the course isn't any harder there.

PHYS 162: This is supposed to be an enriched section, and I believe is compulsory for Honours Physics students. It's unfortunately rather muddled in its treatment of various topics (check this out - the prof who taught it when I took it was denied tenure and isn't here any more) and unless you're REALLY into Physics, it isn't too wise to take it. PHYS 122 is kinder to people in Math.

SCI 238: This is an introductory astronomy course. A student in it once remarked to me that it teaches you everything about nothing. Anyone who's read the How And Why Book Of The Planets can get a good mark here. If you're going to pay money for a course, take things that are worth it.

PHIL 140: This is an introduction to logic. It used to be a bird course, but the rumour went around last term that it has gotten harder. The rumour is false, it's just gotten dumber. The notes are titled "WATERLOG", that alone ought to warn you off.

ECON 101: Both this and ECON 102 are good, solid electives. Everyone can benefit from an expanded knowledge of economics. ECON 102 is the better course, in my opinion, because it teaches you the banking system (always good to know so you don't get screwed at your favorite branch) and government fiscal and monetary policy (supposed to help you understand the government, believe it or not!

ECON 101 is also good because it gives you a more in-depth look at the reasons why the banks and the government do what they do (They have reasons?!)

AM 260: This is an introduction to differential equations. The course itself is really good, but if you get Ian McGee as a prof it becomes superb (he constantly gets over-90 ratings in the Antical). It's much more interesting than the course description implies. It requires some firstyear calculus, at least a knowledge of the various methods of integration, and goes into a wide variety of topics. The high point of the course for me was the mathematical model of the spread of gonorrhea.
ES 111: This course is subtitled "An Introduction To The Study Of The Future", and has to be the most unstructured course I've ever taken (that's good!). The prof seems a fairly unassuming guy, until you find out (not from him) that he's a former Dean of Arts, has taught at the Sorbonne, Harvard and Berkeley, is listed in "Who's Who" and knows Buckminister Fuller and Margaret Mead personally. The course itself is a great collection of futurology topics, featuring a logbook each student keeps in which he can write anything he likes, as long as it has something to do with the future. Don't believe him when he says no essays, however, there may be a few. Course enrollment is limited to 60 , so get in quickly.


## FROSH BUFFET !

The University of Waterloo Mathematics Society<br>invites you to meet members of the Mathematics faculty and partake<br>of a scrumptuous feast of<br>Roast Beef, Turkey, Corned Beef, \& Ham<br>Tossed, Potato \& Jelly Salads<br>Bread<br>Coffee \& Tea<br>In the Mathematics \& Computer Building<br>Room 5136 at 12:00 noon<br>September 7, 1979.<br>Cover Charge<br>Math Frosh with our frosh tshirt: $\$ 3.00$<br>Math Frosh/Faculty: \$3.50ea.<br>Engineers: $\$ 8.00$<br>Others: $\$ 5.00$<br>ALL YOU CAN EAT WHILE IT LASTS.



## WINE \& CHEESE PARTY !!

A Cultured Event...
Date: Sept. 11/79
Time: 8pm - midnight
Place: MC5136
Cover Charge: Mathfrosh with Frosh T-shirt: FREE! Mathfrosh/Math Faculty: $\$ 1.00$
Engineers: $\$ 3.00$
Others: $\$ 2.00$
Legal Age \& School ID must be shown.

## CAR RALLY

At the time of publication of this paper, the Car Rally is only a tentative plan that will probably be pulled off since it's a Mathsoc tradition for every term. If held, it would probably be held on Sunday September 16th starting at noon and lasting about 3-4 hours. The entry fee would probably be about $\$ 2.00$ (two) dollars per car with appropriate rate adjustments for math-frosh and for those wearing their math-frosh tshirt. Trophy prizes to winning cars.

## Anyone may enter.

Please watch for posters on campus confirming the details of this rally.

## WATSFIC PRESENTS

Who presents? Well, I could have said "The University of Waterloo Science Fiction Club Presents", but it makes for a rather unwieldy headline. As you may have cleverly deduced by now, WATSFIC is the University of Waterloo Science Fiction Club, and is recognized by the Federation of Students and the Mathematics Society. Our office is in MC 3036 (around the corner from Mathsoc) and you're liable to find strange people there talking about strange things at almost any time of day. Their purpose there is to lure prospective members in and dupe them out of the 50 cent membership fee before they realize what has happened. Feel free to drop in, but I warn you, those people are very good at their jobs.

Anyways, now that you know who we are, I realize that you can't possibly wait to find out just what it is that we do, and since I'm too lazy to write anything I'll simply resort to the pathetic little dodge of quoting from the WATSFIC constitution, so graciously provided to me by the Math Society Internal Affairs Director.*

1) The aim of the University of Waterloo Science Fiction Club, hereinafter called the Club, is to promote an interest in science fiction on campus by:
A) providing a list of science fiction available for loan to members.
B) arranging showings of science fiction movies.
C) publishing a newsletter/magazine. D) other activities the membership deems of interest.

Strangely enough, we actually manage to do all of the above, our movie night ocurring around midterm, and our newsletter, WATSNEW, appearing at our weekly meetings (Usually on Tuesdays or Thursdays in MC 5158). In addition, we have a small library in our office available for loan to members. Besides all this, WATSFIC is the scene of considerable wargaming and Dungeon and Dragoning. As to what Dungeons and Dragons is, well, that's another story. The best way to find about it or anything else is to walk into the office and ask someone.

All in all, we seem to enjoy ourselves immensely while causing others a minumum of inconvenience, so why don't you join us? May you always make your saving throw.

Greg Bezoff
WATSFIC President

## *note: his initials are "GVB"...

## Disorientation from your Orientation Director...

WELCOME TO WATERLOO! I'm your gregarious Social/Orientation director from the Mathematics Society. This article will try to do two things: 1) try to explain the Orientation program ready for you, and 2) try to explain the SOCIALable aspects of the Mathematics Society.

## Orientation:

Background: In the past, orientation consisted of supplying the frosh with as many opportunities of getting drunk, confused and humoured (not necessarily in that order, or separately) during the first week or two of September. Unfortunately it seems that this is going to be the first year in a long while that most 1st year students will actually be under legal drinking age. This is presents us with a dilemma of "what are we going to do to keep you out of mischief??", there are still going to be PUBS, Wine \& Cheese Parties and many other alcoholic opportunities but, alas, what can we legally do with you? Hummmmmmmm...

This Year: This year there is going to be all kinds of things you can participate in! A partial list includes: movies, big concerts, car rallys, scavenger hunts, a lottery, more concerts, confusion, frustrations (wait till you see the lineups!), classes (gasp!), picnics, buffet, and much, much more (is that a cliche?). I ask you, infact I'm telling you, to be gregarious and PARTICIPATE! in many activities. It is the quickest, easiest, and most enjoyable way of meeting new friends and learning the geography of this slightly ill-designed campus.

## Social:

With your fee paid to the Math Society you get to participate in all sorts of fun \& thrilling things at reduced rates. All these fantastic events come under the Society Social Director (that's me!), the guy who spends the largest amount of the society's money. Some of the events include:
MATHWEEK -- a week strategically placed during the term to help break up the horrors and rigours of studies and homework. During this week there are events like a free movie night, wine \& cheese party, hopscotch, bridge tourneys, and other silly things that are meant to be silly.
(semi-)FORMAL -- if the society has lots of money to spare, we put on a semi-formal or full-formal dance. This irregularly held event turns out to be the most popular one that provides many great memories. Even our Dean of Math goes to it!
PUBS/W\&C -- Sometime during the term we put on a Pub or another Wine \& Cheese party, probably a W\&C since pubs are well supplied by the Federation of Students and other societies.
Other Services -- Not necessarily organized by the social director, some other services include LOCKERS (to first-come, first-served), student representation on faculty committees, senate, and other long-haired stuff, operation of a non-profit food stand, sponsering clubs like CSC and Watsfic, providing music in our lounge, a lost \& found, pinball machines.
WARNING -- if you have your voluntary mathsoc fee REFUNDED (gasp!), you cease to be a Mathie in the eyes of the society for that term. Consequently, NO LOCKER for you, you pay FULL price to pubs and events and we frown at you whenever we get the chance.

Now if the above doesn't appeal to you, don't be afraid to come in to our office and make polite suggestions as to how we can serve you better.
Have FUN!!!!!! at all costs (don't tell the faculty I said this!).

## Anti <br> Freedom-of-Movement Alliance

In the years that I have studied here, when my way from one place to another on campus has been blocked by a locked door, I have often asked myself why the door was locked. And I have often been unable to figure out a reason.

Of course, it is sometimes necessary to lock doors to keep out vandals, drunks, students, and other undesireables. But what is it for when the left door of a double door is locked while the right door is unlocked? Is it to keep out left-handed people? Or consider one of the entrances of the Physical Activities Complex, with six inviting doors. One door has a sign saying "Please Use Other Door". One (and only one) of the other five doors is unlocked. Which one? Try them and see! Then there is the back door of the South Campus Hall dining room, labelled "Exit Only". It can't be to keep us out, since you can get to the other side of the door by going (the long way) through a different doorway. It seems that the shortest route between any two points is barred by a locked door.

A friend of mine recently discovered a conspiracy, among some of the University staff and administration, to interfere with our freedom of movement. (He disappeared mysteriously a short time later.) The Anti Freedom-of-Movement Alliance was formed when a number of petty bureaucrats decided that they could not sufficiently inconvenience us by forcing us to fill out (in triplicate) long forms with ambiguous questions. Little is known about this secret organisation, but now that it is known to exist, more facts will probably be uncovered.

Meanwhile, in the coming months, don't be ashamed if you can't figure out why some door is locked. Your inability to find the reason is not due to ignorance or stupidity on your part. It's because there really is no reason.
editor's comment: the PAC situation is obviously an adaptation of Maxwell's demon. Since only left-handed people can get in, and only right-handed people can get out, as time approaches infinity all the left-handed people in the world will end up inside the PAC. Their only hope is to breed and maybe have right-handed children, though they will be severely malnourished due to the lousy nutritional content of the food available in the vending machines.

## not continued

## The Other Side

As I sit here writing this now, I think of all the exams I "should" be studying for. Either that or sleeping, that's what they say I "should" be doing. I guess that sort of brings me to what I want to say to you.

Newcomers among you may be wondering what sort of learning environment to expect. Well, the answer is that the outside appearance is very similar to that of high school, although there is an added illusion of freedom. You are still forced to cram into your head arbitrary things that have no bearing on what you wish to learn. You are still forced to sweat and panic in gigantic rooms as you spill your "guts" to show the examiners that you are worthy of their praise. (During which, of course, you are treated as a criminal or an animal, and after which, you are forced to wait weeks in anxious expectation of their verdict.) And you are still forced to churn out meaningless make-work until it comes out your ears. Needless to say, these things do not help produce a healthy environment for learning. In fact, one could effectively argue that the concept of assignments and tests in general is nothing but a leftover of the authoritarian situation that once included the beating (read "discipline") of students that did not fall into line. The motivation to do well on them is basically to avoid the penalties of not doing well. This form of "negative reinforcement" is not a practical way to encouarge learning at all. Let's hope that someday this archaic, oppressive, and barbaric custom fades away, and students learn things because they are positively motivated to do so.

They claim the system is designed to educate you, but it seems that it's designed to either make you comform or drive you insane. The worst thing is, students take it. Jerry Farber's "The Student as Nigger" expressed it some time ago in a somewhat ugly fashion which is still, however, fairly appropriate:

When a teacher says "jump" students jump. I know of one professor who refused to take up class time for exams and required students to show up for tests at 630 in the morning. And they did, by God!...They swallow the bullshit with greedy mouths. They honest to God believe in grades, in busy work, in general education requirements.

And if there is one way that you, as thinking individuals and lovers of knowledge, should not be acting, it is like that! For to act in such a manner is to support the existence of a sickly and irrational religion that John Barth characterises so well in his "Grand Tutor's Petition":
"No, dammit, I won't dig the grave!" he shouted, pounding with his free hand on the rough stone wall that formed the north side of the Bastille, which had been torn down some three hundred years before as a sop to the free-wheeling sans-culottes, not to mention the Department of Highway Construction who were delighted at the sudden glut of extra paving stones for the new ultra-modern M5, linking Chelthamshire with the important trade centres necessary to shift the economic balance of the North Sea Coalition and reduce it to a handful of squabbling petty feudal states.
"You must," she replied, in a voice like liquid paper. "There's absolutely no one else to do it, and he won't be dead long."

Reluctantly he picked up the twobladed shovel and delved into the frozen much, which resealed itself at every stroke. After a few minutes he noticed the landscape slowly pouring, like viscous syrup, into his eyes. His last thought as the mud closed over the top of his head was of the immense length of time it would take him to reach the bottom.

She smiled at the right-hand windows of the empty stalled cars waiting for the road to be completed, and turned to begin the long climb up the huge limestone structure, oblivious to the banners waving over the heads of the unionists marching slowly into view out of the northeast.

Our Founder, Who art omniscient, Commenced be Thy name.
Thy College come; Thy Assignments done, On Campus as beyond the Gate.
Give us this term Thy termly word.
And excuse us our cribbing,
As we forgive those who crib from us. Lead us not into procrastination,
But deliver us from error:
For Thine is the rank, tenure, and seniority, for ever.
So pass us.
Certainly this is not the true spirit of learning. In fact, it is a bitter farce of all that real learning should be. I'm sure that most bright educators realise this, but the system is caught in a deep dark pit; just make sure that you don't get caught too. Enjoy your education, that's what we're all here for.

Well, that's about all I can say to you in the humble limits our editor has imposed (And would you believe that mathNEWS generally runs to six pages?) I just sincerely hope that you give your education a good serious thought before jumping in. Who knows, some day students may get the freedom they deserve.


## Anachronism

.in the end, of course, there was very little to say, but still the saddened voice kept droning on, the hoarse voiced consonants rasping over the unseen throat like diamonds over the esophagus of some huge, primitive plesiosaurus which swam unencumbered in the murky seas of the Cryptozoic Era. It did little more than disturb a few of the air molecules over the desk, rearranging the dust on a copy of Kant's Critique of Pure Reason tossed lazily over some handscribbled sheets, face down, as if the owner had intended to return in a moment; for surely only the most careless bibliophile, or the richest pseudo-intellectual, would treat such a beautifully bound book so shoddily. The minute temperature variations had finally caused the binding to crack, and the book would always fall open at that spot, but aside from that there was very little deterioration, possibly because the faint rays of the sun coming through the flyspeckled pane never touched the burnished leather, regardless of variations in season and time of day. The fell in a broad crescent; here a jar of paste, now holding only a flaky residue reminiscent of horse; there perhaps an old volume of the Encyclopaedia Galactica, still shimmering in its force-field binding of vanadium steel. No dust adorned its stainless surface; but the knowledge within would now never be used, for in the melodramatic world of 1928 it was as much an anachronism as the short skirts exposing the silken thighs of the young Vassar coeds walking past the abandoned library in the gently condensing summer rain. Not one thought to stop and try the door, or peer through the finely subdivided window, or hold picnics on the thinning lawn. Inside was a totally different habitat, an unseen piece of the macrocosm of experience that shaped their lives like bonsai in the hands of a gnarled gardener; and in the far back booth the machine continued its somnolent speech, oblivious to the fact that there was no one left to listen.

# ORIENTATION SCAVENGER HUNT 

Great Way to Orient Yourself to UoW and Area!

Where? Register in Mathsoc (mc3038)
When? Wed. September 12/79 2 pm

Winner? Team with most points in least time
Prize? (YES!) 1 Burton Cummings ticket per team member Sorry no substitutions...

Entry Fee? a PALTRY $\$ 0.50$ per person
Team Size? One to Four members ( 4 maximum)
Eligibility? 1979 Math Frosh only may enter

## FASS!

Right now, you're probably saying to yourself, "What can I do to fill those vacant seconds I find several thousand times a day? How can I achieve my potential as a hedonistic human being?" The answer is unquestionably FASS.

What is FASS, you ask? FASS is an acronym (if you were in co-op English, you'd know what an acronym is) which stands for Faculty, Administration, Staff, and Students. Since you're reading this, you're almost certain to fall into one of those categories. (editor's note: yes, frosh are students too, it just doesn't seem like it at times)

So what, you ask? FASS is fun, that's what! FASS is a theatre company that writes and stages a comedy play every year. In May through December, writers, joke tellers, and joke lovers get together to produce a more or less hilarious (sometimes more, sometimes less) script that pokes fun at UW life in general and anything in particular. Early in January, the call goes out for actors and members of the support crew who stage our wonderful (or so our writers tell us) play. More than 100 people join in the excitement, and
there's lots to do besides acting. Our huge support crew builds FASS sets, creates costumes and special effects, and scrounges props. Since FASS is entirely a volunteer effort, there are lots of terrific parties which help reward the people who contribute their time and effort. The culmination of all of our efforts comes during four nights in the first week of February when we present our play. Every year, the play somehow manages to be an exhilarating success, with a total audience of over a thousand people.

Could I really be part of FASS, you ask? Yes! FASS is people just like you, who have fun with whatever talents we bring together. The whole is much greater than the sum of its parts, and FASS puts together so many good parts that we don't each have to be great to have a great show.

So any time you see that word FASS in the news or on a poster, do what it says! Join in our meetings in the summer and fall, and come out to our auditions in January. Or catch the show in February.

We're FASS, and we've got some fun for you!!


## Night: To A Gateway Never Passed Under

My dragon and I roam these silent streets at midnight, the dilapidated old hotel-keeper and his fragile home, trying not to cringe at the eyes, malevolent, rising out of the dark to haunt with their monochromatic afterimages. In vain I clutch the wheel tighter and feel the ribbed plastic splinter, threatening to disgorge its last drops of carbonation into my lap. I feel the powdery wall against my back, seat-leather cold through two layers of cloth, and the dragon takes over and guides me in solemnity through the crystal memories lying shattered on the floor.

When I open the door she is sleeping, damn her ephemeral soul, and the violet lambent flame in her eyes is extinguished beneath the cloak of Morpheus. Comprehension floods through me not in the icicle-from-above spinal immediateness, but in a slow osmotic tingle, and when the wave has passed there is nothing left for me to do but turn off the light in a weltering echo of deja vu and glide smoothly to the left, feeling the unseen inertial fingers pull me across the black pebbled surface in vain, as my dragon slides back under me and purrs at my call. The parquet floors numb me in their five-five intensity as the party debris rises up and swings its red beacons at me, carrots in this never-ending game we play with the meagre possessions I now kneel and gather up before the dull thumping bass can sympathize with my heart washing the strains of a primeval sea through the tubes fuelling my dragon, who breathes brilliant flames of turquoise into the darkness and brings me safe to rest where it is as good as anywhere.

As a reward it is allowed to go mercifully to sleep while the chill wind stirs my cloak and ruffles my hair in unmotherly embrace, clucking at that part of me continually dying, dying while the giddy dance goes on without me.


# Efficiency Methods in Queueing Systems 

or<br>How to Avoid those Insane Lineups

Probably the single most frustrating part about about beginning University is waiting in line. That and finding your way around Campus. And having to move all your stuff from city to city......Among the most frustrating things involved in starting at University is the Lineups!

Lineups at the Bookstore; lineups into the Gym trying to sort out fees and timetable hassles; lineups to get lockers; lineups to get residence meal cards; WIDJET queue positions (aye - there's the rub). First, you must accept the fact that there is no way you can entirely avoid all these lineups. They are a deliberate tactic of the University Administration to force people to drop out or transfer to Arts (where enrollment is declining). Realising this fact, you should now commit yourself to coping with the problem, and try at least to get through the lineups with a minimum of pain and frustration.

There are two keys for this lock:

1) Do it early! By now you should have pre-registered and have your timetable back. If not, that's one more lineup for you. Pay everything you can in advance (by mail if possible) or else you'll find yourself waiting in line with all the other people who didn't bother getting things done early. Almost without exception, you can save yourself a lot of hassle by getting things done at the first opportunity.
2) Try to avoid the peak periods. Lineups at the Bookstore, the Registration Centre, Operation Mathstart (MC5158), C\&D and any other food place on campus are almost always longest right after a class change (ie from about 20 minutes past the hour to 15 minutes before the hour). Your best bet is to try to hit these places during the off-peak times (ie at or near the hour, when more people are in classes).

All the demagoguery of the last twentyfive years broke through to me as I stared with red-rimmed eyes at the document propped up against the mirror on my dresser. It bore an impressive number of flourished signatures, mine among them; but there was a subtle shift in the language we had been fighting for, some twist that inverted its structure and transformed it into some threatening sword, springing at me from the facsimile with a power unheralded by the small, delicate print. I picked up the page and walked back to the bed. Lying down, I held it above me at arm's length to read it through, as if some additional globule of comprehension would drip down on my brow. Failing to detect the source of my consternation, I put it down and made a call, remaining where I lay.
"Karl, did we sign the constitution last night?" I had vague but fading hopes that it was a practical joke by some of the section leaders.
"Always the joker, eh? Read the morning paper if you want glorious confirmation."
"I'm serious."
"Are you so hung over that you can't remember, friend? The ceremony, the speeches, the toasts that went on for hours? I recall you proposed a good number of them." Some dim hint of it was beginning to creep back into my sleepbound brain.
"Did you drug the wine?"
He laughed, a low, oily sound with a carefully calculated impact. "We drank the wine after the signing, comrade."
"But it doesn't look right."
His voice grew sonorous. "Josef, it is a very great document. We have been living with the dreams for so long that our expectations would surpass the abilities of the best jurists that ever lived. The constitution is not perfect, Josef, but the long struggle is over, and we can be proud of it."
"Yes, of course you're right." I was not so confused that I could not detect an underlying edge of menace in his tone. "I'll see you at the afternoon secretariat."

I hung up and retrieved the copy from where it had fallen, glancing over the words that shook off my gaze like waterrepellent fabric, and put it gently away in the drawer of my bedside table before commencing preparations for the first meeting of the Council.

When the secret police came to get me three days later I was not in the least surprised.


## FROSH T-SHIRTS

These beautiful, wonderful, fantastic, high-quality tshirts are a MUST for all Math-frosh. No Math-frosh should feel properly dressed unless they are wearing one of these!

With these shirts, Math-frosh get reduced or free admission to Mathsoc sponsered orientation events such as the BUFFET and Wine \& Cheese Party.

This wonderful shirt may be purchased in the Math Society office, room 3038 in the Math Bldg., and also during random times at the Mathsoc table in the big. Circus tent on campus.

Be proud to be a Mathie, get your shirt now! po. phople I'd like to say thank you and goodbye is finallv graduating this term and I regret not (graphix) is one of the truly classic crazies. He onlv a great piece of creative writing but the best thing eve to appear in mathNEWS. His contribut ions were not only intangible but invaluable and $I$, for one, am going to keep in touch with him. robert biddle (mathunix, CSC) is finishing grad school, he has a great sense of humour and has done wonders for the CSC. He will also be missed. Now for the cretinoids. greg bezoff (prezz,mathletics, watsfic, and chaotic) will be around in Sept., you hapless frosh. karen macneil(c\&d, some courses) is c\&d manager for the fall, so don't blame it on San Andreas. acpatel (ibm) is training to be a megaphone and will show up in Jan. mark niemiec (honeyhun) is a hack and is ALWAYS around. andrew malton (libraries) will hopefillv be off with me to the Imprint for a closer approximation to responsible iournalism(some would say pretentious iournalism). ji long(offcamp living,food serv) has been around longer than anvone can rememher; it's his record I'm breaking. There is some controversy as to whether irwriter (art gride) really exists. This is just silly. The idea that his worlls were written by Christopher. Marlowe is ridiculous. He may have something to do with rfcollins (village 1)who is on co-op come Sept. ken dykes (all the orientation shit)will be in charge of all the fun stuff you'll be avoiding in Sept. his character can perhaps be noted hy the fact that all the stuff he handed in was two columns wide. lecarson(graphix) was responsible for the stuff we dug up out of our files; she returns in Jan. dave canzi(AFMA) is also a hack and so is not responsible for his actions. calvin ostrum(the other side)will engage vou in theo-philosophical discussionfor a reasonable fee. I can't remember who wrote the FASS article, thev all look alike anvway. irgross (lineups, don't dream it) is famous for his shy arrogance. he once set a record bv appearing on the front page of mN seven or eight times. finally there is me, prabhakar ragde. I wrote most of evervthing else(narcisstic, eh?) including all of the short fiction (we 11, 'Night' is not really fiction; if anyone understands it please tell me: I do but no one else who was there does). I will be in Ottawa next $t$.

## GTDIL\&V DILOVHD

ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha hee hee hoo ha ha ha heeee haa ho hee hee hee ho ha ha ha ha ha heee hooo ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha hah hah hah hah hah hah hah hah hah ' ah hah hah hah hah' rh hah hah hah hoo $n_{n}$ see ho ha ha' nur. toe hee ha ha hah.. hah ${ }^{2}$ na hee hee .. ทr ha ha ha hahu , ah hoooheehaha r.. no ha (chortle) ha ha ha ha ha heeeee hou heee ha ha ha ha hee hoo lhee ha ha ha ha hoohah ha ha ha ha (guffaw) hoooo heee ha ha ha ha hee hee hoo ha ha ha heeee haa hoh hee hee hee ho ha hah hah hah heee ho ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ha ( 143 Holland Ave. Apt 非2, c/o Starshippe Enterprises)if anyone wants to bother. Considering that most of this trash was thrown together in $2 \frac{1}{2}$ days I think the quality is reasonable(ie less filler, more info; the masthead usually isn't this long but it's mv last ever..) and I should have some parting comments but find myself strangely devoid of thoughts (can't get rid of them negaphor hlues). and so covered with rubber cement and whiteout(even under fingernails!) I make my farewells (youl can't dislike a concept, vo" can onl" dislike its realization) on 9 August $1^{n} 70$ at 13:24 (sighfeels like $3: 24$ ) and for once not babble on to the bitter
 masthead: this is another regular feature of mathNEWS, in which the editor or his nearest counterpart who is alive and functional babbles on to fill up these irregular spaces while profusely thanking everyone. By the way, this is a record-breaker, being the lohgest (20 pages) issue of this rag ever. I would like to thank the Acdemy...no, really, there are a few

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