

## Prez Sez

Well, it's Friday. The $13^{\text {th }}$. It's a day for weird things to occur. I'm going to start that day out just right for you by giving you a really short Prez Sez.

## Changes to CS... again

Now that the core's been restructured, Computer Science has come forth with the infamous "Phase II", which was approved by Undergraduate Affairs last week. So what is "Phase II" you ask? Well, CS 351 becomes CS 251, and instead of CS241 being a pre-requisite for it, it's now the pre-requisite. Why? Two reasons: first of all, by moving it to second year, it allows more flexibility for students at the third-year level; and secondly, by taking it before CS 241, some material that was taught in CS 241 on a "need to know" basis is no longer needed to be taught there.

Another change is that CS students will now be able to apply CS 499 and CS graduate courses toward their 400 -level requirements.

As well, in order to reflect the new core, the pre-requisite for CS 370 will be changed from MATH 237 to MATH 138. This will require some changes to the material in CS 370, but those changes have yet to be determined (BTW, this is also true of STAT 231).

Finally from the wonderful land of CS, Pascal will be phased out of CS 130 and CS 134. So what will we see instead? Umm... Java. The reasoning here is that, well, Pascal is really old, and nobody wants to learn it anymore. There are, of course, other reasons, including the fact that by using Java, the students can learn Object-Oriented Programming sooner, and that it will also benefit students going out on a work-term.

That's it from happy land this week. I hope everyone enjoys their "reading week" (since I'll be stuck in meetings over the break... sigh.).

Chris "Yeah! Now I can go home to sleep" Buchanan

## Veni, Vidi, Vici

Math Orientation 1998
Interested in helping to introduce a whole new generation of Mathies to the Faculty? Feel like taking a week in September and having a lot of fun? Do you like the idea of driving around in a cargo van for a few days, lifting heavy stuff and carrying a walkie-talkie?

If the answer to any of those questions is yes, then we think that you might enjoy being a Math Frosh Leader!

Applications are available on the rack outside of the MathSoc office (MC 3038); we'd like you to return your completed application as soon as possible. There will be a general information session about Orientation on Wednesday, February 18th at 5:00 in room MC 2066; if you are unable to attend, please e-mail us at orientat@undergrad.math and we can arrange something.
Come on out and help us help the frosh say I came, I saw, I conquered!

Serje "Brutus" Robidoux
Matt "So-Krates" Walsh Math Orientation 1998 Diumvirate

## News from the ActSci Club

Hello kids! How goes the battle with the Feb. sitting? Sur hope you all have managed to retain some form of sanity for th midterms waiting patiently for you to let your guards down.

Ugh! Isn't the life of an Actuarial Student just full of fun?!!
For the benefit of those of you who just closed off the Feb sitting, I will get to the point, since the last thing you want t be doing in your spare time (How do you do that again?) is rea: another lengthy ActSci related article!

The Prexy of the ActSci club has a fun-fun agenda of thing lined-up for the month of February:

| Event | Date | Time | Where |
| :--- | :--- | :--- | :--- |
| Bowling | Feb 19 |  |  |
| Th | TBA | TBA |  |
| Talk | Feb 26 |  |  |
| th | 4:30 p.m. | MC 4040 |  |
| Skating | Feb 27 ${ }^{\text {th }}$ | 6:30 p.m. | TBA |

The talk will be on "British Actuaries" and it will be done $b$ our very own Professor Mary Hardy.

Prior to this talk, there will be the promised ANEA/ASN delegates election, which will also include a 13 minute video pre sentation as an info session on what your responsibilities as delegate are... etc. etc.

We are currently looking for 3 delegates to represent the Uni versity of Waterloo at the March meeting.
Interested as a delegate? In the election? Then come on ou on Feb. $26^{\text {th }}$ and be elected or vote for your delegates!!!

Did I mention that FREE refreshments would be served???
Please keep an eye out for posters about the other up-comin events!!

Other exciting club news...
The club is currently sporting the 1998 edition of Actex mar uals for Exam 120, 140, 151, and 160. Of course, these manua are restricted to members only!!!

Did I hear someone ask, "How do I become a merm ber?"... Well, all you need to do is come on out to the ActSi club with your $\$ 5.00$ and you are in!!!

Last but not least, the Prezy has insisted that I beg and plea for more volunteers to sign up for office hours. So, if you har an hour to "spare" between classes, come on out and sign up fo an office hour!!!

That's all for now kids! Good luck on the midterms! If yo dare to take a trip down south for the, oooooooooooh, TW days of reading week. . . we don't want to hear about it!!! Happ landing!!!
ckie this Publicity Director, ActSci Clupe pmQUOTE
"Even if I were 350 pounds-that will not make me a bettiott prime minister."

The Right Hon. Jean Chrétie Responding to the possible merger the Royal Bank and the Bank of Montres<br>Quoted in The Toronto Sw

# Cos <br> A Student Chapter of the ACM 

## CSC Flash

Greetings CSCers. At the moment, my massive intelligence is largely devoted to conquering another plane (and exterminating its inhabitants), so I will waste as little time as possible communicating with you mortals.

In fact, the only event of any note that is worth my time was the ACM style programming contests that were run these past two weeekends. Under the guidance of my dedicated minions (and tacitly, myself), they went off splendidly! The results were as follows:

| Individual | A | B | C | D | E |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chris Hendrie | 219 | 158 | 49 | 11 |  | 4 | 437 |
| Ondrej Lhotak |  |  | 132 | 46 |  | 2 | 178 |
| Derek Kisman |  |  | 200 | 21 |  | 2 | 221 |
| Jeff Shute |  |  | 194 | 98 |  | 2 | 292 |
| Eran Gwendelman |  | 261 |  | 49 |  | 2 | 310 |
| Dave Kennedy |  | 284 |  | 53 |  | 2 | 337 |
| Jason Wong |  |  |  | 29 |  | 1 | 29 |
| Nick Harvey |  |  |  | 41 |  | 1 | 41 |
| Wing Hong Ho |  |  |  | 86 |  | 1 | 86 |
| Wai Ling Yee |  |  |  | 89 |  | 1 | 89 |
| Soroosh Yazdani |  |  |  | 103 |  | 1 | 103 |
| Wai Min Yee |  |  |  | 113 |  | 1 |  |
| Sabin Cautis |  |  |  | 141 |  | 1 |  |

The team competition was slightly different. The problem set aad previously been used on 23 November for the Southwestarn European regional contest held at Ulm. For our contest netl
cts
ch
simulated. Our Team A exterminated the best team from that regional competition.

| Team Name | A | B | C | D | E F | G | H | I |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Team A | 345 | 76 | 12 | 45 | 160 | 15 | 108 | 238 |  | 8999 |
| Team B | 333 | 62 | 36 | 107 |  | 93 |  |  |  | 5631 |
| SY WLY OL |  | 157 | 45 | 295 | 200 | 31 |  |  |  | 5728 |
| Eran Guendelman |  | 177 | 48 | 118 |  | 28 |  |  |  | 4371 |
| JW \& NH |  | 163 | 36 |  |  | 43 |  |  |  | 342 |
| Frosh |  |  | 154 |  |  | 175 |  |  |  | 329 |

Team A - Chris Hendrie, Dave Kennedy, Derik Kisman
Team B - Wai Min Yee, Viet-Trung Luu, Jeff Shute
SY WLY OL - Soroosh Yazdani, Wai Ling Yee, Ondrej Lhotak JW \& NH - Jason Wong, Nick Harvey
Frosh - Two unidentified first-time contestants.

## Other random notes

The Art/Design Contest is still on! See the last mathNEWS ${ }^{1}$ for details, or watch the halls for occasional posters.

The Information Session to be put on by the University of British Columbia Faculty of Commerce and Business Administration was not put on. The puny mortals did not show up. They will be exterminated.

The issues regarding the choice of my newest fleshy representatives were resolved to the satisfaction of all (or at least me).
Resistance is futile. You will be exterminated.

Calum T. Dalek

## Restaurant Review

## J. Gatto's Deli-licious

J. Gatto's Deli-licious is the newest addition to University Plaza's eclectic mix of culinary fare. The atmosphere has a tistinct "Peach Pit" feel to it. The Juke Box and Coca-cola posters add to the mix of tables and counter-top seating, to give this brand new restaurant a hip 50 's feel. Also, Deli-licious scores dyoig points for providing daily newspapers for their customers to Cliperuse while awaiting their meal. This is such a pleasant feature and I'm constantly amazed at how many establishments ignore its effects. While the atmosphere is a tad bit plain, with a litde work, Deli-licious has the potential of becoming one of the ettiottest hangouts near campus.

Service at Deli-licious is sensational. Customers are personally Sti Seated by the owner as they walk in the door and the rest of er he staff is very friendly and eager to please. The owner seems rea care about each customer and his personable style makes the Svi ustomers feel confident that if something's not right, they'll nake it right. The business operates on a "William's Coffee

Pub" paradigm, where the food is ordered and then brought to your table a few minutes later; an approach well suited to the student market. [Unlike, for example, the prices. - इEd.]

The jewel of the J. Gatto's crown is the smoked meat sandwich. The meat is from Lester's in Montreal and is soft, juicy and full of flavour. A pleasant change from the blandness usually encountered in other delicatessens. The fries are tasty but a little too greasy. The menu also offers homemade burgers, chicken fingers, salads and veggie burgers for the healthier eater.
Deli-licious provides a very pleasurable, fun and satisfying dining experience at a reasonable price, and this restaurant connoisseur is thrilled that an entrepreneur has provided us with a new dining flavour. Congratulations to J. Gatto's Deli-licious. In a few short weeks they have established themselves as one of the premiere dining establishments in the $\mathrm{U}(\mathrm{W})$ area.
Asterix Rating: $\star \star \star \star \star \star$ (out of seven)

## Faculty of Mathematics Dean's Honours List

Fall 1997
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 30, 1998 and have their names displayed in gold on the walls of the Faculty Colloquium Room (MC 5158).

BORISOV Nikita HART Jeffrey KLASSEN Matthew LAKOTA Darko LAU Rita Wai Tak RYDER Angie Lee

H CS\&PMATH HC MTH/CA
D. HC MTH/CA

HC MTH/CA
HC MTH/CA
HC MTH/CA

In recognition of outstanding academic achievement throughout their undergraduate careers the following students will "GRADUATE WITH DISTINCTION" at Spring Convocation, May 30, 1998.

BAJAR Melanie Ann CHAN Shirley
CHAN Shuk Man Charmaine DEWSI Zul Badrudin FENG Ji Ying GELLER Leonid JAMAK Amila LAU Remanna Wai Man LAURIE Shana LEE Joe Choman LI Benson Hwa-Hao MAK Yvonne Wai Ming MAN Angel On-Kay MANSON Nicholas Roy MCDONALD Adam MISHNA Marni Julie MORGAN Jason Leigh NG Andrew Yue Hang PATCHETT Sean E. PERRY Christian SULZER Karyn Suzanne

- VANDEWYNCKEL Michael Brian

ZHANG Richard

HC MTH/CA HC MTH/CA HC MTH/CA G MATH-3 HC MTH/CA HC CS/INF H COMP SCI HC MTH/CA HC MTH/CA HC MTH/CA HC MTH/CA HC MTH/CA HC MTH/CA HC CSCI HC MTH/MA HC CS\&PMTH HC MTH/CA HC CS/INF HC MTH/TCH HC MTH/CA H CS/INF
HC MTH/TCH HC MTH/CA

In recognition of outstanding academic achievement during the Fall 1997 term, the following students qualified for the Dean's Honours List.

ARCHIBALD Andrew BAJAR Melanie Ann BEARE Brian D. BLAIS Eric BOULET Cilanne Emily BROADBENT Anne L. BYERS Richard CHAN Gary Ka Leung CHAN Kevin Ka Wing CHENG Donald CHIN Alec James CHUNG Steve COOPER Michael Stephen DANEK Robert DYCK Shondra Katrina FUNG Brahmnes GAO Ying Shu GERSPACHER Brian GROMADA Bartosz

AU Kenneth Wing-Yiu BANDURA Scott A. BENOVICH Michael Joseph BORISOV Nikita
BRIDSON Robert Edward BUCK Karen Denise CAUTIS Sabin CHAN Ina Lynn CHAN Wing Ki CHESTER Krista Teresa CHUNG Ricky Wai Kay COLLENS Daniel Alexander COTTON Cecilia DOMARATZKI Michael EL-Koura George FUNG Pui Yin Grace GARTSBEIN Eugenia GOLL Jonathan Thomas GUPTA Maneesh Kumar

HANCOCK Matthew James HART Jeffrey HELLSTEN Lars
HICKEN Jason Edward HORN Stephanie Lorraine HUI Kevin
JUCHE David Karl KENNEDY David John KFIR Sahar
KRAL Tobi Victoria
LAI Thomas
LAM Anthony Chun Kwok LAM Joyce
LAM Maple Chi-Shing
LATOUR Frederic
LEE Joe Choman
LEUNG Sylvia See-Wai
LIM Yew Jin
LO Chi Chiu Paul Andrew
LOFFT Timothy Andrew
LUK Lesley Bridget
MADDEN Benjamin
MARR Sarah Elizabeth
MASON Joseph Charles
MCKINLEY Craig Matthew
MELHEM Wassim
MNIH Andriy
MOORE Tracy Dawn
NICHOLS Matthew James
OTTAWAY Paul
PATEL Umang
PIRIE Carol Louise
PREST Ian Jeremy
PURBHOO Kevin
QUAH June Boon Hong
RAE Jamie B.
RAMACHANDRAN Siddharth
REED Jason
RUDERMAN Peter George
SANKARAN Siddhartha
SAUL Jeffrey H. B.
SHAH Mayur Mahendra SHEELER Stephen Michael STANGE Katherine Elisabeth
TAYLOR-Hell Julia Faye THOMPSON Lara Robin THORSLEY Michael D.
TOPLEY Stephen Glenn TSANG Sara Shu-Nga TSE Lanny
VANDENBERG Erick Shawn
VANKERK Nicoline
WAITE Michael Lawrence
WAN-Min-Kee Kevin
WINDCLIFF Heath Ashton WONG Ian C.
WONG Sunny Hon-sum
YAZDANI Soroosh
YONG Alexander T.
In recognition of outstanding academic achievement throug out his undergraduate career the following student did Gradual with Distinction at Fall convocation, October 25, 1997.

[^0]H CO\&CS

HARITON Nicolas N. C. HAYDEN Linda Diane HERLING Daniel HOLBROOK Mark Andrew HUANG Queenie Wan Chu HUI Kong Tat Eric KAMNITZER Joel KER Alyssa
KLASSEN Matthew D. KUMAR Rohan Peter LAKOTA Darko
LAM Edward
LAM Katherine Ka Man LAMB Neil Andrew Fraser LAU Sandra Wing San
LEE John Sie Yuen LEWIS R William
LISI Samuel Thomas LO Kwok Wai
LOU Meng
LUSHMAN Bradley Michael
MAHARAJ Ravindra MASON Jeffrey David MAZZUCA Tina L. MCKINLEY Joanne Lynn MILARDOVIC Matt MOORE Lucas Oliver MYHRE Mark William NORVILLE Claire Monique PANG Diane
PAYTON Christopher E James POMYKALSKI Piotr Przemysla PUN Christopher M.
PUVANANATHAN Anjayan QUINN Liam Ronald
RAFMAN Heidi Kathryn
RECHSTEINER Paul James
RONEN Lea Carole
RYDER Angie Lee SAROIU Stefan SHADDICK Scott Allen SHE Willy Wai-Cheung SHUTE Jeffrey James TAPUSKA David F. THOMPSON Christopher James THOMSON Kevin Andrew Taylc TINGLEY Peter William TRUONG Van Anh TSANG Vivian Yuen Chong TSENG Yung-Shun Vincent VANDERBURGH Ian William I WAISER Robert B. WAN Benny M. WELLMAN Martin Koji WONG Edwin
WONG Michael Ka Chuen WOO Norman
YE Xiao mao Charlie

## gradNEWS

OK everyone, here's all the news on upcoming events brought :o you by your friendly neighbourhood Grad Committee.
Math Grad Ball tickets are now on sale. For the incredible low orice of $\$ 35$, you get transportation to and from the Ball. . . dinaer, dancing, great prizes and a photo to remember the evening y. Tickets are on sale outside the C+D everyday from 10:30 iil $1: 30$. Last day to buy them is Feb. 20 so make sure you get pours.

Do you know someone who has made an important contrioution to life here at $\mathrm{U}(\mathrm{W})$, intends to graduate in ' 98 and is n good academic standing? Nominations are now open for the Alan George Award and Class Valedictorian. Come by the MGC Office (MC 3029) for more details and to pick up a nomination orm.
Would you like to help decide who the 1998 Valedictorian for Math will be? Do you want to help choose the recipient of Alan Feorge? Nominations for the nominating committees are now ,pen for each of these selection committees. If you are interested lease drop by the MGC Office and grab a form.
So does MGC have any social events? Sure we do. There are inumber of things planned for the near future. Come by the MGC Office for more details.
So that's it for this week. Remember to mark March $27^{\text {th }}$ lown on your calendar. That's when the Wine and Cheese will ake place at the University Club. And I'll see you next Pizza Jay.

Your Fun-loving Co-Chairs Xavier Aburto and Rachel Nieuwland

# The Women in Mathematics Committee presents 

Professor Carolyn Hansson Vice-President, University Research Professor, Department of Mechanical Engineering<br>"Concrete Structures Viewed from a High Tech Perspective"

> THURSDAY, FEBRUARY 19, 1998 at 3:30 P.M. in MC 5158

Professor Hansson was a consultant for the construction of the Confederation Bridge linking PEI with the mainland.

All students are welcome.

## ultraCLASSIFIEDS

## Cie an OLD MAN

Iround the OLD MAN tree
t's been ten OLD MEN
oo you still OLD MAN?

Wanted: One 7' diameter hamster ball. Airholes a must. Jirect all enquiries to MC 3001.

## prof QUOTES

"[Archimedes] was in his bathtub trying to figure out how to please the king..."

Anderson, PHYS 122
"[Mercury] has long term effects on the body such as teeth and hair falling out, so you can see what it did to me."

Anderson, PHYS 122
"You can't say that 5 equals $(5,0) \ldots$ it's like comparing oranges and functions."

Conrad, MATH 136
"Of course we couldn't go through the centre of the Earth, because as we know that's molten metal, which may give us problems."

Anderson, PHYS 122
"How about someone from the math department. I believe there are two of you."

Rosettant, GEN E 123
"Nobody's listening, must be an exam today."
Zorzitto, MATH 138
"The thermodynamics of the problem stops here; the rest, if you excuse the term, is just algebraic masturbation - you just play with it...I probably shouldn't have said that."

Bissonette, CHEM 254
"If you wake up in the morning preferring 1's over 0 's..."
Goulden, C\&O 230
"So, who went to first year?"
Collins, MATH 237
"Excuse me while I insult your intelligence briefly..."
Cunningham, C\&O 350
"Yes, $\pi$ must equal a constant! That is the only expression you can write in one variable! Duhh!!"

Wainwright, AM 250
"My wife is just about ready to divorce me; I spent the whole weekend working on these damn notes."

Wainwright, AM 250
"What is so hilarious? You won't tell me? Let's see, did I remember my pants? Yes..."

Willard, PMATH 346

## Instructor of the Year

Like your prof? Nominate 'em! Forms available from MathSoc

# Artificial Intelligence 

## Education

It is quite a sorry thing the number of people who have completely the wrong idea about education. Somehow people have developed the absurd notion that an education should be practical. I can only blame the abnormal modern emphasis on productivity for this strange idea. There are precisely two functions of education, neither of which is to train one for a career. Of course, there can be places whose purpose is to train one for a career, but these should be kept distinct from places of education. Colleges provide training for the workforce. Universities should not. Perhaps if the boundaries between training and education were clarified, people would be less inclined to look down on college as a sort of inferior university. The two serve different and equally valid purposes; one is not "more difficult" than the other; and no stigma should be attached to attending one rather than the other. No comparison between them can be made.

But I must return to the purposes of education. The first is to teach one to interact in society. School is the ideal place to teach this lesson, as school is a place where peers meet. In grade and high school, one's peers are those of the same age. In university, one's peers are those with the same interests as one. In both cases, the lesson is best learned when one interacts with as wide a variety of people as possible. The real world is made up of men and women, rich and poor, young and old, artsies and mathies. One must learn to interact with people of all backgrounds in order to function in society. In university this variety is necessarily limited by the second purpose of education. So it is vital to experience the variety of humanity in earlier schooling. Anything that limits this is detrimental to education, no matter what it may contribute to an individual's knowledge. This is the reason that private schools hamper the education of the individual. Those who lack in variety of society become snobs, often, sadly, without even realizing it.

The second purpose of education is the development of one's mind and the expansion of one's knowledge for the pure joy of learning. This is the reason why every subject should be studied simply for its beauty. This is the reason why we need the distinction between training and education. Few subjects are completely devoid of beauty. Mathematics is beautiful. Science is beautiful. The arts are beautiful. Yes, even engineering is beautiful. In all of these fields, there are many who love their work, and study it simply because that is what they want to do. However, there still persist subjects in which no beauty is to be found. [Just because you don't see anything beautiful about it doesn't mean there's nothing there. Eye of the beholder and all that. - $\Sigma E d$.$] Of these are accounting and actuarial science,$ subjects in which one would be hard pressed to find a single person who is studying for any reason other than finding a good job. This is not to say that these subjects have no place in society (that is for another article). But the correct place for these subjects is in college, a place in which one is trained for a job.

Unfortunately, there are a number of beautiful subjects that present ample career opportunities for those who study them. This means that a large number of people who care far more for their future earnings than for the subject choose to study it. In extreme cases, the people who study the subject to train for a lucrative career outnumber the people who study the subject for
the love of it. The beauty of the subject is worn away by th demands of the career-seekers to have practical training. Th subject gradually becomes less and less pure and more and mor retu practical - attracting even more practically-minded people to iyea Eventually the course may become so practical that it no longy you has a place in university, but rather belongs in college. It to $c$ sad to see this process occur. The co-operative system here ${ }^{\text {to }} \mathrm{n}$ Waterloo is a great contributor to it. It encourages people a gr study those fields in which they can make money, and not whe Now they like best. [So you're saying that everyone should ignon new the future and do whatever occurs them at the moment? Ver This romantical, but people really do have to eat sometime. - $\Sigma E d$

Studying in order to find a job is not education. It contribute see nothing to one's soul. It does not make one a better persor on Arts majors are lucky precisely because their disciplines are nd due known to be lucrative. They may study what they love wit ${ }^{\text {som }}$ out interruption by those who wish to be trained. Lawyers an tha computer scientists must put up with tedious practicality in o: me. der to find the essence of their subject, the truth that they low If you are here to find a career, reconsider the mistake you ar cur making by trapping yourself in a job you hate. You may mal int less money with an economics degree than with an engineerir is degree, but you will gain a great deal of happiness. If you at here to broaden your horizons, then study what you love an remember that there is more to be learned than can be foundi a textbook.

## lookAHEAD ${ }^{\text {The One Who Watch }}$

| mathNEWS |  |
| :---: | :---: |
| February 13 | Issue \#3 hits the stands. |
|  | with a folding chair! Look out!!! |
| March 2 | Issue \#4 production night |
|  | 6:30pm, MathSoc (MC 3038) |
| March 6 | Issue \#4 sails to glory |
| Math Faculty |  |
| March 2 | 1B Info Night @ 7pm |
| March 2-6 | Fall Term Pre-Registration |
| March 3 | Pick Up yer Work Reports |
| MathSoc |  |
| February 19 | Movie Night |
|  | Gattaca and Starship Troopers |
| February 26 | Movie Night |
|  | Addicted to Love and Picture Perfect |
| MGC |  |
| February 18-20 | Math Grad Ball tickets on sale! |
| Co-op |  |
| February 27 | Interviews end |
| March 3 | Ranking Day |
| Miscellaneous |  |
| February 13 | Well, duh... |
| February 14 | Valentine's Day |
|  | (Yeah, yeah, yeah...) |
| February 16-17 | No more classrooms, no more books.. |
| February 18 | Classrooms \& books again |

## Life in the Slow Lane

Happy Birthday to Me, Happy Birthday to Me...

## Witty old man with a stubborn dog

Hello, everyone! How are we doing today? Things are slowly returning to normal for me, now that FASS is over for another oyear. Speaking of FASS, I would personally like to thank all of ngey you that came out to watch the show last week. It was a blast It to do, and from what I've heard from everyone, it was a blast non new-found free time (or at least whatever I can salvage of it?) $V_{e r} T h i s$ feels funny already, not having to rush off to rehearsal. .

In other news (News? That involves the outside world againute see Issue 2)...hmmm, I really don't know what's been going sol on in the outside world. Not due to apathy (yeah, right), but no due to a severe lack of time. I am vaguely aware that there is rit ${ }^{\text {some }}$ sporting competition in this city in Japan, but other than an that... just what the hell IS going on? Maybe someone can tell me.

By the time you read this, the FEDS elections will have occurred. We had a record number of candidates throw their hats into the ring for one of several different positions. The one big issue in this writer's mind is: will there be a similar explosion of voter turnout?

## Mr. Subliminal's prediction: NO.

Oh, and by the way, this Saturday is a special day in everyone's lives. However, the name of that day, and the type of chelebration that goes along with it, varies between two extremes. ${ }^{\text {che }}$ One of those extremes is what is commonly known as Valentine's Day. The name of the other extreme is not so commonly known, -but is nonetheless still celebrated by many, and this extreme is - known as International Loneliness and Bitterness Day. So, Mr. Subliminal wishes to do a little survey. How many of my faithful readers will in fact be celebrating Valentine's Day Saturday, and how many will be celebrating International Loneliness and Bitterness Day? You can submit your vote to the BLACK BOX, or =e-mail me your vote at cjmcguire@undergrad. Next time, I'll -print up the results of the survey. I hope you'll take a couple of seconds as you're reading this and vote.

So, until next time, don't get swamped by your midterms, and enjoy your Reading Break...er, Moment... um, Breath... whatever you want to call it (it's just not long enough, damn it!).

> Chris "Mr. Subliminal <zzzzzzzzz...>" McGuire

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Fighting for the Rights of the Pure Mathies Everywhere: Matt "So-Krates"

The other day as I was out for a jog, I saw an old man with a dog. He was having trouble with his little dog. It was too interested in a mail box to continue walking. I was thinking, how easy it was for the old man to walk to dog this far, yet, it seemed hopeless to go any farther.

It reminded me of school. I had managed to get through high school doing pretty much jack shit. Not exactly an attitude that should get someone all the way to University. However, I managed to get here, and I'm not really complaining. It's like the dog. It was easy to cover the first half, getting to the mailbox.

However, I realized that once I got to university, that I had better start doing work. There are lots of reasons. One which I am extremely proud of is a letter I got from the dean. When I was talking to the co-op coordinator for math, she was impressed, until I told her why I got the letter. It was for my big drop in marks I experienced at the end of high school. It made me wake up and realize I had better start changing my attitude towards school. I think the old man realized this too, he needed to stop chanting, "here boy," and whistling at the dog.

Great, I now knew I was screwed unless I changed. At least I knew I had to change. Oh well, I figured I'd just do what the profs suggested and figured that that would be enough. I had never really done homework before. Frosh week: The first assignment was handed out. Oh, great, this is gonna be good. I did it the day it was handed out. I didn't take much interest in frosh week. I regret it now, but I'was worried about how I was supposed to change my outlook at school.

Life is $90 \%$ attitude. I was given a poem when I left highschool by one of my teachers. In it, it says that life is $90 \%$ attitude. I think the poem is right. You have to have the right attitude. You might get where you want to without it, but it'll be hell getting there, unless you have the right attitude. You have to give your all in everything that you do. You have to be determined $100 \%$ (well, maybe $90 \%$, and $10 \%$ Bomber). If things go sour, find your folly and correct it. It may be easy to find your mistakes, we all have them. Maybe you don't do your assignments, maybe you never treated your big brother fairly, maybe you had a rocky relationship with your parents. Find out what it is that needs to be changed. The old man knew that he needed to change his strategy. He had to think of a new way to get the dog to leave the mailbox and go home.

Now the hard part. What the hell do you do instead? Well, for some it's easier than others. Start your assignments, say sorry to your brother and call home and tell your parents you miss them. However it's usually more difficult than this. The answer rarely stares you in the face and says, "Here I am"; you have to go trudge through deep thought to realize what it is.

I've never seen an old man run so fast. The little dog got all excited. It's owner finally wanted to play. I think the old man had realized that his approach wasn't working and that he needed something new. It's not always easy, just ask any old man how easy it is to run like the wind. Most just shake their canes at you.

Peter "What? This isn't about the Spice Girls" Lizak

## Bridging

First off, your esteemed writers would like to apologize for the lack of an article in the last mathNEWS. There was a mixup during production and the article was left out. One must remember that our wonderful editor is human like the majority of us here, and even he makes mistakes. The article is available on the web at:
http://wry.mathners.uvaterloo.ca/Issues/mn7602/bridge.html
However, for purposes of time and convenience, we are going to reprint last week's article here. Enjoy!!

A reminder goes out to everybody that the regular duplicate game was held last night at $7: 30 \mathrm{pm}$ in room 2134-5 of the SLC, and will be held next on Thursday, February 26 at the same time and place.

This hand comes from Ted Horning's bridge column in the Toronto Star. This article has been reprinted with absolutely no permission whatsoever. Unlucky for them...


The South hand is worth exploring slam, however it might be difficult to reach or make after the East hand opens the bidding. South settles for a spade game here. West led the seven of hearts, and it was difficult for East to read the situation. He rose with the king.

South won the ace and cashed three spades. East discarded the three of diamonds on the third spade. When South conceded a spade to West, East's discard was uncomfortable and he elected to discard a small heart.

West returned a diamond and East's nine forced South's ace. South then ran spades and cashed four more hearts. East had to decide between the ace of clubs and the king of diamonds. He elected to keep the ace of clubs. Making six.

Two things are worth noting on this hand: If East and West are able to communicate their count effectively, then East will know which card to keep, holding South to eleven tricks. Also, had West decided to lead a club, following the concept that one should not look for ruffing tricks when holding a natural trump trick, South might not even make four spades, losing one spade, two hearts, and a diamond.

So, what have we learned from this hand? First, it is obvious that no one at this table ever played bridge in the Comfy Lounge. If they had, West would likely have tried to bid 5 \& with his hand, "just for fun." (If you're ever in the Comfy Lounge, watch some of the bridge players and how they bid, then try to guess just how much crack they were smoking. By the way, just in case you're wondering, there are such things as good sacrifices, and

## the Gap

there are such things as bad sacrifices. A 5 bid by West woul definitely be placed in the latter category.) Second, no matte what hands come up, bridge is certainly a fun game, provide that you like to think. (Heck, bridge is a fun game for you eve if you don't like to think; it just may not be so much fun for you partner.) It is hands like this, where the outcome depends a so many different aspects, that make bridge a challenging an fun game. But bridge, above all else, is a great social game, an that is demonstrated each and every day in the Comfy Loungt So come on out and play some bridge, and just remember th mating call of the bridge player: "Fourth!!!"

Michael "M." Brom
Chris "Mr. Subliminal" McGuir

## Dededededededed

A Response from a Believer

In the previous issue of mathNEWS, The One Who Watche raised a question to believers of institutionalized religions. would like to take this opportunity to say a few words.

Religion indeed is something that originates in the ancies past. However, it is hardly "a relic of the past." Even in th midst of exponential scientific advances, there is no clear sig that religion is dead. There are new believers every day and tt sincerity of many young believers is also evident. For instano more than 300,000 young people, most of them Catholics, partis ipated in the World Youth Day in Paris last August. The eves was on the headlines on virtually all local newspapers. If religio were "a relic of the past," the event would not have receiveds much attention.

Believing in a religion does not necessarily mean having d excuse not to think. Having faith in God does not mean findin a way to escape reality. There are many thinkers, scientists as philosophers who are believers in God. There are also faithf people who do not use religion as an escape. Mother Teresa an example. She had tremendous faith in God and a convictio to help the needy. Such conviction could hardly be an escape.

Ultimately, being a member of a particular religion is not ju about observing its doctrines. It is more about seeking Trut If one thinks that believing in a religion is simply a matter knowing and believing what the religion says, one has misst the real purpose of religion. Hence, in choosing a religion, of should not just base on how much one's belief matches its, $b$ : rather, on how well the religion is able to help one to seek Trut I think that if one is close to the Truth, one will believe wh there is to be believed.

I am a Roman Catholic and I have never been asked to sto thinking or stop pursuing science. I also believe that it is th mandate of the Roman Catholic Church to lead believers Truth. (By the way, the Roman Catholic Church never si that non-believers will go to hell. In fact, it asserts that of God knows who will and will not go to heaven. For mored tails, please refer to the Catechism of the Catholic Church.)

Finally, how much does my belief match the doctrines of th Church? Well, why would anyone want to know?

## Poetry Corner

Do you remember way back when you had to take English classes and Art classes? When creating compositions and other forms of creative expression were part of the homework? Well now, with most of my courses dealing with math in one form or another, I find myself using my free time and even trying to make some time for that which was once assigned as homework. It's amazing the little things that we take for granted.

I'm sure that many of you like to create art, and I encourage you to share it. With that said, here are some poems that I have written, appropriate for the occasion (well, that would really depend on your point of view), which I would like to share.
My Love

Anxious and silent, I wait for you
The sun slowly sets on this cold winter's night
But I see not the falling snow;
I see not the night's beauty;
For you occupy my mind's every thought
Fumbling and nervous, I search for the words to say
There are so many things in my heart to tell you
But I know not the words;
I know not what to say;
If only you could see into my heart
Determined and impassioned, I search through the night
The cold wind lashes at my face
But I feel not the cold;
I feel not the pain;
All I feel is that which is in my heart
Breathless and undone, I find myself lost
The darkness of the night surrounds me
I am unsure of the way;
I am unsure of myself;
And I must wait once again for the morning light
For this second piece I should probably give some credit to Elton John, since it is loosely based on the lyrics of his song "No Valentines".

No more evening sunsets
No more moonlit walks
I'm just left with regrets
No more time to talk
No romantic dances
No more loving glances
I wish that you would stay
But I'm all out of second chances
So please remember me
I'll never forget you
You were the one for me
But I guess I wasn't the one for you
One last goodbye
Then you go your way
You know, you broke my heart on this day.

## Angel

In a moment of sadness, of despair,
With spirit in anguish and heart on pain, I looked up to see an angel looking at me Unfitting looks of question and concern, She was still the most beautiful vision I had ever seen.
Mesmerized by her radiant face, I stood captive in her eyes
Approaching with grace, she took my hand in hers Pain and sadness melted, despair fled as she smiled Eternity not long enough, a moment too much, Standing there with her I was in heaven.
With eyes closed, my mind at peace,
Heart full of joy, I can see but her shining face
Unexpectedly, when sadness approaches unseen,
To eye's delight and heart's rapture,
I will turn around to find that angel smiling at me.
Neville "Hopeless Romantic" Dubash


## New Course Offering

## CS 343: The Piddling Little Details of Computer Science

The Department of Computer Science is pleased to announce an exciting new course for Fall 1998. CS 343: The Piddling Little Details of Computer Science will introduce students to many important aspects of writing computer programs that they might otherwise miss in more conceptual courses.
Topics covered include:

- Parsing the command line
- Choosing input and output delimiters
- Writing effective error messages
- Duplicating the output of existing programs
- Source code formatting and indentation

By the end of the course, it is expected that students will be able to write extremely precise, non-functional programs, and be adept at introducing unnecessary restrictions into programs to comply with assignment specifications.

This new course forms an integral part of the Department's plan to better equip students with the tools they need for jobs in government and industry. There is no prerequisite, as this course makes no use of any formal training in Computer Science. It is open to all students with time to waste. It is a prerequisite for CS 342, and it is hoped that this new course will allow us to remove many of the piddling little details from third and fourthyear Computer Science courses.

## Pud on the Internet

## What is the world coming to?

Friday night, after a wonderful excursion to Mel's we decided to retire to the Comfy Lounge to play some mindless NinetyNine. In between hands, a discussion about Pud started and J. asks what Pud comic I got with my gum. The names have been changed to protect the guilty.

J: What Pud comic did you get?
Me: The bad one.
J: Hey don't say that. There are a couple good ones.
Me: Yeah, two.
A: There's the one where he's shining the barber's shoes while the barber cuts his hair.

J: Hey, I wonder if there are any pornographic Pud comics. I'll go have to look on the internet.
(I just sat there in disbelief, unable to believe I just heard that.)

C: Well, you're a consumer, so there has to be a producer somewhere.
( 5 minutes later)
A: So, J., are we going to look for those pud comics now?
J: We'll have lots of time later, let's finish this game.
Now, understand that I see Pud as a symbol of certain things in this world, a symbol of all that is not funny in these strange lives of ours. But a porn star he is not...

## Michael "Not the Porno Pud Man" Brown

## Life, the University and

 Everything
## Exploration into a controversial topic...

Since my friend and colleague, Mr. McGuire, has deigned to talk about the hot topic "It's not so bad being single" I have decided to enter in the fray with new words and a fresh viewpoint on the situation.

Myself, I have been single for more than a year, with the exception of a couple weeks where I had a S.O., who decided to completely ignore me shortly after we started together. But I'm not bitter. . not at all. Really, I'm not.

I'll admit that there are many advantages to having somebody as your S.O., such as the companionship, the comfort, the closeness. Bah. True friends give you these things, and more. True friends are always around to do things with, to comfort you when you need it (usually because your S.O. did something nasty), and to share things with. And best of all, a friend won't get jealous when they catch you with another friend. In fact, you can have as many friends as you want at the same time.

And there are many disadvantages to having a S.O. as well... you are (usually) accountable to somebody else while you're up here, you can't flirt with all those women in Math, and then there's the commitments: the movies, the dinners, the sex, and all that stuff.
So for now, I'll be content to be with my male friends and my female friends alike, while I know that I am happy and feeling good. And if you think that sounds at all sappy, I deny your existence. I leave you with a FASS quote:
"What is the half-life of single women in Waterloo anyway? Three minutes?"

Michael "Single and Sexy" Brown


## I like women.

## Dear Sam

I don't mean that I just like the physical features; the hai soft skin the eyes one can fall into and get lost for a lifetimnot Rather I like spending time talking with them, because in spipast of the best efforts of many to turn men and women into ormy androgenous race, women think differently than men. I for ${ }_{0}$ City like this difference. Not that there aren't exceptions to the rul Fi and more to this one than most, but I think some things net (hyp to be said.
I like women.
When I it dend dith someone about the meaning resid life, or some other deep philosophical question like whether yo by $t$ should put katsup on your fries individually as you eat them reas puddle it on the side, I generally prefer a viewpoint of the opp site sex to be involved in the discussion. There is something IT never been able to put my finger on that makes a conversatict with someone of the opposite gender different. They see thin! in subtly different ways, and I thank whatever created them doing so.

## I like women.

Unlike the opinions expressed by some, I have never had a $b$ situation with a woman that didn't end up well in the end. carry no bitterness towards women at all and am proud to clai some of my best friends as women. If you have ever had a $b_{8}$ situation I can only wonder, why did you get involved in the place?

## I like women.

But do they like me? Or men at all? Or do they just tolerd us. Big, hairy, gaining pleasure from butting heads and mad tendencies. I can only hope that they do. But either way. I like women.

## $\mathrm{mN} / \mathrm{WWW}$

## A "Behind-the-Scenes" Tour <br> - or - <br> Now Hiring!

Hello again. Those among you who have visited $m \mathrm{~N} / \mathrm{WWW}$, the mathNEWS Web site, may have noticed that timeLINE, the feature promised last issue, is not quite complete. Work continues; combing through twenty-five years' worth of mathNEWS issues is simply taking longer than expected, and things such as, for instance, a CS354 assignment keep getting in the way of speedier progress.
Unless I am delusional (which is entirely possible) there are at least a few of you who are interested in how mathNEWS gets put up on the Web every other week. This issue I will give you a peek at what goes on "behind the scenes" late Thursday night/early Friday morning so that thousands of readers around the world can get their mathNEWS fix every other Friday morning. (Or, I will thinly disguise glorifying my own job, if you'd rather see that way...)

As you may or may not know, the paper version of mathNEWS is created (formatted, laid out, typeset, etc.) using ${ }^{A} T_{E} X$. The $I A T E X$ source files are converted to HTML, the file format for Web pages, using some scripts that I threw together one day three years ago. This takes care of most of the job of HTML conversion; the rest is done by hand using a text editor (vi). Images (artwork, the GridWord, etc.) are converted to JPEG or GIF images from Postscript sources. Tools used include GhostScript/GSView, Corel DRAW, PHOTO-PAINT, and whatever else gets the job done.
This should tell you that unlike mathNEWS, $m \mathrm{~N} / \mathrm{WWW}$ is imnot produced using the undergrad computers; in fact, for the pipast couple years $m N / W W W$ has been produced entirely from ormy computer, sometimes from as far away as Ottawa or Québec ${ }_{0 i}$ City.
Finally, the collection of HTML and image files are "bound" ne: (hypertext links resolved, table of contents created) into one issue and the files are uploaded to the mathNEWS disk space on undergrad. It is also interesting to note that though $m \mathrm{~N} / \mathrm{WWW}$ gr resides in undergrad disk space, the Web site is actually served yo by the Computer Science Club's Web server (for performance n(reasons).

Typically the process takes between four and six hours, which Ir'm told is considerably less time than it takes the paper version tid to be produced.
If you've read down to this paragraph then you may just be If wondering if you might somehow become involved with this process. (Or, you're in STAT231 class and bored out of your mind.) After all, it's a fairly easy job (if you know what you're doing) bo and makes one immensely popular and attractive to the opposite d. sex (I am definitely delusional. . .), not to mention it looks good aijon your already-overfull résumé.
The answer is yes (!), $m \mathrm{~N} / \mathrm{WWW}$ is looking for new staffers. fir Reason? Quite simply, I won't be around forever (unlike some mathNEWS staffers, I plan to graduate and get out of here someday soon...), and I wouldn't mind the break (after all, being im${ }_{r a}$ mensely popular and attactive is highly demanding.) Also, there ad are new features such as the twenty-fifth anniversary pages, and features I've been meaning to implement for some time (such as searching, more back issues, etc.), that require more time and
expertise than the present $m \mathrm{~N} / \mathrm{WWW}$ staff (namely me) can provide.
So, if you think you're pretty hot at Web design, graphic design, programming, or all/some/none of the above, and are interested in contributing to $\mathrm{mN} / \mathrm{WWW}$, contact the editor or, more directly, E-mail me at vtluu@uwaterloo.ca. Any help would be greatly appreciated by myself and the growing mathNEWS Web readership.

Oh, and I guess I should mention mention the $m \mathrm{~N} / \mathrm{WWW}$ address:
http://www.mathnews.uwaterloo.ca/
Viêt-Tâm Luu
"Immensely Popular and Attractive" mathNEWS Web Sub-Editor mastHEAD

## Happy Unlucky Day

Matt again, like that's a surprise by now. Once again, it's a Wednesday morning and I'm still not quite done mathNEWS. Not even close, in fact. But I have high hopes based on me skipping my first two classes, so I might finish up. Come to think of it, I did finish up, since you're reading this now, but I don't know that yet.
So what have I got to say? Not much, as usual. Next week is of course study week, which I get completely off because of my complete lack of interviews on the co-op front. Except that the week is only two days long, unlike other weeks that certain mathNEWS mascots might have access to. So too bad for me. Did I mention I need sleep?

Monday seems like a long time ago, but I disticntly remember having a slightly smaller turnout due to some frosh midterm and a Number Theory assignment that prevented me from putting up posters for Production Night. Still, our bold, hardy, and reliable volunteers this issue, along with their suggestions for new sports at the next Winter Olympics, included Brian Fox (Biathlon with automatic rifles), Chris McGuire (The 100 m Polar Bear butterfly), Doug Becker (Speed crossword solving yeah, so I'm biased! Deal!), John Swan (Snowshoe lacrosse and snowsnake throwing), Chris Buchanan (Naked biathlon (swish, swish, swang, swish...)), Viêt-Tâm Luu (The CS 354 assignment toss), Michael Thorsley (Cordless bungee jump over the bed at thumb tacks), Michael Brown (Snow shoveling), Richard Bilson (Snow angels), Blue (Sex), Jodi Moran (Waterloo sunbathing (what sun?))

Many thanks again to Marion at Graphics Services, who probably received this a little later than she's used to today, and to certain random interlopers who provided me with diversions during the layout ordeal, so that at least I was doing something when I wasn't doing mathNEWS. And no thanks to certain staffers who got their regular features in very late indeed.

See y'all in three weeks...
Matt "So-Krates" Walsh
(The 500 -meter ass-slide)

## Icor the Mighty

To the tune of "Joxer the Mighty" from Xena
Dedicated to a comfy lounger, from the other comfy loungers.

## Icor the Mighty

Roams through the countryside
He never needs a place to hide
With Audrey as his sidekick
Fighting with her 14th trick
Righting wrongs and singing songs
Being mighty all day long
He's Icor. . . he's Icor the Mighty
He's Icor the Mighty
He's really tidy
Everybody likes him
'Cause he's got a funny grin
He's Icor... Icor the Mighty
He's Icor the Mighty
He's very tidy
Everyone admires him
He's so handsome it's a sin
If you're in jeopardy
Don't call the cavalry
There's a better remedy
Although he doesn't work for free
He's every man's trustee
He's every woman's fantasy
Plus he's good with company
He's Icor... (I'm) Icor the Mighty
Icor the Mighty,
He roams through the countryside;
He never needs a place to hide.
He's coming quickly after you
Fighting with his pool cue,
Calling calls and sinking balls
Being mighty all day long,
He's Icor. . . he's Icor the Mighty!
Ohhhh...
He's Icor the Mighty,
He's really tidy.
Everybody likes him
Because he has a funny grin.
Icor the Mighty,
He's very flighty.
Everyone admires him.
He's so handsome it's a sin.
If you're in jeopardy
Don't call the cavalry. There's a better remedy
(Although he doesn't work for free).
He's every man's trustee,
He's every woman's fantasy,
Plus he's goo-ood company.
He's Icor. . .
I'm Icor the Mighty!
Blood...valour. . . and victory!
Hey-hi!
Icor the Mighty,
He's very ornery.

Everyone admires him.
He's so handsome it's a sin.
When things get grim
He'll take it on the chin.
If you're in jeopardy
Caused by the enemy
Don't call the cavalry. There's a better remedy
(Although he doesn't work for free.)
He's every man's trustee,
He's every woman's fantasy,
Plus he's goo-ood company.
Look out!
He's Icor. . .
Icor the Mighty!
LADIES: Icor the Mighty
Master of virility
Every woman wants him
He's so sexy it's a sin
If you want a special tryst
He's the man you can't resist
By every measure he's a prize
ICOR: Just check out my shoe size
LADIES: Just check out his shoe size
ICOR: Hey-hi!
LADIES: He's Icor
Icor the Mighty
Icor the Mighty
Captain of debauchery
Never seems to get enough
Of our tantalizing stuff
If you need some company
With Icor there's a guarantee
ICOR: Of the highest potency
WENCH: Heck, I'd even work for free!
LEIA: Take your filthy hands off me!
LADIES: He's Icor
Icor the Hamster!


## The Pseudo-Expert on Statistics

## Part III: Life After STAT 231

In any mathie's university career, certain questions have always arisen. These queries of life as a Math student knows it include: "What is the meaning of $\delta$ and $\epsilon$ ?", "What do you mean that solution's wrong?", "My CS assignment is due when?" and probably the most oft asked inquiry, "When is this (fill in the appropriate adjective) STAT 231 class going to end?" [It ends when you walk out the door. And you can walk out anytime. $\Sigma E d$.
Now, everyone knows that STAT 231 has quite the reputation. Although yours truly loved the course (the exam's not so hot, but still...) most mathies would rather spend fifty consecutive hours doing a CS assignment. [Perhaps because most mathies are in fact CS majors. - $\Sigma E d$.] Mind you, this is going without sleep, nourishment or even reading the fine publication that is mathNEWS. In other words, the general decision of the people is "STAT 231 sucks!" In fact, once one has passed this blessed course, one has the fantasy involving the STAT 231 (and STAT 230) course notes, gasoline (or anything flammable) and a lit torch. But an important question that one should really be asking is, "What exists after STAT 231?" [How 'bout: freedom from oppression? $-\Sigma E d$.

Ladies and gentlemen, be assured that the pseudo-expert has indeed seen the light at the end of the tunnel and it is wonderful. Once one has escaped the chains of being introduced to statistical concepts, there will be an appreciation in discovering everything from Markov Chains to Hypothesis Testing. And no, Mr. Walsh, no surgery, drugs or illegal activities are involved in this joy of statistics. [But it's not quite like you're high on life either. $\Sigma E d$.

Just what happens after STAT 231?
Well, for one thing, one need not take STAT 231 ever again. Unless playing with crank shafts and ball bearings strike your fancy, this may be considered a good thing. But remember, STAT 231 was just the beginning.

The three hundred level of statistics is very rich in variety. The next step one should try is STAT 330 and STAT 331 . Here, one can deal with more strange and wonderful distributions (such as the Pareto, Cauchy and Snecodor's F), play around with more than one variable and impress people when finding an equation between at least five different random variables. As well, a useful program known as SPlus will give hours of enjoyment. The best part is that these courses are not all that difficult. In fact, you may even be exposed to the three schools of thought that create the field of statistics. Unfortunately, many students prefer to swear off STAT courses post STAT 231. This is truly a shame, especially since these students will be depriving themselves of a rewarding experience. But I am not here to criticize or deprecate the value of the other fine departments in the Faculty. In fact, the psuedo-expert has taken at least one course in each of these departments to get a more rounded view of the field of mathematics. However, mathies should spare room for at least one advanced statistics course to get a broader viewpoint of this department's study. [Answer me this then: if the 300 -level courses are so great - and they very well could be, I'm not disputing why do they have such unenjoyable second-year intros? - $\Sigma E d$.
Of course, there are certain people who just love statistics,
yours truly included. There are also certain programs that require one to take statistics courses. And finally, there are those who are in Statistics. [Whom, one would hope, also fall into the first category, or else they're in for some trouble. - $\Sigma E d$.] For these folk, the third and fourth year will be full of courses that concentrate heavily on probability, sampling theory, experimental design, renewal theory and estimation of random variables. The difficulties of the these courses vary from fairly easy (STAT 332) to quite difficult (STAT $\frac{666}{2}$.) There are only 6 courses that are in the three hundred level, but each will broaden your horizon. The four hundred level courses tend to be greater in number but smaller in their variability with respect to difficulty. And believe me, you do not want to know what reputations STAT 433 and STAT 450 have. Let us just leave with the fact that once you have taken these two lovely courses, you may want to change your mind about STAT 231. [Axiom of Suckiness Theory: if A sucks but $B$ sucks more, that doesn't mean that $A$ still doesn't suck. $-\Sigma E d$.

Overall, life after STAT 231 isn't all bad. Sure, there are negatives as with everything else. But with the nice textbooks which I still use even outside this university, the professors one experiences and the impressive calculations that can be derived, the experience will be enjoyable. And there's still no surgery involved! Now if you'll excuse me, I have a small bug I want to take care of.

John "The Pseudo-Expert" Swan

## Cryptogram

Halloo once again. Hope you enjoyed last week's puzzle. In case you didn't get it, here's the solution to last week's cryptogram:

The mystery of life is not a problem to be solved but a reality to be experienced. -- Aart van der Leeuw

This week, we've decided to try something a little longer than our previous puzzles. Your clue is d equals p.

## Vowk $R$ srlt itjk rb kot vocst vcgse rj At wbe

Drpstk pcrbp kc jtt Ycm, wbe Ycm jwyrbp 'Vowk wicmk w srkst jcatkorbp?", wbe At jwyrbp, "Vtss, R jocmseb'k arbe w srkkst jcatkorbp, jocmse $y c m$, Drpstk,', wbe rk itrbp w omaay jcgk ch ewy cmkjret, wbe irgej jrbprbp. -- Vrbbrt kot Dcco

Special thanks to Corey Gaudette and Gigi Garbett, and Andy Kim and Brenda Yap-Chung, for submitting answers (both correct except for the final letter - we shouldn't create cryptograms in which the only occurrence of a letter is in someone's name!) and Phil Roberts with a completely correct solution, even though there is no prize. Hope you enjoy this week's!

The Avengers

## Spermatikos Logos \#3

Thanks to everyone who submitted to the last puzzle. I received 6 submissions from: Will Chartrand, Greg "Hologrami" Taylor, Peter <Zugzwang> Marshall, Wendy Oakden, Claire Bilodeau and Ian "The Word Guy" Facey. To my great satisfaction everyone got the puzzle right, they were less fortunate with the bonus. The correct bonus answer (17) was arrived at by: Claire and Greg (although Peter does get huge style points for the snazzy cover on his solution). By random draw our winner is... Claire, congrats, pick up your prize in MathSoc. For those of you who want to check your answers the correct solution was:

| Name | Correct Answers | Incorrect Answers | Score |
| :--- | :---: | :---: | :---: |
| Arrrrg | 13 | 7 | 11 |
| Droog | 10 | 6 | 8 |
| Erf | 12 | 5 | 10 |
| Ghileana | 11 | 8 | 8 |
| Illiana | 9 | 9 | 6 |
| Milo | 15 | 3 | 14 |
| Nurgle | 14 | 2 | 13 |
| Orheanna | 17 | 0 | 17 |
| Tatianna | 16 | 4 | 15 |
| Urgoth | 18 | 1 | 18 |

The week's puzzle is a little bit experimental for me, so please send me any feedback you have on fun/level of difficulty.
Every year the PCSC holds a Winter programming contest based on a familiar game. Last year's pick was Boggle. For those of you who don't know, in a game of Boggle a four by four square container is filled with 16 dice each with a letter on it. The object of the game is to see how many words you can create by following any connecting path (hor, vert, or diag) through the dice without repeating dice, starting and finishing wherever you choose. It is a fairly common programming problem, given a 4 X 4 grid of letters to find all possible english words within, but the PCSC chose to put a little spin on the problem. Given an arbitrary set of words, can you write a program to see if those words uniquely determine a 4 X 4 grid of letters? The puzzle this week is not to write the program but to use the logic it would contain. The following words do uniquely define a 4 X 4 Boggle Board grid of letters, your task is to deliver that board given that there are M's residing at Column 1 , row 3 and Column 4, row 1. Word List: MATH, DOTE, BRA, GOTH, BOAR, GLOB, MAIM, BLOB, ALMS, ITCH, TOGS, HOLD, ATIC (Ok I know this isn't a real word... work with me people)

Bonus Question: Now that you have the boggle board, play the game. List as many words as you can legally create. Entries will be scored 1 point per letter per correct ENGLISH word, 1 and 2 letters words score 0 , incorrect words score -3 points.

As always please submit answers to me by email (rjstewar@) or into the BlackBox by 6:30 on Monday, March 2nd. Good Luck!

# gridCOMMENTS 

Conventional Guy

Well, it's another wonderful morning for doing a GridWorig Then again, what morning isn't? After last time's circle fiasc with I have decided to make a conventional again.

But first, let's talk about submissions for the last GridWord. T apparently received two submissions (one more than last timel ston one from Claire Bilodeau, and the other from Ian "the Wo:7) 1 Guy" Facey. Claire had one mistake, but she got the numbe Pur while Ian had it right. Sooo, on the results of a coin flip, Clai Cow is the winner.

By the way, if you don't know the significance of the numbermale "Forty-Two" (the de-anagrammed word from last time), get the 31 ) to a library and pick out The Hitchhiker's Guide to the Galar Rub Then you will understand completely.

Don't forget that you can drop off submissions in the black ba Pyr on the third floor, and if you have any questions about the Grii ERI Word, don't hesitate to email me at trwcolem@undergrad.mat 47)

## Cryptic Guy

## Howdy everybody!

It seems my attempt to make the Gridword harder part worked, I got only 3 submissions this time; Josh "Le Haup: Bennet, Ian "The Word Guy" Facey, Claire Bilodeau. By rar dom draw, the winner is Josh "Le Haups" Bennet. Number ? down (Without tea, infinite break is out of favour) provided a unexpected solution - I expected the reasoning to be "shatte: (break) - "sr" (because it's infinite, and therefore without be ginning or end) - "t" (without Tea) = Hate ( out of favour The slightly wackier (but a bit more poetic) solution was tol to me by Josh's group: "Death" (an infinite break) - "D" ( fro: Darjeeling - apparently the only real tea), scrambled (ah, wh not $)=$ Hate.

## Rebuttal to the Pseudo-Expert

STAT 231 - Flush it!!!
Michael "Jonnie exp $x$ " Thorsk 11

## Yet Another Little Problem

Hey all! Last weeks answers were facetious for a word that ho all the vowels in order and 121 for the missing number in $t 14$ sequence. Why 121 ? All of the numbers were 16 in differe 15 bases. If you look at the second last number you'll see 100 is binary for 16. 121 is base three. For this weeks brain tease I've picked something more challenging. You are given 12 coil 16 of equal size and shape. You have a simple balance scale. One 17 the coins is a counterfeit and is either heavier or lighter than ti others; you don't know which. Using the scale only three time 18 how would you find the counterfeit coin?

Have fun!

## mathNEWSquiz \# 3

Another week, another Squiz. The winners from last week are, once again, the Co-op Guys with 40 points. Hmmm... one has to wonder how much time they put towards their jobs. Way to orgo guys. Others were Jason Smulevitch with $39 \frac{1}{2}$, Comfy Crew ssu with 38 , Claire Bilodeau with 34 , Ian "the word guy" Facey with 24 and Ken "I want to be core" Reycraft with 12.
The answers from last week are: 1) Depression 2) Fred Flintnel stone 3) Borden 4) Queen Elizabeth II 5) Lincoln 6) Hamilton Vor7) 13 8) Milk 9) Sudan 10) Russia 11) 88 12) 52 13) Yellow and be Purple 14) Cob 15) Egret 16) Gaggle 17) Pride 18) Murder 19) lai Cow 20) Unkindness 21) Iron Pyrite 22) Baseball and bridge 23) no drink 24) enlightenment 25) save fuel 26) Pascal 27) keeps nbemale star erect 28) Alicia Silverstone 29) 48 30) Andy Warhol the 31) Trigger 32) 150 33) Grey 16 and 17 34) Three seashells 35) lar Ruben and Wong's 36) Alan George 37) 1980 to 1986 38) Bjork 39) Michael Stipe - mice 40) Jane's Addiction and Porno for buPyros 41) The Chevron 42) In Harmony With Truth 43) QWGrii ERTY 44) Frequency Modulation 45) Anti-Meridian 46) Mirvish ma: 47) Quig-Quag 48) 6 49) Tin Woodsman 50) 18.

1. This Alanis music video was distributed in several versions.
2. This Celtic dancer used to star in the world renowned show, "Riverdance", before he started his own show, "Lord Of The Dance".
3. When printing colours, instead of the familiar RGB (or Red Green Blue) colour system many of us are familiar with, they often use the CMYK system because they can achieve more colours. What do the letters stand for?
4. This is the world's highest waterfall.
5. The Koala eats the leaves of this tree as it's primary food source.
6. In the movie Speed, Sandra Bullock's character must keep the bus going above this speed.
7. This was the name of the smartest smurf, according to him at least, in the Smurf village.
8. He was Princess Diana's significant other, and died with her in the fatal car accident that claimed their lives.
9. He is next in line for the throne of England, after Prince Charles.
10. This polar icecap holds approximately $70 \%$ of the fresh water on Earth. Is it the Antarctic or Arctic icecap?
11. Do polar bears hunt penguins?
12. An American football field is shorter than a Canadian field (wimps!) by how much?
13. In 1997, this Canadian University team won thier first Yates Cup.
14. Guano is the name for the waste product of what animal?

15 . The latest Bond movie, starring Pierce Brosnan, was just recently released. How many Bond movies does that now make?
16. Which actor starred in only one Bond movie?
17. These were the two movies starring Bond made and released in this year.
18. What type of gun does Bond prefer?
19. Who is Bond's CIA friend?
20. In the Bond movies, what is (the original) M's full name?
21. How many Bond movies has the character Q, played by the same actor since he first appeared in 1963, been in?
22. How many Bond movies did Roger Moore do?
23. Is that more or less than Sean Connery?
24. Who was Bond's father-in-law?
25. This brand of vodka has been associated with Bond since the first movie.
26. This is the fastest commercial jet in the world.
27. We know that wine is made from grapes, what is vodka made from?
28. What is tequila made from?
29. These are the four primary ingredients in beer.
30. In brewing ale, however, you leave out this ingredient.
31. This is the colour of Captain America's boots.
32. Who did Bruce Springsteen hire to replace Steve Van Zandt?
33. What two letter word is found in four of the Beatles first eight singles?
34. Which player starts in a Chinese Checkers game?
35. Many national flags feature stars. Of those that do, what is the most common number?
36. Which word in this sentence is the verb?
37. What sport is a spinnaker used in?
38. Which Christian saint is credited with writing the Acts of the Apostles and the third Gospel?
39. What do the letters IMF stand for in economic circles?
40. What sport keeps track of sand saves?
41. What do hiking enthusiasts refer to as A.T.?
42. What Cretan monster did Theseus kill?
43. Who was the father of Zeus?
44. What sea god was brother to Zeus?
45. This lord of the dead was a brother too.
46. This goddess was Heracles' worst enemy.
47. This is what Jason and the Argonauts went to retrieve.
48. These sprang from the ground when Jason sowed the dragons teeth.
49. He slew the gorgon named Medusa.
50. He then fell in love with this woman.

Make sure to submit your questions for this week by March $2^{\text {nd }}$ at 6:30 pm. Submit by either stuffing entries in the BLACK BOX or delivering them in person to the mathNEWS office or the mathNEWS mailbox in the MathSoc office. Good Luck!

Squizmaster Blue

## Things Not To Do Today

## Advice from your friendly mathNEWStaff

- Break a mirror
- Walk under a ladder
- Go to class



## Grid Clues (Cryptic)

Note: This crossword is a little more complex -5 of the clue words actually stretch outside the margins by one or two letters. These extra letters, (totalling 8) when unscrambled, form the answer to -1 .
-1: "Go Peck em", exchanged my class mate.
Across

1. Note after wag
2. take gut tunnel
3. Still tin-alloy, I hear is sand toy
4. Press discus heart red
5. Philosophically Quiet Earth steal and beat
6. The tricksters ask costs
7. Lime bang holders are rumored to be special army unit?
8. Original real life imp braided a halfbreed
9. Us Telephone Co. affirm violence
10. metal implement reverses time waste
11. Timely first first without first blurred is first galley.
12. Unstarted, tractable, befuddled elder
13. Corrupted Slang is hard to understand

## Down

1. Quick movies' garment
2. Cavort with Bud
3. Ear to psychiatrist's wife with another one? fit to be worth a beer?
4. Trusted strangled explosions
5. Noble torn hurt pig
6. Completely undoubtable, but not entirely helpful
7. Confuse one bridle-city with belief capa-city
8. Burmese Capitol chased muscled hireling
9. bewildered localized without origin, or merely arrange again.
10. seasickness from much more than a hint of an enemy.
11. Strange things see around us standing on our heads
12. Lent item lacking nothing is headover heels for bean orga
13. Sucker about tit trade reborn?

## Grid Clues $\underset{\text { Across }}{\text { Conventional) }}$

1. Clothing demonstrators
2. Gone bad
3. Consult this for directions
4. Detector which uses radio waves
5. Establish by legal act
6. A steep fall of water
7. Gaggle
8. Nagano games
9. Property of an object
10. Sharp crested ridge
11. At the end of your foot?
12. An artificial imitation
13. Hairdos

## Down

1. Place for exchange of goods
2. One of the arts
3. Confined
4. Portions
5. Natives of the Subcontinent
6. Holiday poultry
7. The condition of peculiarity
8. Les Champs $\qquad$
9. To plead with
10. Trip
11. Coral islands
12. Fold
13. To be of use

[^0]:    Surazski Lucas

