Volume 54 Number 1

September
Friday $\downarrow$ II, 1990

Ti.e Unfrished Issue...

##  <br> 



## I her State of the Society

This term the objective for the Math Society is simple: to finally become a professional services organisation. We have been moving towards this goal for almost two years now and this term it is within reach. But, before we see the light at the end of the tunnel, we must all be clear on what this objective means.

In the strictest sense, what we want to do is present a very business like front to all outside people with whom we have dealings. Specifically, this means such things as answering the phone politely, keeping our facilities clean and organised, ensuring that all documentation that we put forth (internally and externally) is put together in a professional manner, and providing all of our services in a way which will earn us respect as an organisation.
The reason we wish to accomplish this is twofold. First, a professional image is important in our dealings with outside ventures such as novelties dealers, ticket sellers, Plant Operations, the Faculty, and other on- and off-campus organisations. If we present this professional image to them, they are more likely to take our suggestions and requests seriously, thus eliminating a lot of the red tape which has bogged down our efforts in past terms.

Second, and most important, we are trying to effect a change in the attitude of our volunteers this term. I personally have looked upon my time with the Math Society as valuable business experience. However, most volunteers simply become involved to flesh out their resumes. This attitude leads them into thinking that they will do the minimum amount of work possible to justify the experience - obviously not what we desire in a volunteer. I feel that if we work on putting forth a professional image, we can at the same time encourage our volunteers to develop their own business skills. Thus, the Math Society will become a valuable learning experience for them and not just something they do once a week so that they can go to the end-of-term party.

We have already taken a number of steps to produce this air of professionalism. These include:

- Substituting "The Math Society" for "MathSoc" wherever possible, especially in letters to outside organisations;
- The adoption of a new motto: "Quality, Service, \& Leadership" for external use and the slogan "The Math Society - More than just a line on a resume" for recruiting;
- Scheduling our projects through the use of a computerised project management tool;
- Expanding our volunteer reward system to include more tangible benefits as well as a better understanding of intangibles;
- Establishing better relations with the new Faculty so that we can work together on our mutual goals, and;
- The adoption of a statement of purpose for the society which outlines our long term goals.

We have a large group of frosh who will be volunteering for various Math Society positions this term. By starting the business image now, we can encourage them to accept this attitude as the norm and to develop it further as they become tomorrow's leaders in our Society.

> Tom Vandeloo, President
> The Math Society
P.S. For class representative positions, you only need five (5) signatures on the nomination form (other than your own).

Look A head

| mat liNEWS |  |
| :--- | :--- |
| Sept 24 | Issue \#2 production |
| Sept 28 | Issue \#2 release |
| Oct 15 | Issue \#3 production, |
| Oct 19 | Issue.\#3 release |
| Important Dates |  |
| Sept 21 | Add/Change/Drop deadline |
| Cinema Gratis |  |
| Sept 25 | Roadkill |
| Oct 9 | In the Name of the Rose |
| Fed Flicks |  |
| Requiescat in Pace |  |

## Killers Freely Roam UW Campus

FROSH, BEWARE! You could be the next victim of these elusive murderous creatures. They can usually be spotted in flocks congregating on the many grassy areas around campus, notably the area in front of Health \& Safety, where it is believed that the grungy nature of Laurel Creek water contributes to their crankiness.

Survivor Timothy Id, a 3A kinesiology student who spoke to us only after we gave into his request for anonymity, hesitantly stated that the killer creatures "stalk unsuspecting students who are innocently minding their own business." They are partial to students who are depressed after writing a particularly tough midterm. "I had just finished a gruesome REC 000 midterm and was walking on the grass behind Burt Matthews Hall," recounts Id, "when I heard a squawk and a rush of wings beating the air. I felt myself being abruptly pulled up by the scalp. Only a knowledge of the ancient art of Duck Fu saved my life."
These creatures, known in scientific circles as duckus carnivorus, make no effort to hide their shameful character. Some of the bolder creatures have been seen to approach unwitting frosh and demand that they be given everything from bread crumbs to expensive jewelry, UW leather jackets and even designer pink ties. Although these "swarming" events have been rare so far, UW Campus Police are worried. Sgt. Wally Nutcruller says the force is dcan everything they can, but the ducks are extremely intelligent and revert to their passive camouflage whenever a squad scooter is in the area. "Our best advice to students is just that they should always travel in groups of twenty-three or more, and if they see one of these creatures start to dive-bomb a fellow scholar, holler 'Duck!' This tactic usually proves effective."

With your vigilance, this scourge can be removed from our campus and made into the problem of our neighbours down the road at WLU.

> Four Bee Prime

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Editor: Trevor "the relurtant editor" (ireent

## Lost in Space. .

Just when you thought you had the Math Building figured out; you know where all your classes are and you can find your profs for consultation. It arrives.

No, this is not some furry little monster that gobbles up entire Mathies in a single gulp, it's the dreaded, impossible, impenetrable sixth floor. Many students have became lost (and some still are!!!) looking for a room on the sixth floor. It's a maze of halls and corridors that no one has ever been able to map.

Many top physicists believe that a mysterious black hole exists up there and the unlucky souls that stumble upon this phenomenon are trapped forever. Rumour has it that the architect that designed the building had a slightly warped mind and constructed the floor in contempt for everything that existed.

For those of you that must trek into the forbidding sixth floor, a few words of advice:

1. Carry a compass to help find your way out
2. Take along a ball of string. Tie an end to an exit and let the string out as you go. When you leave, follow the string back.
3. Tell someone that you are going to the sixth floor, so that if you become lost, a search party can be formed for your rescue
4. If you see someone who appears to know their way around, ask them for help, but be warned. He/She may be a monster in disguise waiting to trick unsuspecting Mathies (Artsies and Engineers go for it, ask anyone and everyone) and hide them deeper in the maze
5. If you find another lost soul, help him out, they may have been lost for years

With your help, the sixth floor should be easily travelled in ten or twenty years.
G. McFrosh

## How Not to Become Editor

and why I did it

I was zonked out on the couch, as usual. I don't have a bed yet (and I don't expect to afford one in the near future), so I sleep on couches. I say they're more comfortable. The rest of the world says "Sour grapes".

Anyhow, there I was on the couch, and I woke up. Don't you hate it when that happens? And right beside the couch was this piece of paper, that said, in triplicate, "Trevor Green - mathNEWS Editor". So I went back to sleep. I woke up again and the paper was still there. Then I looked more closely. It turned out to be a blessing in disguise: it was a key permit for two keys. This may not turn out so bad after all.

I told someone I'd accept the position.
That was the last I ever saw of that piece of paper.
The Reluctant Editor
To be continued...

## Vapid Fire

All the liews that Ther (ilober Ind Mail monldatit murli with "thme-mitre pole

- In a surprise move of Anschluss, General Saddam Hussein annexed Turkey over the weekend. He claims, "This is my last territorial claim. Except Jordan. And Armenia. And the Sudetenland." Margaret Thatcher has gone on the record stating "If he invades Poland, it means war."
- A calm settled over Oka yesterday as both sides waited for the fallout to dissipate following the detonation of a 24 -megatonne thermonuclear device in the no-man's land between the two lines. So far four extremist groups, including the IRA and Islamic Jihad, have claimed responsibility. The RCMP is sending in a task force to investigate.
- The Prime Minister announced today, in the spirit of privatization, that the Government was going to sell off Revenue Canada to the public. "When it actually has to be accountable to shareholders, we expect they will find innovative ways to collect the largest amount of taxes possible." Although nothing is official as of yet, it is rumoured that a lottery (grand prize of $\$ 500,000$ which nobody wins) and a telephone-saturation campaign are but two of the new methods to expect.

Mr. Death

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## Recycling in Class

Recycling has become a hot issue around the country and on campus. It's no wonder, considering the quantities of trash that our society produces. Without some action, we will eventually suffocate in the ever-growing mountains of garbage.
There is a more serious issue, however, that is being ignored by the media. This is the current 'information explosion' that threatens to suffocate us all in an ever-growing mountain of useless information. Everyone, from academics to politicians to the media (and back to politicians), is producing vast quantities of trash, most of which begs the question, "Who asked for this?"
For example, a study was conducted of a typical scientific journal, The Physics Review. If you look at the amount of shelf space occupied by each year of the Physics Review, and extrapolate into the middle of the next century, it will be filling library shelves faster than the speed of light. This doesn't violate the theory of relativity, however, since no information is being transmitted.
I propose that we, as students, apply the fundamentals of environmental consciousness to combat this hideous situation. We can apply the 'three R's' of recycling to information just as easily as to waste. (For the environmentally ignorant, the 'three R's' of wast reduction are: REDUCE (the amount of stuff you use), REUSE (stuff when possible), and RECYCLE (stuff that you have to throw away).)
REDUCE: Perhaps the biggest contribution we can make is also the easiest. Reduce the amount of information in your head. You can do this easily by taking fewer courses, taking bird courses, and doing as few assignments as possible. NEVER do bonus questions, and NEVER ask your prof a question that might lead off on a tangent and provide you with more useless information. Lobby the administration to REDUCE course requirements, REDUCE the amount of material covered, and REDUCE the number of silly publications on campus. (A campus like Waterloo really only needs one silly publication, and mathNEWS fills the roll quite well thank you.)
If you pay attention in class, and accidentally accumulate too much information, don't worry. Just give yourself some time, and you will probably forget it. Remember, too, that alcohol can assist you in deteriorating your long term memory.

REUSE: Many professors waste a great deal of effort creating new exams each term. This practice accomplishes nothing, and causes many students great anguish. The university could save everyone a lot of hassle by reusing exams.

As well, a huge saving in expenditure could be realized by arranging courses so that students can reuse textbooks. It is inexcusable that each course covers material that strays so far from the previous course that a new textbook is required.

Don't forget that a solution used by one student on an assignment can easily be reused dozens of times in the assignments of other students without wearing out.

RECYCLE: If the essay that your brother wrote on the economics of spam production got an A+ five years ago, there is absolutely no reason that you should have to waste effort on the same topic, RIGHT? Unfortunately, according to the environment hating administration, you are committing an academic offense by handing in your brother's essay for the course yo are taking. As responsible students, we should lobby the university to permit the recycling of assignments. When you get an assignment back, don't just throw it away; give to some frosh less fortunate than yourself.
In conclusion, I hope you will join me in my fight to make this world a happier place with less academic junk. Do your part to stay uninformed!

The OTHER brother Darry'

## The Wonderful World of Hudson Bay

Picture this scene. The time is $2: 00 \mathrm{PM}$, the place is the comfy lounge.
You put your money in the voracious vending machine and push the black buttons in the proper order for your furiouritr smar. The spiral spring thing turns, and nothing drops down to the delivery hatch. This is a calamitous crisis situation. You can't jiggle the machine enough to make the sought after farourite snar because the machines are all bolted together - the proper amount of jiggling would require a hydraulic jack or high explosives. Here is a new solution. Consider, after you put the first amount of money in (lets call it $x$, and while we're at it, call the cost of the coveted farourite smar x also), you are getting nothing for something. The unit cost of your farourt. sull is not at all good right now. Be a fool, and put in a second unit of money. A farourite shar drops down, you now have one fullourite smax for the price of two. The situation has improved. The ant runt of money (call it P ) $=2 \mathrm{x}$, the value received is x (one package of furmurte snax). The unit cost is $\mathrm{P} / \mathrm{x}=2$. Previously, we were talking about a unit cost of P/0 (I hope that I don't have to tell you what that tends to as a limit). In fact, if you keep putting money in, the unit cost will approach 1 (of whatever amount of money was advertised). Unfortunately this breaks down when one considers that there are not an infinite number of chocolate bars. It breaks down further when one also considers that one would probably run out of money long before one runs out of chocolate bars.
the man without a pseudonym
molly

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## Prof Quotes

> Holy quotable quotes Watman!! Those prolifie professons nerer takie a breakt. EMen in the summer. sfreral spouted silly statements.

That's right folks, and we've compiled some of the summer's best for your perusal. Look forward to brand new quotes this fall. Remember, though, we can't do it without your help. If you hear your prof say something stupid, don't just laugh at him or her. Write it down and slide that submission under the mat hNEWS door (MC 3041) or in the Black Box on the third floor.
"This is a very complicated solution that doesn't work."

Hare, CS 242
"There are some things you have to put effort into getting wrong. This isn't one of them."

Monroe, CS 340
"A typical remark after a physicist has had a few drinks: 'You mathematicians think everything looks like a potato.'"

Davis, Math 234B/Pmath 336
"My root is about to overflow."

Monroe, CS 340
"If I'm having trouble walking it's because of the hernia I got lifting some of your marks up to a 15 ." (out of thirty)

Aczel, Pmath 352
"The interesting thing about this is that it is interesting."

Li, CS 438
". . one, one, one, one. .."

Burns, Algebra 146
"Let me give you a taste of things to come."

## VanEvra, Phil 140

"... and if we're really sadistic, we give you all the beer you want, but we don't let you go to the bathroom until your program finishes."

Monroe, CS 340
"Some reasonable set of real numbers reasonably spaced over a reasonable range would be a reasonable choice."

Monroe, CS 340
"I can define the universe as all chocolate bunnies!"

VanEvra, Phil 140
"How could you do a binary search so that the runtime to find each node is the log of its distance from the beginning of the list? This is something to discuss in the Bombshelter."

Monroe, CS 340
"Can I do that? Of course I can! I'm making up the rules!"

VanEvra, Phil 140
"It looks like a ' $w$ ', but we call it omega to sound like mathematicians."

Willmot, ActSci 232
"I don't want you to go up to some girl and say, 'What a nice pair of paraboloids you've got.' "

McGee, Math 138
"My drugs weren't as strong as yours."

Hare, CS 372
"I'm becoming naked. . . I don't mind becoming naked."

Cuenca, Econ 101
"We'll try this with the girls on top and the guys on... Let me rephrase that."

Kroetsch, Music 111
"Quite often you write one thing, say another thing, mean something else, while it should be something entirely different... That's quite common among great mathematicians."
U.S.R. Murty., C\&O 350
"Algebra is just like granola bars. They're both full of fruits, nuts and flakes."

McGee, Math 138
"That's what the rest of this course will deal with. How to find a good P."

Burris, Math 145
"I don't know how to spell it, so I'll just write it sloppy so you all can spell it correctly when you write it down."

Audas, Phy 122
"Students who are not lost yet usually get lost at this point."

Moskal, Math 136
"I was advised that I could get into trouble if I photocopy these and give them to you, so my way around this is to put them in the library and let you photocopy them and get into trouble."

Hewitt, Math 138
". . this is useless; let me give $y: \eta$ infinitely many examples."

$$
\text { continurd an page } 6
$$

Moskal, Math 136
"Trust me. Have I ever lied to you before. . . besides in previous classes?"
antinued from page 5
Audas, PHYS 122
"I like to keep a black hole around as a pet."
Audas, PHYS 122
"Gravity is a conservative force. That means it has about $17 \%$ popularity."

Audas, PHYS 122
"It's like getting an erection in four dimensions."

Hoffman, MATH 136

## The Stanley Burger Philosophy



## Masthead

Six hours ago I wouldn't have believed it. This may be easier than I thought! Out of chaos and void came suddenly... mathNEWS! But then, with all these amazing people helping me, it could hardly go wrong. All remaining mistakes, and there are quite a few, are mine alone. These amazing people, along with their favourite fantasies, are: Roger Maxwell(That I'll Graduate), Kivi Shapiro(Lord of the Rings), Kathi Lai(No Fantasies), Marcel Goudeseune(42), Grant McArthur(Win millions of \$'s), David Gibbs(None of your business), Karen Smith(Joey Ramone in Reykjavik), Eric Gocomber(AHEM, Cough!), Melanie Johnson(led. she didn't include one. Ah well, we can speculate!!), Mike Newman(Frumious Bandersnatch), David Weil([ed. none here either. Hmmm!!), Stephen Smith(Chocolate covered Spam), Penny Watt(Unprintable), Betty Jo Hill(Snow White and the Seven Dwarves), Sean Goggin(v4.4 BSD), Becky Riell((ed. Curiouser and Curiouser!!), Doug Hopkins(Denver the Wonder Hump), Lance A. Sibley (WD-40 and Strawberry Haägen-Dazs).

Thanks also to the great people at Graphic Services (hi Marion!), without whom this would be PURE insanity. Special thanks to Stephe Smith for the Coke, and Karen for doing everything I was too tired to do.

## This is a Sexist Article

## if you don" cante. thent lital it us: " ratcist. bigamiont misanthropiat.... list articte

No one ever writes letters to mathNEWS unless someone writes a tremendously offensive article. This is blatant encouragement for such articles. Who doesn't enjoy receiving mail? If I were editor, I am sure that I would solicit such articles. Think of how lonely we mathNEWS staffers must get slaving away late at night for you, the average mathie. Everyone is too apathetic at this campus. If village food disappeared, nobody would care - perhaps that is a bad example. But the point is this, nobody reacts to any of the good things people and organizations do on this campus (or in real life, come to think of it), only to the bad things. Try writing a positive letter to mathNEWS or even to Imp',n!. I harp on this every once in a while and nobody listens, but I keep on trying. There's nothing like a compliment to encourage a positive response. Oh yeah. Something I happened to notice one day. If there is an offensive looking title on a page, people go right to it.

## Math Grad Committee

The fun has just begun!

Welcome back everyone to your final year in Math. The end of our illustrious career at Waterloo is finally in sight.

Let me first introduce MGC. MGC - Math Graduating Committee - is all Math students in their final year organising their yearbook, grad photos, social events, fundraising for the Math Grad Ball and lots of other stuff. Everyone is invited to come-out and help; if you want to have fun, just get involved! If you want to be involved, stop by the MGC office - beside the MathSoc office - and sign up for one of the sub-committees. Their are four sub-committees, each with a director; Yearbook, Social, Fundraising and MGB. Finally there's the MGC Chairperson.

- Fundraising - pizza, bingos, raffles
- Yearbook - grad photos, photography, design
- Social - pubs, tournaments, campus rec., special events
- Math Grad Ball - planning, decrrations, slideshow

Now you know all about MGC, I'll let you know what's going on. We're already off to a great start.

- September 18 - Blue Jays road trip to the SkyDome - Tickets on sale Monday
- Week of September 17 - Grad Photo sign-up and Yearbook sales
- October 2-10-Grad Photos and Yearbook sales
- October 3-Class Photo - place to be announced
- Octoberfest - Tickets on sale outside the C+D - date to be announced
- Pizza Days - every other Wednesday

Lots more stuff in is the planning stages so watch this column or stop by the MGC office for details.

## The Adventures of Freddy Frosh

"What," said Freddy, looking at his schedule, "I have 8:30 classes every day!?"
"And we have to walk from village two," pipes up Tony, his friend.
"That means we should be up at seven."
They looked at each other, each of them thinking, "what have I gotten myself into."
(Narrator: Welcome to the bureaucratic world of Waterloo, Freddy!!!)
Monday Morning, Sept. 10, 1990: 0700 hrs: Freddy Frosh after a week of inhaling beer and wasting his parents' hard earned money on snack food along with dodging ducks and other lesser forms of life like engineers. He holds his head, wincing in pain.
"High School wasn't like this." he says to himself.
"Actually I drank more in high school." pipes up Eugene Engineer, his yellow helmeted, near-alcoholic roommate who had spent the whole last week plotting to steal the pink tie.
"I'm going to the shower," says Freddy, who stubs his toe on the two empty cases of beer bottles lying on the floor.
"Return your bottles, Eugene."
"In a minute, mom, after I watch Mr. Dressup."
(Narrator: This is in no way meant to insult engineers whose intellect is well documented ... by Laurier students.)

After a short, two minute shower, three-quarters of which was spent under cold water, he goes to breakfast. Yummmmmmm another delicious meal of rubber eggs and greasy toast, yum yum yum. It was just like mom would make if she was plotting the family's murder. He wouldn't even feed this stuff to the ducks ... well, maybe to the ducks. At least Eugene had to eat it too. If you're going to suffer at least it's better to see an engineer suffer with you.
(Narrator: Frosh readers, disregard this, making engineers suffer is only good if you can enjoy it. Cut them off from their tool (is it just me, or is that phallic?))

0830 hrs: MC 2065: "My first class in university, WOW!!! GEE WHIZ!! Look a geek with a pocket protector, no that's the Prof," thinks Freddy.

Professor Dave Kteinkersmitzalnitdel, who speaks in an accent just to one side of unintelligible is standing in front of the class waving his arms and frantically explain about some Polish mathematician's theorem.
"I learned this in high school," thinks Freddy, "University is EASY!" As he watches a paper airplane fly over head, he can just make out Imp'th, on its wings.
(Natator: Is Freddy in for a surprise, huh kids. Scary stuff, eh?)
Suddenly all goes dark for Freddy. He is lost in a wave of calculus.
The Prof is boldly going where Freddy has not treaded, and Freddy wasn't paying attention.
(Narrator: Bad Freddy, Bad.)
Freddy leaves his first class dejected, heading for the C\&D and a cup of coffee and a Montreal Bagel.
to be continued
Don Chuckles

## Definite Article of the Week

## Rebuilding Your Bike

About a week before I was going to move out on my own for the first time I decided it would be beneficial for me to own a bike, especially since I'm living off campus. So off I trek to the newsstand to pick up a copy of the local classified paper, and start digging through the sectio 1 on bikes.

I finally found what I thought was a great deal on a used bike. A :tually the bike turned out to be in dismal shape, but I only found that out after I had bought the bike and taken it completely apart. That was the easy part. Within about two hours after I had bought the bike, it was lying in pieces on the garage floor. Now that there was nothin!; left on the bike, I had to clean the miserable thing.

The frame was a ghastly color of blue with some really tacky stickers on it. After scraping those off, I repainted the frame a nice neutral colorany color you want so long as it's black. That left all the mechanica parts. The previous owner must have cleaned the bike less often than never, because all the gears, chain, dérailleur etc. were covered in a mirs of old motor oil, sand and road salt. So that's what tar sands really ar :. I managed to make about three buckets of solvent opaque by washi ${ }^{\mathrm{g}} \mathrm{g}$ the gears and chain.

I didn't manage to get the gears off the rear wheel, so I took it t ) a bike shop and they actually did it for free, with the instructions to just spin it on by hand later, as the chain would tighten it as I pedaled. The one other problem I experienced was the bottom bracket, where the shaft for the pedals goes through. Removing it was easy, but putting it back was next to impossible. It seems the thread for the two nuts holding the bearings is so fine that it's easier to cross-thread the things than get them in straight. I gave up on that one, and took it to a bike shop where they were quite willing t $\cdots$ do it- for $\$ 45$ ! By this time I had cross-threaded one side once and the other side three times, so I rè ally had no choice.

Other than that, reassembly went like a dream. I repacked the wheel bearings with grease, put on a new chain, custom-sized the cables for the brakes and gears, adjusted all the cables, and presto! I had a bike that was probably better than new (it was built in Korea) for less than the price of a new bike, and I gained lots of experience in bike maintenance. I learned more about the mechanics in those four days than in the previous many years that I've been cycling.

Fo: d Prefect

## PMC

This is by way of an introduction to the PMC (aka pure math club). We're just getting started this term, and we've got lots of stuff planned. Our intrepid leader, Shapiro, has announced the imminent creation of the dreaded PMC soccer team, who will set forth to challenge all those foolhardy enough to doubt their bravado. Furthermore, our bold chief of mission control, O'toole, is preparing a dazzling array of guest speakers, ranging from our very own Dr. Horton, speaking on the wonders of the torus, to Dr. Ruth, speaking on, ... well, ... other wonders.

We're fast accumulating one of the largest libraries of pure math material, we've just acquired some modern computer equipment, we've got a new logo, and we've got a column in mathNEWS! And for only (an undetermined sum) you too can become a member of this illustrious assemblage. But I hear doubt, hesitation, reluctance even. Why should I become a member? (you say) What the hell do I get? (you say) Well here's where your money goes: straight into the pockets of the PMC executive. But what the hell, buy a membership anyway.

We'll be having (as you read this: will have had) an organisational meeting on Wednesday (last week). If you want, or even if you don't want, drop by and buy a membershir , have a chat, make a contribution to the above mentioned PMC exec fund.

## Ultra Classifieds

Jeff
I waited for you Tuesday night at AL. Where were you?

For Sale
Answers to upcoming AM and CS exams. Reasonable prices. Total Confidentiality.
call 747-QUIZ
Do you know that with your CFS card you can get a $10 \%$ discount at the Stag Shop? No kidding!
Mark
Had lots of fun Tuesday night at EL. What happened to you?
Jeff
Hey Mike
You left your "crayons" at my place. You can pick them up tonight.
Bob
For Sale:
A crate of slightly used turtlenecks. Cheap! (Judy, remember you bruise easily.)
Bob
Keep your $* \backslash \$ \% * \backslash \&!$ "cray $\rightarrow n s^{n}$. I don't want or need them ever again!

Mike
Domer the Wonderhump riles again. Watch for it at a scunt near you.
the annoying one.

## ((Greeting and Salutations)

## HON THE ©SC JOM THE (SC JOLV THE (SC: JON TIIE ('S(')

(Join the csc, see the center of the Universe (it's next to the couch on the floor). See the world of computers before the disk-loader-that-calls-itself-an-OS-that-starts-with-M. Guess the boot sequence of the NOVA II. See some core. Get free tea.)
(The CSC is the Computer Science Club of the University of Waterloo. We are a messy group of computer hackers (not crackers). We welcome all and any who would like to join the CSC. A membership is 2 dollars and lasts a term. Membership has its privileges, exempli gratia an account on the aging hulk from the dawns of time WATCSC or HAL 9000, an HP9000/236 machine, running SYSTEM III unix.)
(If you can't afford $\$ 2.00$ come by anyways, we have elections at $7: 00$ in MC4040 on the 24th of September, and our regular room is MC3036 (across from the C\&D).)
(This term is going to be great. There is an Othello ${ }^{1}$ contest in November (you write a program that plays Othello and play against others). We are getting BSD4.3 running on FRED and plan to have it fully operational by next month.)
(sorry for the parentheses: I am talking with a Lisp)
(Calum))

[^0]
## Top Ten Necessities for UW That You Forgot to Pack

10. Notes from the first time you took C\&O 230 .
11. Half-price pizza coupons.
12. Campus map. (Would you believe I'm in 4 N and just found out today where Biology 1 is?)
13. Cookbook of Kraft Dinner recipes.
14. Half-price pizza coupons.
15. The videotape collection you don't want your mother, father or kindergarten schoolteacher to find while cleaning your room.
16. A thesaurus with which to amaze, astound, astonish, surprise, dumfound, startle, dazzle, overwhelm and electrify the ELPE examiners.
17. Thrash punk tapes with which to continue your Bach-loving roommate's education (Bach to the Future option).
18. Half-price pizza coupons. (Hey, this one is really important!)
19. Duck repellent.

Four Bee Prime

## mathNEWS needs you!

Can you write? Do you know anything at all newspapers? Have you even heard about mathNEWS. It doesn't matter, we still want you to help us put together the mathNEWS.
First, a little information about mathNEWS production. Every other Monday (starting on Sept. 10) we meet to put together articles on anything that someone might find interesting or humourous. (If I'm wrong don't shoot me, I'm new at this.) We need people to write interesting articles, to type up those interesting articles, and even give ideas for articles. In general, we need any talent or ideas that you can bring to the mathNEWS.

For those of you that are still unsure of coming out to help produce the mathNEWS here are some of the benefits of being on the mat $h_{1}$ NEWS staff.

As mathNEWS staff you have the opportunity to:

- try out your writing talents
- learn how a major (well sort of) newspaper is put together
- meet other Math students (and others)
- learn organizational skills
- get your views across to the rest of Waterloo
- eat pizza (Meetings usually have pizza ordered in)

Hope to see you at the next meeting! (September 24th)
G. McFrosh mathNEWS writer

## mathNEWS Quiz

Well, a brand new term, and, of course, a brand new set of squizes. Have fun.

## Sports

1. Name 5 American pro-sports (baseball, football, or basketball) teams (with affiliation) whose names do not end in ' $s$ '.
2. Name 5 team names that are used in 2 sports. (of football, hockey and baseball)
3. Name the city/state affiliation of the above pairs of teams.
4. If basketball is added to the sports in 2 , what pair of teams would be added to the list?

> Citogronphy
5. Where is Queen Maude Gulf?
6. What is the southern most mainland point in Canada?
7. What three countries share the island of Borneo?
8. List the countries that border Iraq.

## Mories

9. Who played Paploo in Return of the Jedt?
10. Who did the music for Ladyhatlke?
11. Who played !Xi in The Gods Must Be Crazy?
12. Who won an Oscar for his part in Cat Ballou?

## Misc

13. Which two cities are referred to in the title A Tale of Two Cities?
14. Which Planet in our solar system has the most moons?
15. What feature separated Hadrosaurs from other dinosaurs?
16. Which planet is farthest from the sun?

## Eugene Goes to School

Eugene started school today. Eugene is a Math-Frosh. Eugene was ${ }^{\text {scared. He has to make new friends here. All his friends and family live }}$ far away. He couldn't even bring his cat! The professors told Eugene to work hard. His big brother and sister said so too. Eugene thinks Math is a hard. But Math is more fun than Engineering!

Eugene, of course!
/[with help from Dick and Jane -ed./]

## Election Report

Despite popular belief, you are not through with elections yet. The Math Society elections for the term are starting now. My name is Doug Hopkins and I will be your Chief Returning Officer[CRO| for the term. The other members of the election committee are Lisa Booth, Dave Fielder, Stacy MacFadyen, and Dave Weil. Collectively, we will be running the elections happening this term and ruling on any disputes that might arise.
For the time being, we need class representatives. The following positions are available:

- 1 N regular 2 positions available
- 1A 4 stream Co-op 3 positions available
- 1A 8 stream Co-op 3 positions available
- 2 N regular 2 positions available
- 2A Co-op 3 positions available
- 3N Regular 2 positions available
- 3A Co-op 2 positions available
- 3B Co-op 1 position available
- 4 N Regular 2 positions available
- 4A Co-op 2 positions available
- 4 B Co-op 1 position available

Nomination forms for said positions can be picked up in the Math Society office, MC3038.
Important dates for the class representative elections are as follows:

- open nominations Monday Sept. 10, 1990 AD
- close nominations Monday Sept. 17, 1990 AD @ 3:30
- start campaigning Monday Sept. 17, 1990 AD @ 4:30
- stop campaigning Monday Sept. 24, 1990 AD @ TBA
- elections Tue., Wed., Sept. 25, 26, 1990 AD @ TBA
- announce results Wed. Sept. 26, 1990 AD @ the shelter.

Some of you may have figured out that by the time you read this you only have $1+$ delta business days to get your nominations in [those of you who have figured this are quite correct $]$. So get out there, and pick up those nomination forms.

Good luck to all of you who are running.
Doug Hopkins//Math Society CRO

## First Aid for the Beginner

Sometimes, no matter how hard you try to avoid it, it happens! Especially at the strangest times, like when you least expect it! So what do you do when you are socializing with Friends and your buddy falls victim to the dreaded 'Broken Nail'? Read on!

Remain calm, you will be of no assistance to the victim if you panic. Treat victim for shock, just to be on the safe side. Find a nice, calm, soothing person to watch victim while you obtain supplies. The next step, of course, is to obtain supplies. Supplies you will need are: bandaids, popsicle stick, glue, file and beer. Give victim popsicle stick to bite down on and beer for extreme pain. Examine nail to see if it is saveable. If so, repair with glue and bandage. If not, file evenly and bandage. Replenish victim's beer and resume partying!

## Griddles

Greetings, everyone, and welcome to mat hNEWS's longest-standing tradition, the gridWORD. Well, okay, pizza goes back further, but we try. Anyway, this is the grid, and here are the clues. What you do is you figure out the clues and put the answers in the appropriate places in the grid. Neat, eh?
There's like other complicated things like how to solve the clues, but we'll leave that to you. Oh, yeah, there's neato boffo mondo wizard cool prizes if you're clever enough to solve them and your solution is picked from all the cleverly correctly solved solutions submitted to the mathNEWS BLACK BOX by Monday, September 24. Neat, eh?
Not only that, but there's a theme for the cryptic. And if you figure out the theme you get bonus marks. Bonus, eh? So there you go.

Oh, if you do decide to submit your solution, make sure you include the following very important bits of information:

- your pseudonym
- your comments
- your favourite reason to be here on this most excellent campus

These, if submitted, will appear in print in the next issue of mathNEWS. Wild, eh? Yeah, I thought so too.

Anyway, that's about all you need to know. Except the BLACK $B O X$ is on the third floor of the MC across from the comfy lounge.

Have oodles of fun.
the snark

## these, then, would be Conventional clues

i think

Down dooby doo down down

1. Cost
2. Aussie boxers?
3. Kind of music
4. Island nation
5. Round
6. Good old
7. Marks tentatively
8. Bandits' bane
9. Adjust
10. Ambushed
11. Jumped
12. Liquid quantity
13. Not busy
14. Rainbow
15. See 22 across, except get a whole bunch of people or trees or platypi or rocks or whatever doing it, instead of just one (so, I get tired of short clues)


## Cryptic

heh heh heh

## Across

1. Half of what you need to build a cat (3)
2. Sea of light (4)
3. In most glib, esteemed way (4)
4. Let water in (5)
5. Confused, irradiated tribe from desert planet (6)
6. A piece of pie, that is (2)
7. Give me $\log$ back, gnome (5)
8. In case people stay (4)
9. Alpha, in either paddle (3)
10. Jump safely (5)
11. Endless panic in paradise (3)
12. Pushing in below knee (4)
13. Ledge of diseased skin (5)
14. Tailless insect exists (2)
15. Modify mood (6)
16. Roll out the barrow (5)
17. Trust in, barely (4)
18. Hike in fifty-litre keg of beer (4)
19. Short, brown, sleeveless top (3)

## Down .

1. Messy tall cousin of Worf's (7)
2. Wire for help? (9)
3. Decapitated sheep bears cross underwater! (3)
4. First in and of women hangs outside window (4)
5. Swelling, disorganized, navy force (5)
6. Colour in Rin-tin-tin (4)
7. Employ torpid, deranged, whimsical power (7)
8. Stimulate blind resident (5)
9. Wrongly fired again for watered-down measure (5)
10. Mistakingly peer portside for Kirk's command (9)
11. Temporarily give Jamaican nectar (stupidly) to Vulcan's violent cousin (7)
12. Allude in simply-put hints (5)
13. Sun feature (4)
14. Mixed-up Simpson kid (4)
15. Cook in? How? ... Ok (3)

[^0]:    ${ }^{1}$ ()thello is a trademark of Milton Bradley.

