

Incaith NEWS

## The Zone

Lots going on this week. When you read this, you will have either attended or missed a forum on the proposed (hah!) changes to Co-op, and passed them on to the Math Society to send off to the ivory tower of Co-op Services. Why have you not heard of this before? Nobody has. It's been secret. Even Students Advising Co-op (SAC) only recently heard of this total revamping of the system, and when they did were ordered to strike it from the minutes. Co-op claims to have had student input until now, but I want to see the students they asked! It certainly was a mystery to even this intrepid (yet idealistic) reporter, until the most recent revelations.
The Society has been spending student money quite appropriately. There was a healthy student delegation - that is, people actively concerning themselves with the issues that concern them, at the Faculty Council meeting recently. Which was surprising, being as the meeting was (oh so coincidentally, of course!) held during Reading Week.
Not that they were there to talk about this issue, which came as a complete surprise to those at the meeting. The students were there to talk about a fascinating development from our faculty, who would like to allow admissions to Computer Science separately from everything else in Math, in first year. Why? Because some students don't realize that CS is in Math, and the faculty feels these people are smarter than the ones that do. Great. Thanks, folks, nice to know what you think of us!
The Math Society is, of course, Going Through Channels. Can they do more? Probably. Maybe they could hold demonstrations, sit-ins, and rallies. Of course, maybe they could have their office and budget removed. The University of Waterloo is not well known for being tolerant of - or open to the ideas of - its students. Anyone remember the alt.* ban? We may have the name, Censorship U, but it's not for lack of trying.
For some reason, there seems to be an unwritten law that every time the Math Society Council meets, they have to change their constitution. Remember, that's every week. The latest has to do with who can serve on committees.
Did you know you have to be a full-time registered Math student to help MathSoc? Oh, excuse me. As of the meeting before last, you can also be an Honourary Lifetime Member. This is a distinction they confer on someone that has aided the Society beyond the call of duty, and it means the person can come in any time and make photocopies. This may be of limited use to someone who has graduated and gone to Ottawa, for instance, but the Society seems to feel it is a very distinguished honour.
So HLM's are allowed the great distinction now of doing work for MathSoc. Why did they make this change, and why did they spend over forty minutes arguing about it? Basically, the Orientation Director had someone in mind to run his finances, but this person happens to be in Arts. However, there was the redeeming feature that he was an HLM.
The main question people were asking was whether people who were not registered could be trusted to perform their duties, while the (obvious) response was that even registered people could bugger off at any time. The aforementioned Orientation Director even offered - actually, threatened! - to do so, to prove his point. An iconoclast. I like that. Of course, the Faculty may only strengthen their impression of him. Apparently they notified the Math Society executive that they "did not think he was the best candidate for the job." Not that the Society listened, and for that I applaud them.
The Zone is written by a former senior councillor and idealistic troublemaker at MathSoc.

Look Ahead

| mathNEWS |  |
| :--- | :--- |
| March 5 | Issue \#4 hits the stands |
| March 10 | Issue \#5 Writer's Night |
|  | 6:30pm, Descartes Lab |
| March 15 | Issue \#5 Production Night |
|  | 6:30pm, MathSoc office |
| March 19 | Issue \#5 hits the stands |
| Math Faculty |  |
| March 16 | Campus Day |
| March 20 | Math Grad Ball |
| MathSoc |  |
| March 8 | Movie Night: Single White Female |
| Co-op |  |
| March 5 | Ranking Forms Available |

## MathSoc Wants You!

Yes, MathSoc keeps copies of old exams! Yes, MathSoc has

1. the cheapest photocopies on campus
2. lots of great novelties and mathwear
3. 3 Macintoshes which can be used by any member of MathSoc
4. 5 group study rooms which can be signed out by any member of the MathSoc

But we can't provide these services without you!
Come out! Volunteer for an hour/week to keep the office open! You could even write for mathNEWS! Most of all, bring us copies of your midterms! We don't have the person power to run up to every prof and say, "Can MathSoc have a copy of your exam?"

And what do you get? Current midterms and finals to study from; an office which is open when you need it to be open; and if you become an office worker, an invitation to the end of term bash at some bar or another!

So, come out and join the fun!
ATP

## Orientation Report

By the time you see this, the leaders for 1993 Orientation Week will have been chosen. The leaders were chosen on the basis of experience and what I feel they would give to Orientation from what they said on their application forms. I have also set up a waiting list, in case some people turn down their position.

To everyone who did hand in an application, thank you, and for those who did not get on Orientation, I'm sure some people will quit or be removed, so don't be depressed.

Orientation Weekend is set, and will be the weekend of July $16-18^{\text {th }}$. I also have a Fed meeting to attend on March 9, so I will have more to report then.

Til next issue,
Michael Melvin
1993 Orientation Director

## PMC\&OC WEEKEND UPDATE

I'm tired, so this is going to be short.
Quote of the week: "I don't WANT to play Titan!" -Leon It's been a busy couple of post-Bleeding Week weeks.
We've had 2 talks since last we met. Prof. Prabhakar Ragde gave us a talk on Ramsey Theory, and Nieauiokhaieoujoieaiel KirtikumarRamandlalNahalchandPrechandHirachandTrikumKishor Shakstomosovouifjdhoklingerstan. . spoke on the Brouwer Fixed Point Theorem. We would like to thank both speakers for taking the time to give us their talks.
** BULLETIN *** BULLETIN *** BULLETIN ***
The stories you've heard are sad but true... the mighty PMC machine ground to a halt Friday night. .. and the TSA emerged from Columbia Ice Field. . .victorious. The final score was TSA 2, PMC 0.
The damage was done in the first 10 minutes of the gameone good and one flukey goal. . . after which the TSA was denied everything, despite an alarmingly high number of shots on net. Clearly, the TSA was being offensive. And unfortuantely, the mighty PMC offence was all but shut down!!! Ay caramba!
I'd like to take this opportunity to thank everybody who showed up. We had a GREAT turnout. .. man, if there was a bench-clearing brawl, we would've won by sheer numbers alone!!! And for those of you (i.e. everybody) who discovered that gravity still works while one is on ice, and received bruises in the process, we appreciate the damage taken.
Yet mark mine words. Thy hemorrhaging shall not be for naught.

## From the jaws of defeat, shall vict'ry be wrought.

Fair is foul and foul is fair, yet ball of bases the sport not be.
The game afoot is't ball of broom - what say'st, TSA, to best of three?
Abrasions cry revenge. . card collectors cry "need 'em",
Contusions cry vengeance... Attenborough's CRY FREEDOM.
A rematch! A rematch! Our kingdom for a rematch!
One which we've been granted...'tis time now to snatch
Victory, honour, pride, mad dog and glory, our shopping list sings,
From the TSA...those blocks! Those stones! Those worse than senseless things!
And Christopher, TSA Prez, like Clarence shall be found,
In a metaphorical butt of malmsey, metaphorically drown'd
(Poor Clarence! Surely he wish'd his butt metaphorical...
A metaphorical butt. . .hmm...how phantasmagorical)
Drown'd by the number of goals we shall score,
(Nought not being nearly enough, methinks we'll need more)
The date and the time is all we need settle,
Before the TSA meets again PMC sinew and mettle.
So Once more unto the ice, dear friends, once more,
For this time vict'ry shall be ours. . Quoth the Raven, "Nevermore".
Anyways, thanks again to all that showed up... and we'll trash the TSA in the rematch... CLEARLY.
Well, that's all for this issue. Be seeing you.

## CSC Flash

Welcome back everyone. Hope your break gave you enough time to relax because I am sure your Professors have a lot of work prepared for you, including midterms and finals.

Well, if anyone can find the time in between studying and writing exams, there are some interesting events scheduled by the CSC coming up. We have ...

- Ultra Arcade Night on Wed. March 10.
- PAMI Lab Tour on Mon. March 15, at 1:30.
- ACM Preliminary Programming Contest on Sat. March 20.

And also, for those interested in writing games, there is an arbitrary game contest that will be held later in March. It is being run by Ed Dengler, and the chosen game for this term is the game Abalone. See uw.cse for details.

In other news, $U(W)$ 's programming team managed to finish $7^{\text {th }}$ in the world at the 1993 ACM Scholastic Programming Contest Finals in Indianapolis. Nice going Ed, Rok and Ian! Unfortunately, the top 6 teams were awarded prizes. :-( On a lighter note, $\mathrm{U}(\mathrm{W})$ has just been officially informed that we will be hosting next year's Regional Contest in November. If you recall, our team placed first in the regionals last year. We anticipate another excellent placement.

Calum T. Dalek
Chairbeing

## GINO'S PIZZA

Try a little bite of Italy 747-9888
160 University Ave. W. Waterloo

The Official Pizza of math NEWS
TWO GREAT COUPONS!
TWO GREAT OFFERS! TWO GREAT OFFERS!

MON. \& TUES. ONLY
Large
Pepperoni
Pizza
Reg. $\$ 9.08$
Special With


Coupon
Exp. 19/03/93
Pick-Up Only

MON. \& TUES. ONLY

## Free Slice

With the purchase of
One Slice and a Pop. Valid Only with Coupon

Exp. 19/03/93
Pick-Up Only

# To All Graduating Math Students: 

## RE: Pink Tie Pledge

What is the Pink Tie Pledge?
The Pink Tie Pledge is one of the most important ways in which we can leave our mark on the Faculty of Mathematics at Waterloo. Initiated by the Class of ' 90 , the pledge represents the commitment of graduating students to improve undergraduate education in the Faculty.

## Why should we Pledge?

1. The Faculty of Math has a world renowned reputation for excellence - this reputation will be beneficial to us as we market ourselves in the business world.
2. In these times of ever-increasing costs and decreasing government support, the Faculty's ability to offer a top-notch education is undermined. The need for private support is critical to maintain the reputation and quality of our degrees.
3. We can ensure that future generations have the same learning opportunities that we have had by making our "tie" to the university's future.
4. In previous years, Math alumni have donated well over $\$ 500,000$ to the Faculty for the Descartes Scholarship Endowment Fund and undergraduate instructional lab equipment. We have had the oppurtunity to benefit from their support and the Pink Tie Pledge provides us with the oppurtunity to join with them and support future students.

## COMPUTER MPUTER Stree

Math \& Computer Bidg Room 2018 Ext 4636 Mon. - Fri. : 10:00 am - 3:00pm

## IBM PRODUCT FAIR

Friday, March 5, 1993 10:00 a.m. - 4:00 p.m.

ICR Lounge Davis Centre
-IBM PS/ValuePoint
-ThinkPad 300 Mono Notebook
-ThinkPad 700C Colour Notebook

- RISC System/6000 - New Models
starting at $\$ 3693$

Join us for Coffee and Muffins while browsing over the new models and chatting with IBM product specialists

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## What projects will it support?

The Dean has asked us to support two priority projects that other alumni have been supporting: the Descartes Scholarship Endowment Fund and undergraduate instructional lab equipment. The Descartes Fund provides scholarship money for over 200 of 850 freshmen each September. This allows the Faculty to attract the brightest and best students to Waterloo. Funds for undergraduate instructional lab equipment provide additional support to an insufficient equipment budget. This allows for the purchase of state-of-the-art computer equipment. In addition, a Teaching Assistant fund has been initiated this year to improve the quantity and avaliability of TA's in the math building. You may choose to support any or all of these projects.

## Can I afford it?

Support can be made at the level you choose. Most importantly, the first donation is not due until May 1994.

Every participant will receive a pink tie lapel pin to wear in recognition of their commitment. Donors who pledge $\$ 101$ for three years will also recieve their very own personal prime number. The number is assigned by the Dean and a list of new prime number club members is published in "Math Ties", the Faculty's alumni newsletter.

Math students, faculty, staff, and alumni have a reputation of being very supportive and loyal members of the Faculty. Our spirit can never be diminished. Please join us in this very important initiative. I realize that making a pledge may be low on your list of priorities in your last term of studies, but I hope you will give serious thought to the benefits of a donation.

MAKE YOUR "TIE" TO THE FACULTY'S FUTURE WATCH FOR YOUR PINK TIE PLEDGE IN THE MAIL OR PICK ONE UP AT THE MATH GRAD COMMITTEE OFFICE, OR AT THE INFORMATION SESSION OUTSIDE THE C\&D ON TUESDAY, MARCH $9,10: 30$ TO 12:30.

Sincerely,
Wendy Gallant,
Chairperson

## The Exciting World of Actuarial Science!

The Actuarial Science Club has definitely been keeping busy these past few weeks. For example, just last Friday, Nick Crook gave an excellent seminar on the fast-paced world of pension consulting. We had a great turnout (dozens of people, if you include the refugees from the $12: 30$ underwriting class). Nick talked about consulting, gave helpful hints about resumes and interviews and discussed the Task Force on the Future of the Actuary. He also made a few gratuitous "Rob Brown" jokes, so our day was complete.

I'd like to take this chance to thank everyone who has donated old study notes to the Actuarial Science Club. It's a much more ecologically friendly choice than just burning them. We love to collect those study notes, so if you have a few lying around, bring them over! And if you're looking for study material for your May exams, come and see what we've got.

## ANOTHER GREAT TERM!

Last term was another great term for mathNEWS! The figures have just come in from our accountant, and they're astounding. Foreign subscriptions are up $81 \%$. Local sales alone last term grossed us $\$ 315,000$ (and since Mathsoc pays all of our printing fees, you can see how we're laughing all the way to the bank). One benefit of this financial windfall is that mathNEWS may be expanding in the near future. Yes, there may soon be a new WEEKLY math magazine in your future! Some of our readers have suggested we should put the money towards getting mathNEWS printed on decent paper, or hiring some good writers, but we know that no one REALLY wants that. The number of possible math-mags we could create is almost endless, but we've narrowed it down to 22 possible contenders. Please read the following summaries, choose your favorite, and dump your vote in the mathNEWS black-box located on the third floor of the math building. Don't bother including your student ID number, name, or restricting yourself to only one vote for your favorite mag. If you care enough to vote 1000 times for a particular magazine then, garsh darn it, we care enough to write it for you.

## New Math Mags

mathBLUES: Got those exam time blues? Tired of rock-nrolling 'till you barf at the bomber? Check out mathBLUES, a hip and soulful examination of Waterloo Mathies (both grads and undergrads) who can't get jobs and are working as blues musicians around the world.
mathBOOS: Scary scary scary! Why should Halloween only be in October? Read mathBOOS and get so darned scared you'll. . . well. . . you'll be really scared! Full of Mathie horror stories like "the function that wouldn't converge" and "the eighth derivative".
mathBOOZE: Uh, wait, we already tried this one. Didn't work...
mathBREWS: Where can you get free beer on campus? If you know, write up an article for us, and we'll be sure to publish it in mathBREWS!
mathCHEWS: Can't keep up with the ever-changing prices in the $\mathrm{C}+\mathrm{D}$ ? This weekly mag including both a complete menu, and valuable " 2 cents off your next donut" coupons will be the answer!
mathCLUES: Can't get that last question on the assignment? Here's where you can turn to for help (though you won't get this mag until it's already due).
mathCOUPS: Hear exciting stories of Waterloo Math Co-Op students working as mercenaries in El Salvador. Yes kids, it WILL count as a Math Workterm!
mathCUES: Exciting tales of Mathie pool games. Learn how to calculate the angle of that perfect shot to sink ALL the balls. Learn how to deal with the emotional letdown when you realize you are only accurate to $+/-30$ degrees.
mathEWES: Sexually stressed out? Here you'll find out about a little- publicized sexual alternatives.
mathFLOOZE: Never mind, we'd never get this one past the dean.
mathFUSE: In comp-sci EEE? This mag is for you! Not that you'll have any time to read it...
mathGLUES: What has the best Sniff/Stick ratio anyway? An exciting new report every week.
mathGOOSE: Bored with mathEWES, come over here then. mathPEWS: The Mathie religious discussion magazine.
mathQUEUES: What's your favorite abstract data type?
Come out here and discuss it!
mathSCREWS: No chance the dean will even consider this one.
mathSHOES: Every good Mathie should have a pair, why isn't there anywhere to discuss it? Learn about the best shoe-sales a week before anyone else.
mathSNOOZE: All your weekly math lectures transcribed!
mathSPEWS: A cheap rip off of Iron Warrior editorials!
mathSTEWS: Yum yum! Some of the best cooks in the world are enrolled in the Waterloo math program! Learn their greatest cooking secrets!
mathVIEWS: Another dull discussion mag. Ho hum. Yawn. Zzzz...
mathZEUS: Learn about famous Greek Gods who have attended Waterloo!
mathZOOS: And if you get tired of mathGOOSE. . . come over here!

Ahmoras the Dragon

## Rowry Flake: Ground Water Researcher

"This is Reginald Looksy, reporting for mathNEWS from the Village Green where Rowry Flake, of the U(W) Centre for Excellence in Groundwater Research, has claimed to have made another major breakthrough."
(Rowry:)"Well yes, we have determined the source of the groundwater."
"Fascinating. . . what is it?"
"Well, we are almost positive it came from somewhere at a higher elevation."
"Is that it?"
"Yes, but well, we're not sure from exactly what elevation."
"You called me all the way out here for that?"
"You reporters are all the same! You don't care about basic research. You're only interested in wiz-bang science. If I were doing Star Wars research at U of $T$ you would be worshiping me."
"Well, if that's how you feel, I'll be going now (to U of T)."
"But wait, I have graphs!"
"Goodbye!"
"They're in colour!!!!"
MacGyver
EvilCoop
HOUSING

Now that we have your attention...
Sex for Sale!
Come and arrange for a night of pleasure

On King St. N, Waterloo
near Grocery, Beer Store, Recreation Shops

Ask for P. Imp

Pilot in Hell

## prof QUOTES

"AClDC is a sort of sophisticated neanderthal stomp."
Huron, MUSIC 270
"If you want to sing popular music, you've got to sound like you get up in the morning and gargle with gravel."

Huron, MUSIC 270
"This $X$ is really a $Y$, but it's in drag."
Best, MATH 237
"If this comes out wrong, then you know you've made a mistake. If it comes out right, then you don't know anything."

Goodman, AM 251
"The hearing sensitivity gets less and less as you get older. (Actually, this is not the only sensitivity that gets less as you get older, but we won't get into that.)"

Eastman, SCI 205
"If quarks don't make you famous, finding a few universal constants will."

Liu, PHYS 465
"My code is involved with your code in an intimate fashion."
Ragde, CS 134
"I am purposely making myself stupid. It isn't hard."
Vrscay, MATH 138
"Conservation of mass isn't always true; when you change 15 diapers a day, a lot more comes out than what you put in."

Sivaloganathan, AM 361
"Would you buy insurance from a company called Pits? Think of the advertising. 'We're the Pits' "

Brown, ACTSC 462
"Not only does it not affect anything, it doesn't."
Larry Smith, Econ 102
"The only thing that understands me is the $\mathbb{I A T}_{\mathrm{E}} \mathrm{X}$ processor"
J.P. Black, CS 454
"If anyone ever takes over the world, it will be us [Canadians], by accident."

Larry Smith, ECON 102
"Oh, so now the problem is, I have to go and find somebody with a case of Canadian who will trade it for my case of 50 , and that's going to be really impossible."

Hoffman, ECON 102
"You just don't know how interesting the world is. Get a life!"
L. Smith, ECON 102
"I'd like to be able to do a tap dance to make it more exciting."
Sivaloganathan, AM 361
"Any questions from anybody besides Ian?"
Becker, CS 340
"I can't believe that they could get measurements to the ninth decimal place 100 years ago, and I can't even get to class on time."

MacKay, STAT 231

## Poverty 55

## Imagine if you could visit yourself in the future

A young corporate executive sitting at his desk is suddenly zapped into the future to meet his future self.
"Hey, you're me!"
"Yes, I'm you twenty years later."
"But... you don't have any legs!"
"Yes, now that you mention it, I never should have gotten on that bus..."
"W-w-why are you living in this rat infested dump?"
"It all started when they elected that weenie, President Clinton. Reduce the deficit, my ass. He reduced it all right, and the economy along with it. After he deregulated the stock market the bottom fell out taking all our junk bond savings with it. There was one stock that rocketed up though...now what was it?"
"But, but, what happened to my career? I was on the fast track up, there's just no way I could lose it. I don't understand."
"Yes, it was very improbable. How were we supposed to know the CEO was in the next stall?"
"Alice! My God, Alice! Where is my wife? What happened to her?"
"Well, she was much closer to the epicenter than I was..."
"No, no this can't be right, what about my real estate holdings?"
"Oh, you mean the ones west of the San Andreas?"
"And my antique car?"
"Freak meteor."
"And the numbered Swiss accounts?"
"Embezzled."
"Wait, my eyes are adjusting to the darkness. What are those tubes coming out of your chest?"
"Its an artificial heart. Well. . .more like a water pump from a Dodge Dart; health care just isn't what it used to be."
"And what are those. . lesions all over your, mine, I mean our face?"
"Well, if you thought AIDS was bad, you haven't seen anything yet! Safe sex HAH!"
"Ahhhhhhh! Noooooooo!"

> MacGyver
> EvilCoop

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## The Do's and Don'ts of Resume Writing

Most people know about the general format for writing resumes. Unfortunately, sometimes we forget to look at the finer details that can make, or break, our resumes. Keeping in mind that there is no such thing as a "right" resume, here are some steps to hopefully guide you in creating a "better" resume...

DO...

## - use good quality paper

- organize in a logical/chronological, concise format
- single space and laser print
- write in point form
- begin each sentence with an action verb
- use a "summary of qualifications" or the like
- list extracurricular activities and volunteer work (you well-rounded person you!)
- manually proofread for grammar and spelling mistakes (Spellcheck is not a god)
"How boring" and "You knew all that" didn't you?! So you must know (please excuse the sarcasm!) that you... DON'T
- use pink, purple, florescent, brown, orange, etc. coloured paper (UGH!)
- get too fancy (or it'll be a mess)
- write "RESUME" on your resume (laugh, it's been done)
- use "I", "me", "my", etc. (WHAT?!! your resume about someone else?!)
- write in your birthday, height, eye/hair colour, weight, or anything else that's personal (unless you are planning to become an actor/actress, model, or are trying to get a date)
- use "responsible for", "duties included", "involved in", and so on (REDUNDANT!)
- try to be humorous (it doesn't work)
- exceed two pages (it'll never be read)
- list negative qualities or any kinds of quirk (yes, this too has been done and it's doubtful the person really wants to get a job)

Well, that's all the torture I'm going to subject y'all to...FOR NOW! Careful, I'll be back before ya know it.

Your friendly SCA,
Anna

## Math, the Universe, and Everything

## A Student's Guide to Getting a Job

It's that time of year again. The weather is starting to warm up, winter is coming to an end, and everybody is starting to get strange lustful urges emanating from their genitals. But overriding that urge to pick up some poor innocent frosh at Fed Hall is a deeper, darker, less easily satisfied urge: to get a good summer job. After all, you have to be able to afford to pay next year's tuition so as to be able to get a good look at next year's poor innocent frosh.
The staff of mathNEWS, in co-operation with those fun folks in Needless Hell, have put together a guide to help you land that summer or co-op job that you've always wanted. So whether you wish to work in the private sector, the public service, or the fastpaced world of food preparation, this guide will be invaluable in landing you a cushy job where you will gain experience, a load of money, and your very own secretary of the opposite sex.
This guide will not be of much use to those of you who actually pick up jobs in first rounds, or if you automatically get summer jobs (i.e. your father is in charge of some large corporation like, say, Big Nerd Ranch ). But for those of you who do not fall into one of these lucky categories, this guide will be invaluable in your quest for a summer job.

## Your Resume

Don't be afraid to lie on your resume. Nobody's going to check this stuff too closely. If you want to say that you were on the development team for MS DOS, go right ahead. If, on the other hand, you want to interest potential employers, you should at least try to tell an impressive lie. Claim to understand Combinatorics and Optimization, for example.

Be sure to list as many languages as possible on your resume, but avoid any that the interviewer may actually speak, such as English. Listing "dead" languages such as Latin or French is probably the best way to do this.

Declare whatever minor you want on your resume, as long as you have at least one course that could conceivably count towards such a minor. Hell, declare three or four minors: you'll impress the hell out of potential employers because of your broad range of interests, and they have no way of finding out that you never plan on taking another Psych course ever again.
Make sure your "interests" section contains as much as possible, even if your main hobbies are drinking beer and getting in fights in the Bombshelter. For example, claim that you write for mathNEWS. How the hell are they going to check it? We all use pseudonyms around here. So claim to be Flipper, Fuzzy, or, God help you, Kivi.
Also claim to be active in MathSoc; this is true for anyone who has paid their dues. The potential employers may well believe that you are claiming some sort of executive position but that is their problem, not yours. List as many volunteer agencies as you can fit on the page, and if asked about your work with them, go into a spiel about how much you like working with people and how it Helped You Develop as a Person.

List every award you've ever received. Be sure to include the awards you won back in elementary school, so any potential employers will see just how smart you are.

## The Interview

Your first decision before going to an interview is what to wear. At Needless Hell, the recommended attire is a suit or dress. But

## The Puzzle Page

A Prize for the best submission!

What comes next?
$2,5,10,17,26$,
$1,2,5,10,20$
B, D, F, G, H, J,
A, H, I, M, O, ..-
$5,32,12,25,19,18,26, \ldots$
$3,3,5,4,4,3,5,5,4, \ldots$
$12,20,23,18,6,19, \ldots$

## Division Puzzle

Each letter represents a unique digit from 0 to 9 . What are they?

| MID |
| :--- |
| TERM/STRESS |
| TERM |
| TELSS |
| TFMTI |
| $-\ldots-\overline{M I T E S}$ |

MRDED
FIR
droG's Scramble
RECPATH QUETIALY
LOOSITUN FOCIEF


Why read mathNEWS?

## Stupid Sign of the Week

Message seen on a classroom blackboard:
"Please turn off the lights. P.L.O."
(Now do they want the lights on or off??)
Token Artsie

## An Ode To Fréchet

Some time ago, in Riemann's day,
Calculus was penned in a cumbersome way;
Seas of partials, indices too,
Jacobian determinants spiced the stew.
But now we have another way;
Linear maps have joined the fray.
'Though some feel wrath, me thinks that Math Hath truly felt a "breath of Fréchet."

## Chess Puzzle

You have a knight on the bottom left corner of a chess board. How many ways can you move to position X in 5 moves? How many ways can you move to position Y in 4 moves?


If you've never played chess, a knight moves in an $L$ shape. That is, the knight can move two squares in one direction, and then one square in a perpendicular direction. So some moves for a knight might be two squares up and then one square to the left, or two squares up and one square to the right, or two squares right and then one square up or down.

## Maze Game

For the following grid you start in the top left left square, and want to end up in the bottom right square. You can only move up, down, left, or right. The number beside each row or column is the number of squares you can use in that particular row or column. For example, for your first move, if you chose to move to the right you can only move right 1 or 2 squares. You can't move right 3 squares because that means you would have used up 4 squares in the first row, and the number to the left of the first row is 3 . Similarly, if you chose to move down you can only move down 1 or 2 squares because the number to the top of the first column is 3 so you can only use 3 squares in the first column.


People who have too much time on their hands

## A Simple Request

Here I sit at my X-terminal, crunching out yet another hack article, hoping that the editors like it so that maybe I might even get fed tonight. And what thanks do I get for it? Sometimes I just have to ask myself, Why do I keep coming back here?
Well, that's an easy one. I live in Village and require the free pizza in order to survive. But is that enough of a reason? No, no it isn't. mathNEWS also allows me, a rebellious youth and aspiring writer, to voice my opinions and be heard through this faculty-wide forum. I'm able to sway public opinion, open people up to new ideas, and create psychological graffitti on a massive scale.
Yeah, right.
Let's be honest, folks: people don't read mathNEWS to think. Most people skip the serious articles, and anything over half a page in length. The best that I can hope for while writing mathNEWS is to invent a new catch-phrase. Kind of depressing for someone like myself.
I'm not asking for much. Maybe just a little recognition. Maybe I'd like to think that there's actually someone out there who's reading this. I'd like to believe that I'm actually making some kind of difference. That's all I'm asking for.
Plus maybe some fan mail. Possibly even a fan club, with merchandising and a newsletter. Nothing too big; I wouldn't want to make more than twenty, maybe thirty, thousand dollars a year off of it.
And groupies. Groupies would be nice. Just two or three; I don't want to seem greedy.
Plus, I've always thought that France was a nice country...
That's it. I don't think I'm asking for too much. Just recognition. And money. And women. And political power. That's all. Now, if you'll excuse me, I have seven more articles to write before the Editor comes back with the pizza, and if I don't have them all finished I might be spending the next few days locked in the Mac lab. Again. The things I go through for you people. .

Guelph Erronious

## mastHEAD

We had a great turnout for Monday's production; all twelve of us had a great time. This fact may be related to the time at which we posted signs to let everyone know that we needed their help ( 5 p.m.). I will endeavour to be more efficient next issue. Anyway, thanks to everyone who came out to help with this issue. Their names (and their favourite mathNEWS alternatives) are: Bill McEachern (mathNOOSE); Phil Rittenhouse (math Ni!); Arsenyk Ustaris (Calvin and Hobbes); Joe Hewitt (DEEP HURTING); Steve McIsaac (Manual for Civilization); Curtis Desjardins (Cosmopolitan (Yah, so I'm a "Cosmo gal", Gonna make something of it?)); Kivi Shapiro ( $\mu$ ); Betty-Jo Hill (They're not my favourites, but with 1B info night, not to mention 2 midterms and an assignment due tomorrow, I get to study as well as do mathNEWS); Peter Milley (The Tao of Mathies); Mike Hammond ("Weird Al" Yankovic); Dale Wick (Gino's); John-Paul Gignac (alt.sex); Dave Brown (AAaaargh!!); Shannon Mann (Nothing); and Ian Goldberg ( plaTAmN).
Thanks also go out to Marion at Graphic Services and also to all you anonymous mathies who read the articles we write. We'd love to see you on Wednesday, which is our next Writer's Night.

Christina Caldarelli (There is no alternative) Erich Jacoby (math NUDES)


## Publications Received

For some reason, various big-time publishers keep sending us samples of their products. I guess somehow we got on their mailing lists. Anyways, the following publications have been received by mathNEWS this term, and are on file in the mathNEWS library if anyone wishes to peruse them. If you are a big-time (or small-time) publisher, please feel free to send us samples of books that you print, especially funny ones or ones about sex (like the one we got last year) or even ones about funny sex. If the book looks interesting to read, one or more of us mathNEWS staff will read it and print an unbiased review for our readers, thus publicizing your book to thousands of Mathies and other special people.
Publications received:
Not Politically Correct, by Ric Dolphin. Illustrations by Cameron Cardow. Stewart House, Toronto: 1992. This book was reviewed several times earlier this term. My personal review: I made the mistake of reading this in the washroom, and was tempted to use it for toilet paper.

Ontario Centres of Excellence Directory. Ontario Technology Fund, Toronto: 1992. A very interesting read... not!!! This is, however, the inspiration for our series of Rowry Flake: Groundwater Researcher articles. Seriously, U of T gets Info. Tech. research, Materials research, and Laser and Lightwave research and $\mathrm{U}(\mathrm{W})$ gets Groundwater research? Guess who missed the grant allocation meeting?
darkmatter, Vol ???? (Fall 1992). This is a U(W) Physics student publication. However, it does not claim to be any sort of official voice of the students or whoever their representative body is. Each issue is only four pages long, but those pages are mostly clever physics-oriented humour worth reading by anyone who appreciates a good laugh. I see potential for a great student paper, here. (Dare I say, as great as mathNEWS?)

## Faculty of Mathematics

## Dean's Honours List

In recognition of outstanding academic achievement throughout their undergraduate careers the following students will "Graduate on the Dean's Honours List" at Spring Convocation, May 29, 1993 and have their names displayed in gold on the walls of the Faculty Colloquium Room (MC 5158).

HC M/CA/I
H STAT
H COMP SCI
HC M/CA/I
H COMP SCI
HC C\&O
HC ACT\&CS

In recognition of outstanding academic achievement throughout their undergraduate careers the following students will "Graduate with Distinction" at Spring Convocation, May 29, 1993.

| BROEDERS Michael Charles | HC M/CA/I |
| :--- | :--- |
| CHOY Kuen On Ben | $\mathrm{HC} \mathrm{M} / \mathrm{CA} / \mathrm{I}$ |
| DICKSON James Edward | $\mathrm{HC} \mathrm{M/CA/I}$ |
| DICKSON Robert John | $\mathrm{HAM} \mathrm{\& STAT}$ |
| FAN Chui-Wah Winnie | $\mathrm{HC} \mathrm{M} / \mathrm{CA} / \mathrm{I}$ |
| MARTIN Colin Roy | $\mathrm{HC} \mathrm{M} / \mathrm{CA} / \mathrm{S}$ |
| NGAI Michael Sek Ngai | $\mathrm{H} \mathrm{ACTS} \mathrm{\& STA}$ |
| SACOOR Nazir Firozali | H ACT SCI |
| SHARMA Pavan | $\mathrm{H} \mathrm{M} / \mathrm{CA} / \mathrm{C}$ |
| TSANG Wing Yin Teresa | $\mathrm{H} \mathrm{MTH} / \mathrm{B} / \mathrm{CS}$ |
| VAN VOORST David Andrew | $\mathrm{HC} \mathrm{M/CA/I}$ |
| WAI Monica Ching Yee | $\mathrm{HC} \mathrm{M/CA/I}$ |
| WEIGEL Susan Audrev | $\mathrm{HC} \mathrm{M/CA/I}$ |

## The Study Break

The study break, I thought I'd take
Was prob'ly one big huge mistake
Cause hours later, I could make
No sense of what I'd read.
I know I tried, until I cried
to make the numbers come alive
And let it not be said I've lied
My mind was not "near dead".
But silly me, did go to see
If I could count more sheep than three
And when I next got up to pee
My clock face plainly said
That though I'd meant, all good intent To rest my mind which felt so spent The entire night had come and went And I'm on Chapter Three!

The Bitsnatcher
"... cause it might just look like horse manure."
Goulden, C\&O 230
"We have just proved, ladies and gentlemen, that $10-4=6$ !"
Small, STAT 230
In recognition of outstanding academic achievement during the Fall 1992 term, the following students qualified for the Dean's Honours List.

| ASTLEY Derek John | HIRJI Rahim | PHAM Hoan Huu |
| :---: | :---: | :---: |
| AU Man Wah Bonnie | HO Jackie | POSNBR Marshall Bvan |
| AU Panay Keng-Che | HOOD Trevor | PRETTI John-Paul |
| Baldwin William | HSU Ada | PTASHNY David |
| bandurchin michael | HUANG George | PUN Welkome |
| BBCKBR Mathew | hUBER Maxie | RICHARDS Michelle Fiona |
| BENDER Lorraine | HUYNH Myphung | ROSSI Randy |
| birsan Dorian | ING Lynne | RUBTZ Christina |
| BLANEY R Kyle | IP Jeffrey | SABOURIN Lousindi Roic |
| bosland marcus | IRVING John | SCHIEDGL Juanita |
| bourdon Sean | JHU Bdward | SCHOPIBLD Michael $B$ |
| burton paul | JOANIS Bric | SCOTT David Andrew |
| BUTCHER Thomas | KAMINSI Piotr | SHAH Nikhil |
| CARD Lisa M | KAMINSKY Kirk | SHARMA Pavan |
| CARRIERE Jeromy | KAUSHANSKY Karen | SHNBIDER Aviva |
| CHADHA Dushyant | KBH Bommie | SHORT Trevor Danic |
| Chan ho Fai James | KBNNBDY John | SOURBLIS Comatantimos |
| CHAN Ho Hon Joseph | K日Rr David | SPENCBR Scott William |
| CHAN Kai-Chung | KBtthe Steven | SPRINGER Colin M |
| Chan Peggy | KLUMP Stephen | SRI-SKANDA-RAJAH Axy* |
| CHANG Andre | Kry Paul | STACKHOUSB Shawn |
| CHAU Wayland | LAKOTA Hrvoje | STASTNA Marek M |
| CHENG Henrietta | LAM Cheuk | StBPhBN Tamon Muri |
| cheung ade | hau Oi | SUMNBR Resben Avrum |
| CHBUNG Kevin | lau Sok | SUTHBRLAND Bric |
| chiung man | Lbi Gregory | SVBKIS Laila Sandra |
| CHOW Gabriel | LBE Oliver | TBLLA Srikanth |
| CHOW Kin | Lbib Gary | TBOH Bee Lin Pauline |
| christaki Chris | LBPPINBN David | TO Siu Lun |
| COUCKUYT Jeffrey | LBUNG Alan | TOLONB Blisabeth |
| CRAFton bradley | Li Andy | TOMLINSON Stephen ivan |
| CUMmins peter | LIAO Hiu | TONG Kit Ying Priscilla |
| DAVIDSON Douald | LIN Ka-Leung | TRINH Nga |
| DAVISON Timothy | ling alan | TSANG Clara lai Fong |
| Di tullio Giuseppe | LIU Qim | TSUI Bddie Chak Sang |
| DRAGB Jamea | LOU Jie | VAN BGMOND Stephen |
| EBBO David | LU Fletcher | Vasiga Troy |
| farrbll Glen | LUK Paul | WAHBE Andrew Albert |
| perreira paulo | LUNG Florence | WAI Betsey Wan Po |
| fitton Amme Marie | MA Theresa | Wainwright Martim |
| Ployd Janice | Mackay James | WINGBR Gary Bruce |
| FONG John | mabnhaut barbara | WONG Bonnie |
| FONG Yuen | Man Vince | WONG Christine Wai-Yee |
| FOSTER Mary | MARR Aaron | WONG Kwok Chung |
| PREDBRICK Stephen | Marszalbk Kriyestof | WONG Man Kit Darny |
| PUNG Lawrence | max well David | WU Shao Min |
| gaudet Dean | MBREDITH-JONBS James | YaU Chung Jason |
| GIGNAC Lealey | MOK Diana | YBUNG Ka Yee |
| gilhuly Patrick | NBbBLUNG Mark | YBUNG Kin Pong |
| glaister ian | NBUFBLD Brigitte | Young Carmen Min |
| goldberg lan | nguybn minh | YU Ka Wah Angela |
| hamilton patty | pacb Clare | ZHANG Hao |
| HAMM David | PARSONS Todd | zhang qi Xiang |
| HARE Kevin | pascal Jodie | zivkovic aleksandra |
| Hawkins Michael | PATEL Nilesh | zong Gui |
| HEDLBY Lymae | PBCK Michael |  |
| HINGORANI Justin | PBIRCE Stephen |  |

In recognition of outstanding academic achievement throughout their undergraduate careers the following students also "Graduated with Distinction" at Fall Convocation, October $24,1992$.

PRENOL Anthony Michael RIDDEN Geoff W

General Math 3-year
General Math 3-year

In recognition of outstanding academic achievement throughout their undergraduate careers the following student also "Graduated with Distinction" at Spring Convocation, May 30, 1992.

SHINER Jeffrey Allan Computer Science

In recognition of outstanding academic achievement during the Winter 1992 term, the following student has been added retroactively to the Dean's Honour List.

## CHOY Kuen O B

In recognition of outstanding academic achievement during the Spring 1992 term, the following students have been added retroactively to the Dean's Honour List.

HILL Warren
LEE Vivian T W
MEREU Stephen W

## Letter to the Editor

I would like to vehemently complain about the toxic waste barrels outside the main entrance of the Math Building. Quadratic residues are highly dangerous: I believe that they are the primary cause of the Nice Guy Syndrome. I am sick of the apathy in this country. When is Brian Mulroney going to do something about the spread of this syndrome? When will Quadratic residues be disposed of properly and not just thrown into barrels and left lying around in public places? Too many people have been turned into Nice Guys because of inaction! I'm raving mad. .

Salad Man

## Coming Out

## The story of a self-confessed Mathie

My childhood years were full of torment. I lived in Hull, Quebec, where anyone who was different was a target for ridicule, or worse, bashing. I am different in three ways: First of all, I am predominantly Anglophone; second, I am educated; and finally, my interest lies in Mathematics. Since my home city bordered on Ottawa, and it was the English-speaking Canadians who were providing most of the jobs, Quebecois learned to be somewhat tolerant of the linguistic differences. In addition, with a halfdozen universities within the area, scholars weren't considered a small minority. However, it was Mathematics that truly set me apart from the rest.

Math was something I didn't think about much in Elementary School. It never occurred to me that I might be a true Mathematician. Then, unexpectedly, a grade six teacher confronted me. He said that there were tell-tale indications that I was special. He said there was nothing to be ashamed of; that, statistically speaking, about $10 \%$ of the students were "closet" Mathematicians, but only a couple would fully realize and accept their lot in life.
There were many doubts racing through my mind. How would I tell my parents? Would I lose my friends? Was I a reject to society? While all the 'normal' students consumed themselves with drugs, sex, and rock 'n roll, I spent most of my leisure time finding a proof to Fermat's Last Theorem (In an expression of superiority, a couple of bullies destroyed my hand-written proof. I was so traumatized by the embarrassment and loss that I vowed never to touch the theorem again). My world was a very lonely place.
I tried to gain acceptance in an ignorant and intolerant society. When hanging-out with others, I'd try to participate during trivia question time. However, heads would roll when I posed questions like, "What is the general solution to an infinite geometric series?" If looks could kill, then this was a public execution! The girls were especially irate. My popularity was low, but try as hard as I might, it was difficult to resist sharing in this way.
Eventually, I was accepted into the Mathematics Faculty at Waterloo. At last! I was surrounded by people who could related to me. They could feed my insatiable appetite for Math, and provide counsel whenever I was troubled.
I now dream of returning to my home town, and to boldly declare myself a Mathematician. My hope would be to encourage younger students to stand-up to mathPHOBE, and pursue their natural direction.

## MathSoc Rhetoric

The (Subliminal) Ravings of $a$ (Artsie) Lunatic

By the time this makes print, the leaders for 1993 Orientation (slosh) Week will have been chosen. The leaders were chosen on basis of experience (picked from a hat) and what the Director feels they could give to Orientation according to their application forms (big tits). A waiting list has been set up (little Black Book), in case some people turn down their position (fat chance). Everyone who handed in an application is thanked (screw you!), and for those who did not get on Orientation (losers), the Orientation Director assures you that some people will quit or be removed (shot dead), so don't be depressed (don't call us we'll call you).

Orientation Weekend (drunk-fest) is set, and will be the weekend of July 16-18 ${ }^{\text {th }}$. The Director (fascist pig) also has a Fed meeting to attend on March 9, and so will have more to report later (more bullshit).
The MathSoc Novelties (faulty merchandise) Blowout Sale and the Valentine's Day (massacre) flower-and-balloon deliveries were HUGE successes (pilferage)! The novelties were practically sold out (nobody bought the shorts), and brought in more than $\$ 600$. Many a-fluttering hearts (gag me) received balloons and carnations (I didn't get any), and although Cupid failed to make an appearance (too depressed), many Cupid-wannabe's (sexual fantasy) spread their good cheer to all (make me puke).

The Math Pub at Fed was a big hit, too (it sucked)! There was dancing (dry humping), a hot tub (false advertising), and a great time (drunken stupor) was had by all ( 5 people).
The Co-op Department (incompetents) has decided to change the co-op system from its current (inefficient) format to one that will be more effective (full of holes) in our current economic situation (recession). There will not be anymore first rounds ( 3 weeks of Hell); job descriptions, resumes, and interview schedules will all be on line (in their dreams), basically making job placement more like the "real" world (if I wanted the real world, I would have left here when I graduated). This new system will take place all term long (miss classes all term), so technically, you could have a job as early as the second week of term (shit jobs) or as late as the last day (desperation move). This new system has been discussed at length (secret meetings) in SAC (deleted from the Minutes), and has the approval of the students (everyone hates it). Ask your class reps about it (make them do something for once), and voice your opinion (don't let Co-op get away with it).

That's all for this issue (it's past my bedtime). Next issue (pay me first), I'll have more MathSoc and Campus goings-on (scandals). Until then, I'm...

Token (Mr.Subliminal) Artsie

## Vapid Fire

Canada Post is no longer forwarding mail. They will continue the trend of 'super mailboxes' to make service so poor and expensive that the delivery of mail will consist of nothing but Publisher Clearinghouse Sweepstakes, overdue bill notices, Columbia House Offers, free samples of feminine hygiene products that make guys say "What am I supposed to do with this thing, stick it on the wall?" and other great junk mail.

At this point the hunting of postal carriers will be ruled as justifiable homicide to reduce the overpopulation of the species and help Canada Post to trim its budget.

## The Search for The Seven of Diamonds

There is a convention in Denmark that requires that if you win the last trick of the hand with the seven of diamonds, and you make the contract if you are playing, or you defeat the contract if you are defending, then your partner owes you a beer. A very interesting fact, Ace thought when he first heard this. Not being a big beer drinker, he felt that he was going to catch up for many years of being sober.

| Dummy: | Ace: |
| :--- | :--- |
| \$ KQ | \$ 65 |
| ○ 6 | $\diamond$ AK5432 |
| \& AJ732 | $\diamond$ K4 |
| \& AQJ54 | \& K93 |

Ace was playing a set match against the Viking brothers, Sven and Garth when this hand came up. Sven took the lead of a spade with the Ace, and returned the Jack of spades to Ace's Q as Garth discarded a small heart. WELL!, thought Ace, what am I going to do now? I only have 11 tricks even if I can manage to take 3 diamond tricks. So he started with 5 rounds of clubs, discarding a 2 hearts from his hand. Sven followed 3 times, and discarded 2 spades, and Garth threw 1 heart and 2 diamonds. What to do. This was the position:

| Dummy: | Ace: |
| :--- | :--- |
| \$ void | \& void |
| 06 | $\diamond$ AK54 |
| $\diamond$ AJ732 | $\diamond$ K4 |
| \& void | \& void |

Ace cashed the AK of hearts, and when Sven discarded on the second round he smiled, because he knew he was cold. He played the King of diamonds and a small diamond, and when Garth played small, he put in the jack, $100 \%$ sure that it would win. The Ace of diamonds pulled out the queen and the Diamond 7 was the last trick. Making 6 NT , and more importantly, a beer. Garth was somewhat stunned that Ace had managed to work out the position so precisely, but he later realized that it was obvious. Sven has already shown up with 8 spades (as Garth only had one), one heart and 3 clubs, so he could only have one diamond. Ace knew that after he played the King of diamonds that Sven had none left, and so could finesse knowing that it would win.
So, play your favourite game with a beer card. In euchre it could be the ten of clubs, in hearts the 7 of diamonds will do. Challenge yourself, that's what earning beer is all about.

Ace Upmysleeve

## Weather Forecast

The mathNEWS forecast calls for unusually cold periods followed by unusually warm periods. Heavy rain will be mixed with clear skies and blizzard conditions. Visibility will vary from very good to nil, depending on which direction you look. Winds will be out of the North, South, East, and West at $0 \pm 100 \mathrm{~km} / \mathrm{h}$. There is an exposed skin warning in effect for the bitter wind chill and high UV index.

Don't forget your umbrella, snowshoes, sunblock, hip-waders, and water-wings when you leave the house. If you leave the house.

# A day in Virtual Reality 

Unix-style

Someday in the future...
"Now you understand this is purely experimental," the researcher explained to Joe Undergrad. "I can't make any guarantees that this virtual reality system will work."
"Hey, that's okay," Joe replied. "What will I see with this thing anyway?"
"The math computer systems. We haven't had the time to write any fancy programs yet; all we've got is a virtual-reality Unix interface. You'll be able to do anything you normally do on the computer systems, but it will look like something's 'really' happening!" The researcher handed about twenty pounds of equipment to Joe. "Put this on, and I'll join you in virtual reality in a minute."

Sure enough, soon Joe and the friendly researcher seemed to be floating in a purple void. Little blue blocks floated around them.
"What are these?" Joe asked.
"The files in your account. Of course, some of them are hidden; you have to tilt your head to see those. Watch out for that one," the researcher said as Joe reached for one of the blocks. It was too late, however; Joe had fallen in. The researcher leapt in after him and hauled him to his feet. "That was a subdirectory."
"How was I supposed to know? Damn, my knee hurts!"
"Yeah, virtual pain. We're proud of that one. Anyway, you can tell the directories from the files when you tilt your head back. We get out by going through the '..' directory; tilt your head back and to the right and you can see it." The pair jumped into the right block and ended up back in the home directory. "This isn't too interesting. Come on, I'll show you the programs running on the system."
Together Joe and the researcher entered Program Space. "What's that?" Joe asked. In one corner a bunch of faceless virtual people were sitting at desks covered in virtual paper.
"They're reading mail and news. Most of the system is devoted to it." Suddenly the researcher saw something in the system and turned pale. "Oh jeez, get out of the way! Someone's using the Ada compiler!!"

A giant vortex had formed in the distance, sucking up system resources and leaving oversized files in its wake. It was moving slowly towards Joe and the researcher, pulling everything in sight into its destructive maw. Caught by surprise, they didn't have time to make a clean getaway, and the vortex backed them into a corner. Luckily they found a path leading out of Program Space, and they ran down it just in time as the vortex casually sucked up the section of the CPU they had just been standing in.
"That was close," the researcher said, mopping his brow. "It's a good thing there wasn't a CS assignment due."
"Where are we?" asked Joe.
The researcher looked around. "I guess we hopped over an Internet link into a MUD." All around them was a crude simulation of a medieval city. A knight rode down the street and cut Joe in half, but he reappeared immediately, so he and the researcher explored while they waited for the Ada compiler to finish running. Other players tried to kill them a lot, but that was okay because they just kept reappearing back where they started. Finally they judged the Ada compiler had enough time to finish and returned to their home system.

When they got back they found Program Space had somehow thickened; it was hard to move, and more virtual people were in the mail/news section. "I guess classes just let out. The system's too sluggish for us to do anything else, we might as well log out."
Joe regretted not having a chance to look through his news
himself, but followed the researcher back out of virtual reality Back in the lab, he asked the researcher "Is there anything else we could have done in there?"
"No, we pretty much saw it all. I suppose we could have travelled to some ftp sites, but the administration frowns on that. Basically, until we write some more software for this gear there won't be many uses for it. But just think of how this equipment will change the nature of .gif files forever."
"Incredible," breathed Joe. "Truly you are doing work to benefit mankind!"

The Not-Wizard

## ultraCLASSIFIEDS

Yvette, Don't you think it's about time you opened your Unix account?

Anon
Does anyone have any information regarding getting a place at the Phillip St. townhouses for the upcoming fall term ('93)? We would like to find an ENTIRE townhouse to sublet for that term. If you know how to go about this, please send me information at Dr. Suess@descartes.

Dr. Seuss
To my Cheeto! Thanks for all the love. Hope the week went well! Panzarotti alla bell tonight - and maybe, later, a massage (if you're lucky).

Love you lots Hopping Dorito
Thank you to all ye Mathies who helped Manju \& I in decorating and dismantling this weekend (at Fed).

Michele
P.S. If you miss - tough!


S
ne wave

## U 2 can do Scientifik Ekshperimentz

Are you one of the many mathies out there who are taking science courses, but have opted out of your labs? Do you worry that by doing so you are missing out on some vital portion of your education? Or is it just that you are intimidated by the thought of having to spell phenothalene correctly? Fear not, for even the fourth year PM-major who's about as far from reality as anyone's ever gonna get is capable of performing the following experiments, and personally exploring the mysteries of Science:

1) Physics: The bigger they are, the harder they fall.

This is one of the easiest properties of physics to demonstrate, and also demonstrates an important scientific technique: the use of the Correlational Study (ooooh!!!). For this experiment, you will need a microphone, a volume-level measuring device, a variety of large, heavy objects, a fairly large vertical drop, and a steady stream of unsuspecting experimental subjects. As the subjects walk beneath you, you will drop the heavy objects on them one at a time, and record the loudness of the scream produced. Analysis should show a direct relationship between the weight of the object and the volume of the resulting scream. Note though, that the volume will reach a limiting value, and if the weight used is too heavy you may not recieve any noise at all. It is therefore reccomended that the masses used should remain under 16 tons.
2) Chemistry: Diamonds are Forever

Here's your chance to prove the validity of that old saying, and surprise some of your less-scientifically-knowledgeable neighbours. Go to a snowbank on the lawn of somebody you know, and in the snow draw the chemical structure diagram of a diamond. This could take some time. Then, wait until July, when your friend will be really surprised because the snowbank is still there. You can then explain to him why this happened, and gloat in the self-satisfaction of scientific knowledge.
3) Biology: You can lead a horse to water, but you can't make him drink.

## Not Really A prof QUOTE...

Let me share with you a short story from my past.
Last year around this time, I was taking a first year physics course at a certain other prestigious university. We were all waiting for class to start when our professor, Doug Forbes, the department head, rushed into the room holding the end of a rather long piece of string. 'Hold this', he said to a girl in the front row as he handed it to her, and promptly left again.

He came back a minute later, this time with holding the other end of the string which terminated in a rather large ball. Going around the classroom, he got each student to take hold of the string at a certain point, and soon the entire classroom was effectively tied together.

Midway through the proceedings, another professor stuck his head around the door and was slightly amazed at what he saw. 'It's okay, Gary', Forbes said, 'I'm teaching an introductory class of Bondage 101'. After his bewildered colleague left, he turned to us and admitted 'God, it's GREAT to be the coordinator!'
So, after he ran out of string, and every person in the room was holding it in at least one place, he walked to the front and proudly surveyed his achievement.
'This', he said, with an air of satisfaction, 'is Vector Addition!' And that's how I learned it.

Guelph Erronious

For a long time, this phrase was accepted as scientific truth by the catholic church, along with the sun orbiting the earth, spontaneous generation of organisms, and the idea that the book of Leviticus really isn't the most boring one in the bible. Then, around 1400, Norman Galilei, Galileo's lesser known and philosophically inclined cousin, decided to use the new method of experimentation to test the validity of it. In the end, he determined that the statement was definetely not true, but at the expense of two horses, 30 feet of rubber tubing, 16 gallons of water, a fireplace billows, and a cistern filled with ducks.
I'm afraid that the methods he used were a little graphic for presentation in mathNEWS but you should be able to find texts on the subject in some well-stocked libraries, or in any bookstore whose name includes the word "kinky".
4) Psychology: Mice in little Mazes

Why try a silly experiment with white mice running through little mazes when, as a $U(W)$ student, you have so many better tools to work with? I am of course referring to your fellow students and the MC sixth floor. The experiment goes pretty much like the mouse one; place the subjects in the maze, and they'll try to find the reward at the end. Just drop into the CSC and tell a few people that there's a whole lab of unused Xterms up there. It's amazing what some people will believe...

Anyway, you can then follow them, or attach little radio collars if you want to be really professional about it. See how long it takes them to get lost. See if they can find their way back out. There's an endless world of experimental material here for the aspiring psychologist. If you want to expand the scope of this project, there's always Hagey Hall. And remember, if you're worried about the morality of experimenting on human beings, remember that you only have to follow the Human Experimentation Act if you intend on publishing your findings.

> Guelph Erronious

## Annoying Habits

Picture this: you walk into the MathSoc office to get a staple or a few innocent photocopies. As you enter you are attacked by a bright blinding ray of light. You are afraid you might be trapped in some scary Twilight Zone episode where Darth Vader's storm-troopers are trying to vaporize you!!!

Wake up!!! It's not the twilight zone; it's those few obnoxious people who insist on not closing the photocopier lid when making copies. Upon interviewing the current treasurer of the Math Society, I've discovered some of the side effects of this disgusting habit. By copying with the lids open these people are wasting the precious ingredient of toner which is a necessity if the reproducing machines are to keep working. If people don't close the lid, the toner lasts only half as long as it should under normal circumstances (quoted from one of our trusty photocopier repair-people). These toner cartridges cost approximately thirty dollars each. The treasurer even went so far as to plead with me to tell everyone to keep the lid closed. Heck, if you guys and gals can take the time to replace the cap on the toothpaste tube in the mornings then for God's sake please keep the photocopier lid closed when making copies.

Ted-E-Bear
"You can't put negative numbers into our marking system I've already tried."

## mathNEWSquiz \#4

## Left Handshake to all the trivia-minded

Answers to squiz \#3 are: 1) Blazing Saddles; 2) Monty Python's Quest for the Holy Grail; 3) Cool World; 4) A Few Good Men; 5) the Mystery Science Theatre version of 'Moon Zero Two' (a truly 'great' movie to make fun of - full of weinerdog moon buggies and six-shooter gunfights in the vacuum of space - and yes, this was a toughy); 6) the Apache expression for "Horse's rear" (Source: Night of the Crash Test Dummies, p.20); 7) cave (Source: It Came from the Far Side, p.87); 8) pogo stick (Source: Night of the Crash Test Dummies, p.86); 9) Mr. Funucci (Source: the Far Side daily calendar, 9/25/92); 10) elephant with a peg trunk (Sources: It Came from the Far Side, p.103; Far Side Gallery 3, p.162; Valley of the Far Side, p.67; I've never seen an elephant with a peg trunk, have you?); 11) MAUS; it originally appeared in Raw; 12) You'd still be seeing him from out of the corner of your eye; 13) Moonshadow, Sunflower, Ira and Frodo; 14) Spoon!!!; 15) It's a gardening term; 16) Sarah McLachlan; 17) Clannad; 18) Talking Heads; 19) Keith LeBlanc; 20) Mike Myers portrayed Mick Jagger, and Mick Jagger portrayed Keith Richards; 21) Sister Act; 22) ten cents; 23) The Natural Log; 24) five cents; 25) Tuesdays $4: 30 \mathrm{pm}$ in MC4067; 26) Georgia; 27) approx. 2600 degrees celcius; 28) Peter O'Toole (Henry II); 29) two; and 30) Volkswagen Beetle.

Yikes! One extra week between the last issue of mathNEWS and this one to answer the questions, and there were only three submissions. Well, here are the participants, and their scores, in random order: 18 centimetres (12); Chuckles ' $n$ ' Muffy (9); and Skinny Puppy Lyrics (14). Skinny Puppy Lyrics can pick-up its mutilation devices... err... squizprize in the MathSoc office.

## Movie Quotes

1. "I want to spend the night with you."
"You mean, sleep over?"
"Well. . . yeah."
2. "I remember when it was fun to say, 'Wow, that really felt great. What's your name again?' "
"I've never had sex with someone I didn't know. For that matter, I've never said, 'Wow, that really felt great.'."
3. "I'd rather have 30 seconds of wonderful than a lifetime of nothing special.".
4. "I've never felt this way about anyone. I want to do something for her, but what?"
"Well, there's the usual things: flowers, chocolates, promises you don't intend to keep..."
5. "Did you ever meet anyone you didn't kill?"
"I haven't killed you yet."

## Potpourri

1. In what year was January $1^{\text {st }}$ used to mark the beginning of the new year?
2. How many time zones are there in China?
3. Fish travel in schools. What do whales travel in?
4. What American city leads all others in per capita consumption of pizza?
5. What was the record number of curtain calls ballets greats Margot Fonteyn and Rudolf Nureyev received following a 1964 performance of "Swan Lake" in Vienna?

## Actors

1. What Hollywood star turned down the Jack Nicholson role in "The Witches of Eastwick", the Dustin Hoffman role in "Rainman", and the title role in "Batman"?
2. In how many of his 200 films did Hollywood legend John Wayne die?
3. How much was Burt Reynolds paid for posing as "Cosmopolitan" magazine's first nude centerfold, in April 1972?
4. What was the theme song of comics Laurel and Hardy?
5. What current Hollywood leading man was once a dancer with the Eliot Feld Ballet company? (This isn't as hard as it sounds)

## I Adore My 64

1. What abstract data type does the Commodore 64's BASIC use to store its programs in memory?
2. How many keypresses can be stored in the keyboard buffer, by default?
3. In BASIC, how do you change the border colour to black?
4. What begins at memory location 53248 ?
5. Why won't GEOS work on an Amiga C64 emulator?

Midterms and first rounds in Co-op should be over, so what better time than now to squander your precious free time solving the squiz? Place your answers in the BLACK BOX opposite to the Comfy Lounge, or e-mail them to mathnews descartes, by sundown of next issue's production night.

## Token Artsie, Searching, Amiga Bytes, and your host, Pilot in Hell <br> <br> Logic Puzzle

 <br> <br> Logic Puzzle}Two people with too much time on their hands sat down and wrote a logic puzzle. After they finished one of them said "This puzzle has no solution."
The other one replied "You're wrong, this puzzle does have a solution."

A violent fight followed.
Help them put an end to their strife. For the following logic puzzle either solve it, or explain why it can't be solved:

Last week four students wrote four different midterms. They each wrote their respective midterms on different days and in different classes. Who wrote what, when and where?

1. The four students were Alex, the student who wrote PHIL 140, the person who wrote on Wednesday, and the person who wrote in MC 2065.
2. Ann had her exam after C\&O 230 but before the one written in MC 4067.
3. Alan, who did not write Phil 140, wrote his exam two days before the student who wrote in MC 4045.
4. Math 237 was not on Monday or in DC 1301
5. Amy, after finishing her exam, told the student who would write in MC 4045 that the Math 237 exam she wrote last
term was easy.
6. CS 360 was written on the fourth floor of the math building
the day after Amy wrote her exam.
7. No one wrote on Thursday, which was good since no one could ever get the hang of Thursdays.
Please help put an end to the horrible predicament.



## Grid Comments

Or How the West Was Won

Well, here we go again with another exciting GridWord. As you all probably know we didn't have a grid last week, which led me to make up this fine piece of artwork. I hope that there is some response to this, or else we just may not have any more Grid Words (so that's an empty threat, but it felt good to make it).

As always, drop off your submissions to the BLACK BOX by Monday 15th. Have fun! I hope it's all ec-citing for you and that you are ec-static when you are done!!

Grid-EC

## Conventional Clues

Ecross
5. Get weary
7. Think about the future
8. Poker bet
9. Positive ion
12. Stringent
14. Interconnection
16. Surround
18. Not only for mice
19. Spice
20. Director Perminger

Down

1. Back bone
2. Random
3. Actor Guiness
4. CKCO, CityTV, CBC, etc.
5. Why things happen
1). Joins
6. Invigorating
7. Gadget
8. Bum
9. Simple

## Deep Thoughts

Well, Valentines Day has come and gone and I'm left with a disturbing question. Which is more pathetic? Getting no valentines, or getting one from your mom?

