# moathNEWS 

## Volume 70, Issue 6 <br> Friday, Marck 29, 1996



## ActSci Club Update

In the previous ActSci Club Update (mathNEWS Vol. 70, Issue 5, March 15), I misstated that the ActSci Club ACTEX manuals are only available for loan to club members. My apologies for the error.

Here's the actual ActSci Club ACTEX Manual Sign-out Policy:

1. ActSci Club members can sign out manuals for up to 2 days, with a $\$ 10$ deposit and membership card.
2. Non-members can sign out manuals DURING THE DAY only, with a $\$ 10$ deposit and their student ID card.

If you have any questions regarding ACTEX sign-outs, please feel free to drop by the club office (MC 3030) or call ext. 6534.

For those of you who didn't know, the University of Waterloo is one of seven member universities in the Actuarial Students' National Association (ANEA/ASNA). Five delegates were elected to represent UW. They are:

| Chantal Bray | cbray@undergrad.math |
| :--- | :--- |
| Lynda Jeffs | lejeffseundergrad.math |
| Kevin Moniz | kbmonizeundergrad.math |
| Joanne Phoa | jphoacundergrad.math |
| Raman Srivastava | rsrivasteundergrad.math |

The delegates represented $U(W)$ at the quarterly meeting on March $16^{\text {th }}$ in Montreal. Elections were then held for executive positions and our very own Chantal Bray was elected President of ANEA/ASNA. Good job, guys!

Please contact any of the above five delegates for more information about ANEA/ASNA or to voice concerns.

On Tuesday, March $26^{\text {th }}$, the ActSci Club presented a talk by Jim Doherty from Sobeco, Ernst and Young Actuarial Consultants, on Dynamic Solvency Testing. Also, we had our End-ofTerm Bash at the Bombshelter on Wednesday, March $27^{\text {th }}$.

Well, that's all for this term, folks. Good luck in your final exams and see you next term.

June Quah Publicity Director

## socTOC

Well, well, it's that time of year (again). The term is at an end, but not at a stand still! There are all of those exams to write, all those EOT reports to submit, all those parties to go to, all that champagne to drink, and, of course, there is that Toy Story movie to be seen at the Cinesphere in Toronto.

That's right, boys and girls: GET YOUR TICKETS. Or I'll find you and make you eat them. Okay, I promise I won't. There are still some tickets left, so come and get 'em. They are being sold at MathSoc for a limited time only. So buy NOW! (I sound like one of those dumb salespeople. . . fine, just dumb.)

NEways, I hope that everyone had a great term. Good luck one your finals, and for all those with arts classes, don't forget you still have a few lectures to attend! :)

May "I left my signature out again!" Szeto

| mathNEWS |  |
| :---: | :---: |
| March 29 | Issue \#6 whacks the stands |
| March 30 | Stands sue Issue \#6 for assault |
| Math Faculty |  |
| March 29 | The End |
| March 29 | Ralph Stanton to address U-Grads |
| April 3 | ELPE, 7pm @ PAC |
| April 8 | Exams begin |
| April 20 | Exams end (unless you're supposed to have one on the $19^{\text {th }}$ ) |
| April 23 | Please be out of here! |
| MGC |  |
| April 8 | Yearbooks Available |
| May 25 | Convocation |
| Pink Tie Pledges |  |
| March 29 | Last day to get prof QUOTES books to screw Mala |
| March 29 | Last day to get JOLT to screw Dave |
| March 29 | Last day to pledge to screw Marco and Mike |
| MathSoc |  |
| April 3 | Toy Story at the Cinesphere |
| Miscellaneous |  |
| April 3 | Lunar eclipse |
| April 5 | Good Friday |
| April 6 | Even Better Saturday |
| April 7 | Easter Sunday |
| April 8 | Easter Monday |
| April 9 | Ruby Tuesday |
| April 19 | Illegal strike to take place in Kitchener-Waterloo-Cambridge area |
| April 22 | Exams for suckers who were scheduled to write on the $19^{\text {th }}$ |
| CS Assignments | Watch That Load! |
| March 29 | CS 241 Project 5 due 8:30am |
|  | Load forecast to be high |
| March 29 | CS 354 Project 4 due 5:00pm |
| March 29 | CS 488 Project 5c due 9:30am |
| April 1 | CS 487 Final Test, out 1 pm Due 9 pm |

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Broke and Destitute: Mala "Crakko" Krishnan, Mike "Hammer" Hammond, Brian "Calculus Cowboy" Fox

# $\infty$ Computer Science Club 

A Student Chapter of the ACM

## CSC Flash

Greetings mortal beings!
The end of the term is upon us, and the CSC is wrapping things up. Thanks to everyone who presented and organized talks.

Past Events

The Tetris AI programming contest was held on March 23. There were three contestants. Tim Prime entered the winning robot. Thanks to the other contestants for entering. Don't worry, if you missed this contest, the CSC will hold another in a term or two.
Naomi Nishimura gave a talk on counterintuitive techniques in parallel computation on March 25. We learned how to take advantage of all the computers on campus at once. (Good preparation for my plan to take over the world.)

On March 26, Jonathan Buss gave a talk on the games that complexity theorists think about. A talk on Open Text Engine was given on March 27.

## Upcoming Events

The only event coming up is the ${ }^{\wedge} \mathrm{D}$ dinner on April 1. No, this is not a joke. Everyone is welcome, those interested should email jarnottocalum. Meet at the CSC at 6:00 pm to walk over together.

## Renew your membership!

Memberships and quota are now being sold for the summer term. Come renew your memberships and quota for next term. If you do not renew your membership and quota, your calum account will be disabled, or your quota will be lost.

## Other things

My favourite slave has obeyed my orders to shave his head for charity. Come and have a look at the new Nikita Borisov! Good luck to everyone on their exams next month!

Calum T. Dalek Chairbeing

## Pledge, Pledge, Pledge!!!

We're in the final stretch for the Pink Tie Pledge. As of Monday evening deadline, 59 people have generously pledged a total of over $\$ 24,000$. Thank you everyone for your support. The good news is that this total does not include the 5 outstanding challenges by: Mike Hammond, Mala, Krishnan, Dave Vernest, Young Chung ([greatest apologies for any incorrect spellings]) and myself.

As I'm typing I just received another pledge. Cool!
We will be accepting pledges throughout the exam period, just drop off the completed pledge card at the MGC office. I will continue to update the web site http://www.csclub. uwaterloo.ca/~mkoechli/ptp/ptp.html as well as the "Thermo-Tie" on the third floor foyer. Future pledges can always be brought to Shirley Thomson's office on the fifth floor.

A few last thanks.
Thanks to Phil Hunter, "Minister of Propaganda" of the MGC, Tom Moloney of the Alumni Office, the MGC board of directors and most importantly the Class of '96, the real force behind this year's Pink Tie Pledge.

Thanks to everyone, and smooth sailing!
Marco Koechli, '96 Pink Tie Pledge Chair

##  Seen in the PAS

## Assertiveness Training Group

Please wait here


3 ON 3 PIZZA DEAL
3 ORIGINAL CLASSIC HAND TOSSED PIZZAS WITH CHEESE AND 3 TOPPINGS OF YOUR CHOICE ON EACH


# Reasons to Pledge to The Pink Tie Pledge 

\#41: You can own your own Prime Number!

## Kurt's Corner

## Cleaning Up The Spew

## Hey Folks,

Well it seems that our esteemed prez is finally feeling the effects of working so hard all term. So she decided to let me out of the closet to unleash the world of the MathSoc exec on you for this week. So today you will be visited by three spirits. The spirit of MathSoc Past won the coin toss so it'll get to go first ...

## The Past

Perhaps the most noticable change this term has been the almost magical appearance of new boards all over the third floor hallway: Boards like the Math Art board, the Academic Issues board, the Math Feedback board, the covered Whiteboard and the MathSoc Info board. If you wandered into the MathSoc office at any time at the latter end of this term, you'd have noticed that it got a long overdue facelift. The floor was scrubbed, the walls repainted and the office furniture upgraded. Cupboards were fixed and new doors were installed on the novelties cabinet (which was filled with new and exciting novelties). Besides that, the office has looked incredibly clean all term with Charlene Knowlton at the helm.

Most people by now have heard about our pre-photocopied exam packages. Yep, pre-photocopied...no waiting in line. Everything we have for a course in one package. Finally, the most recent addition has been the aquisition of a new exam bank cabinet, (still in the process of being filled) that we got with the help of funds from MEF.

## The Present

If you read the newsgroups frequently then you'll have seen the posts regarding the Helping Hand operation that we are trying to get under way. This is an attempt to take mathies out into the community and give something back to the city that gives
us so much by teaching math to those who need extra help. For further information on this, look at Sarah's article somewhere in this issue (hey, it's hard to clean up ALL the spew. . . she did have a head start after all)!

Another project that we have started is the creation of a card detailing the services that the Math Society provides, lists the clubs and how to get in touch with them, and most importantly, describes how to get in touch with us if you have any concerns. This card will be included in the fee statment mailout that all mathies receive from the registrar's office this fall. So the next time that you open your tuition bill and see an charge of $\$ 7.50$ on it, you'll know right away what it is going towards and be able to carry that infomation with you everywhere you go.

## The Future

Great you say, but these things don't really interest me... well, no problem, the spirit of MathSoc Future, can look into its crystal ball and see what is going to happen in the fall when you come back... uh well, actually you won't be coming back, Bob, since you failed all those courses and that terrible accident with the leg hair remover will keep you away, too, Jill... but the rest of you will be here to witness the Fall of Frolic and Fun. That's right, after an especially good frosh week, we're in the process of planning things so that events will be happening non-stop! September 23 to 27 has been designated as MathWeek and well be packed full of events; Casino Night, Movies, Pub Night, Sports, Contests, just to name a few...

Uh oh...now that I'm done, Sarah's heading back this way...NO!! Not the closet again... Noooooooo...
<...silence fills the room, interupted only by the occasional sound of someone spewing and the faint and muffled cry of a tormented soul...>

The "Other" exec - Kurtis "Ghost Writer" McClellan

## ultraCLASSIFIEDS

Hey Calculus Cowboy, Non, il vous resemble!

Lots of love to my bunny!!
Your Monkey!
Hi to Boyce, Wazza, Tom and Sir Blaze Sir!
M \& L
Good luck to Jimmy at The Crucible!
Maximum Man
To: Marc O'Keckly
Never had an ultraCLASSIFIED, eh? Well, here ya go!

Irish Eyes Ain't Smiling

## mastHEAD

Well, this is it. The last issue of the term. The last term that I. Mike "Hammer" Hammond, mathNEWS co-editor extraordinair(ily tired), will be here in the Math Faculty as an undergrad. Yes, barring unforeseen complications (or simplifications), I will be graduating. <Insert depressing music, like that of Jann Arden or Alanis Morrisette.>
But fear not! <Insert hopeful music, like that of Pat Boone or Neil Diamond.> I will not be exposed to that entity referred to as "the real world" in this slightly-off-ivory tower we call the MC anytime soon; I shall be returning in the fall for grad studies! <Insert happy music, like that of Bobby McFerrin or Sharon, Lois, and Bram.> (Yes, I appear to be next in line to inherit the Sutherland/Desjardins title of "Here Longer Than God".) And I have every intention of continuing my contributions to mathNEWS! <Insert depressing music, like that of Tracy Chapman or Crash Test Dummies - oops, I mean weird music, like that of They Might Be Giants or Talking Heads.>
Without further ado, here are the wonderful people (some of whom will be leaving, and who will be sorely missed) who contributed their somewhat valuable time for the production of this issue, along with their term, their major, and their favourite crazy person: Christopher Calzonetti (4B AM (the $1^{\text {st }}$ time around. . I'll be back...), Crazy person? Well, anybody but me. I'm not -tic-crazy! I'm aLL riGhT nOw!), Tim Coleman (CS 1B, Everybody's crazy, 'cept me!), Darren Rigby (Some year, Some program (I think they lie to me), ME! (It's about time we got to this question.)), Matt "So-Krates" Walsh (2A PM/C\&O (Double), Me , because I neglected to fill in a mastHEAD entry!), Stuart Pollock (4B AM/CS (Double)/minor in MathSoc-ism, I am! (Wow! What a coincidence! I neglected to fill in a mastHEAD entry, too!)), Ian Milligan (3A CS, The little man inside my head is kinda nuts...), D. K. Gardiner (4N C\&O/CS (Double), Life, love, and the pursuit of happiness), Viêt-Tâm Luu (2A CS, Me. (CS 三 crazy!)), and David Vernest (4A CS, Ed of Ed's Night Party on CITY-TV!!).

Special thanks go to Marion and the people at Graphics Services, for all their invaluable help. (Why are "valuable" and "invaluable" synonyms and not antonyms?) Extra-special thanks go to Domino's Pizza, who provided us with the wonderful 'za throughout this term. As well, they have provided us with pizza vouchers as prizes for the previous issue! Thank you, Domino's, for your generosity. And even-more-extra-special thanks go out to Scott Norris, May Szeto, Candace Parado, and Viêt-Tâm Luu for their behind-the-scenes work. You guys really helped us out!

> Mike "Hammer" Hammond (4B CS, Dave Vernest - oh, wait, that says crazy, not lazy! My mistake!) Mala "Crakko" Krishnan (4B CS, Mike Hammond - have you heard the jokes??)
> Brian "Calculus Cowboy" Fox (4N AM, Former and present mathNEWS co-editors)

# Reasons to Pledge to The Pink Tie Pledge 

\#2: Math can pledge more than Engineering

# Winta's Paradise <br> Inspired by experiences this term With apologies to Coolio 

As I walk to my classes on the side of the street
I take a fall on the ice and can't keep on my feet,
'Cause I've been slippin' and slidin' so long
That even my roommates think that my traction's gone. Now it ain't never crossed my mind that Waterloo weather This late in the month of March would be worse than ever! I lost my watch where I'd fallen, and soon I'm callin' The campus police desk with no hope at all. My sneakers had no grip, and I was mad at myself 'Cause my boots I had forgot on my mathNEWS shelf. . . fool! It's the kinda day that simply no-one wants to walk in On the sheets of black ice, fallin' down, goin' sprawlin'.

Been spendin' most our lives livin' in a winta's paradise. I'm slippin' on the ice livin' in a winta's paradise.
The Weather Network lies when you're in a winta's paradise.
You should take my advice: try to leave this winta's paradise.
Know I'm gonna fall down on the ice there.
Doesn't matter if I take my time and tread with care.
I'm an educated fool with balance on my mind.
Got my life in my hands and a real sore behind.
The ground ain't nothin' but a heart beat away.
I'm askin', "Why didn't I just stay home today... fool?"
I'm 22, never will I live to see 23.
The ice, snow, and cold are killin' me.
Tell me why don't they close school today?
They get all our money anyway!
Been spendin' most our lives livin' in a winta's paradise.
Spring is in winter's guise when you're in a winta's paradise.
You know that I despise livin' in a winta's paradise.
Get out at any price from this stupid winta's paradise.
Rainin' on the Monday; soon it will be freezin'
Rainstorm after rainstorm, season after season.
Everybody's slippin', and half of them will fall, uh
As I did twice on the walk in with Lixin and with Mala.
They should be closin' school, but nobody's put the word out.
It's silly 'cause the weather... is so absurd out.
I guess they can't,
I guess they won't.
I guess they know
That for assignments I'll be out of luck...fool.
Been spendin' most our lives livin' in a winta's paradise. Fall by the traffic lights livin' in a winta's paradise.
Yeah, nature isn't nice givin' us this winta's paradise.
And I must emphasize: just depart this winta's paradise.
Tell me why don't they close school today?
They get our tuition anyway!

## Squeeze Me Please!

Even though it was played in the Comfy Lounge, this hand has some interesting problems associated with it. The actual play is fairly advanced, but you should be able to follow it.

| Vul: Both Dealer: S | North |  |  |
| :---: | :---: | :---: | :---: |
|  | ¢ AJ98632 |  |  |
| West | $\diamond$ A |  | East |
| ¢ 7 | \% 32 |  | - Q5 4 |
| - Q9876 |  |  | $\bigcirc$ J 10 |
| ¢KJ865 | South |  | $\diamond$ Q97 |
|  | - K 10 |  | ¢ K K 1097 |
|  | $\bigcirc$ AK 5 |  |  |
|  | $\diamond 1043$ |  |  |
|  | + A85 |  |  |
| South | West | North | East |
| 1 NT | 2* |  | Pass |
| 24 | Pass | $4 \diamond$ | Pass |
| 6 NT | All pass |  |  |
| Opening | lead: 4 |  |  |

South was playing an opening bid of one no-trump showing 15-17 points. However, he was a pathological liar and also liked to play the hand. West stuck in a bid showing two suits of the same colour because she was bored. North transferred to spades and then bid four diamonds to show first round control of the suit. Since it was the Comfy Lounge, South bid the slam.

Now that you are in six spades, how do you make it? West has two suits of the same colour. If she has 4 spades, it is impossible to make this contract, so assume that she has hearts and diamonds. Even if you find the queen of spades, you still have only eleven tricks so you are one short. This means that you will need a squeeze to get your twelfth trick. In order to do a squeeze you need to duck this trick so that somebody will have too many cards in their hand later.

To make this hand, you must also assume that West has at least 5 cards in hearts and diamonds. If this is not the case, East will be able to protect one of the suits and the squeeze will not occur.

Accordingly, you duck the first trick. West now switches to a small heart. You win this with the ace and cross to the diamond ace. Finesse the spade ten since West is likely to be short. Cash the spade king, trump a diamond and play all but one of the spades from dummy ending with the following position:

|  | North 4 |  |
| :---: | :---: | :---: |
|  | $\bigcirc 32$ |  |
| West | $\diamond$ Void | East |
| ${ }^{4}$ Void | \%2 | - Void |
| $\bigcirc$ Q9 |  | $\bigcirc \mathrm{J}$ |
| $\diamond$ KJ | South |  |
| \$ Void | ${ }_{\square}^{4}$ Void | \& KQ |
|  | $\bigcirc \mathrm{K}$ |  |
|  | $\diamond 104$ |  |
|  | \% A |  |

If at this point you play the club to the ace, West will have a painful decision to make. She can either discard a diamond, in which case South would trump a diamond and have the king of hearts as an entry, or she can discard a heart. Then South would play the king of hearts setting up the three making dummy high.

## A Novel Regulatory Region Is Required for Trophoblast-Specific Transcription in Transgenic Mice

Now that I haven't got you attention, I'd like to talk to you about sex. Actually, the truth of the matter is I'm not going to talk to you about sex, but in mentioning it, I've probably got everyone's attention again. I've noticed a large proliferation of attention-grabbing titles have been veering towards our friendly primal activity, and then after misleading the public into reading further, all pretense at any enjoyable pastime just disappears, leaving the reader hanging, so to speak. (My thanks to my sister by the way, who's title I lifted for use as the title of this article. I hope I don't get sued by the journal that published her article, but I'm sure you all knew that a novel regulatory region is required for trophoblast-specific transcription in transgenic mice anyways.) As per usual, I have nothing of value to say, so there's no sense in me misleading any of you. (My apologies to those of you that happen to be really excited by transgenic mice. Oh, and I might as well take this opportunity to say "Hi Sis!" while I'm at it.)

- Is it just me, or does Jock MacKay have three or four cars parked up in his office? (MacKay teaches STAT 231. I know what you're thinking. What the heck is a guy in 4B doing taking 231?! Never you mind.) Every time he tries to relate something taught in class to the real world, he manages to produce a part from the engine of some car produced at the GM plant in either St. Catharines or Oshawa. (Hey Brian. Maybe this guy knows some co-ops that worked in Oshawa.) Anyways, I figure late at night after he and the TAs finish marking the exams they have drag races through the sixth floor.
- The course listing(s) for next year have come out finally. I noticed that instead of a booklet, they're using $5 \times 8$ cue cards this year. I guess the cutbacks have been a bit heavier than expected. I expect we'll have to move all the exams around as well, due to the city wide strike schedule for the $19^{\text {th }}$ of April. Right now, the actual rescheduled date is the $22^{\text {nd }}$, which would be the date any leftover exams would have been written on due to excessive snow, wind, plagues or other acts of god. (Can I say "god" in mathNEWS? Do I have to capitalize the $g$ ? Will mathNEWS now get cancelled because of the controversy I caused?)
- Why did the Iron Warrior get cancelled anyways? And I mean the real reason here, not whatever you read in the Imprint. I have sources that lead me to believe that it was the magic article that was written by the lone engineer on the grassy knoll. I'm still searching for evidence though.

Well, that about wraps things up for the term. As far as I can tell though, there will be a barbecue in one of the new labs, hosted by everybody who's graduating this term. Plenty of food and drink for everyone!

# Post-Teen Angst: The Brain, Located Here 

Television<br>-or-

"Those British comedies really fuck me over, man."
Television is a many-splendoured thing, is it not, dear Average Reader? It can baby-sit, spoon-feed, annoy, agitate, bore, confuse, or even entertain you. Great stuff, iddnit?

But the way people interact with television is moderately frightening. Some folks get downright nasty if you dare to interrupt their favourite show with a phone call. Or shush you if you dare speak while the sacred box is on. Or draw moustaches on the supermodels in the makeup commercials. (Ooooops. That one's mine.)

Point being, this medium should not be the ultimate in one's life. So you miss fifteen minutes of "Friends" to talk with your dottering Auntie Bertha. Big deal. So you get interrupted in your recitation of Star Trek by a conversation. Who cares? Really. Catch it in re-runs. Don't live your life for TV.

Except for maybe "Columbo". Or "Squawk Box". Or "Funky Squad". Aaaaaaghghgh!!! I've got it, too! Nooooooooooo!!! Okay. So I admit that I enjoy some programs. Fine. But there's not enough good ones out there.

We need more stuff of the calibre of the first season of "Mighty Morphin Power Rangers". Pure cheese. Formulaic to a tee. Giant robot battling giant monster. Good guys win. Bad guys get away to cause havoc next week.

I submit to you that TV is mostly tapioca. I am strong enough to admit this, and see television cheese as an art form. Join me, my children. Flip from channel to channel, late at night. Watch "Lost in Space" during the commercials in "Funky Squad".

Search out the cheese. Join me in the quest to find the cheesy TV utopia. It may be an amalgam of "Chips", "The A-Team" and the third season of "Star Trek". It may merely be a sit-com on FOX. Who knows?

What am I really saying here? I don't know. TV is evil. Succumb to it with your eyes closed and you are as good as dead. Embrace it with a cynic's eye, and you may yet survive.

Wah. This is just waaay too deep. Think I'll go and catch the last few minutes of "Dr. Quinn" and let my brain ooze out my toes.

Ian "Son of God Complex" Milligan

## prof QUOTES

"Why are we doing this? Why am I doing this? Why am I teaching mathematics?"

Willard, PMATH 330
"AH HA HA! The revenge of Linear Algebra."
Willard, PMATH 330
"This is your chance to be a pure mathematician, to talk about meaningless things. That's what we do."

Willard, PMATH 330
"In my previous morning class, I convinced them that I'm not an asshole. I'm going to contradict that now."

Willard, PMATH 330
"You have a Saturday exam?!? Oh man. That shouldn't be allowed. I think I had plans."

Willard, PMATH 330
"If that doesn't confuse you, boy I'll try harder."
Vrscay, MATH 138
Student: "It's probably a stupid idea." Prof: "That's okay. I like stupid ideas; not on an exam."

Vrscay, MATH 138
"That's right, the Pat Buchanan algorithm. You start at the top and move right, until you end up at the last one."
I. Munro, CS 134
"Proof by picture. Who does proof by picture? Engineers. . . uh. . . well, I do."
I. Munro, CS 134
"The technical term for this is 'Yuck."'
G.W. Oldford, STAT 231
"The way I make ugly things go away, is to give them names..."
G.W. Oldford, STAT 231

## Now Playing

Here's my final movie review of the term.

## Executive Decision

Kurt Russell (Stargate) and Steven Seagal (Under Siege) play the roles of a Washington bureaucrat and a hard-nosed military man in this entertaining action flick. Although they've had past disagreements, they find themselves working together when a terrorist gains control of a passenger airliner and demands the release of his leader. Seagal puts together a team of specialists, including John Leguizamo ('House of Buggin'), who attempts to board the plane in flight and regain control of the aircraft.

Once on board, they enlist the help of a flight attendant, played by Halle Berry (also starring right now in Race the Sun), as problems develop. Great action scenes, including some amazing flight maneuvers by the various aircraft, make Executive Decision a real thrill to watch. However, I found that some parts of the movie seemed to be included only for the action they added, and while that action was good, it detracted from the flow of the film. Other than that, a great picture with enough excitement to keep you going until exams are over. $\star \star \star \star$

## Warren "The Movie Milkman" Hagey

## Income Tax Add-On Form For University Students

Attach this form to your income tax return

## Procrastination Expenses (Section P)

1. Alcoholic beverages (numbers may appear in scientific notation where necessary)

P1. \# of beers consumed $\qquad$
P2. amount of liquor (oz.) $\qquad$
P3. P1/50 x P2/100 x $\$ 5$ $\qquad$
Math impaired formula (referred herein as the
"Arts formula"):
enter \# of empties on your shelf $\qquad$
2. Public Transit / Taxi

P4. \# of bums you sat next to on public transit $\qquad$
P5. \# of psychotic cab drivers you drove with $\qquad$
P6. Amount of medical bills as a direct result
of P5 $\qquad$
P7. P4x $\$ 10+\mathrm{P} 5 \mathrm{x} \$ 40+\mathrm{P} 6 / 100$ $\qquad$
(Arts formula: $10+20$ )
3. Computer

P8. Hours wasted on the internet $\qquad$
P9. P8 x $\$ 1$ $\qquad$
(Arts formula: Enter 0)
4. Night Club Expenses

P10. Cover charges $\qquad$
P11. \# of times you were kicked out $\qquad$
P12. P10/\$8 + P11x\$10 $\qquad$
(Arts formula: 40-10)
5. I admit it - I'm a lazy bum

P13. \# of hours spent just sitting and staring, doing absolutely nothing __ (maximum 50: if more, get serious help)
P14. P16x\$1 $\qquad$
(Arts formula: Just enter 50)
Total of Section P: P3+P7+P9+P12+P14 $\qquad$
(Artsies: Consult calculator manual for help on the addition of multiple numbers in succession, or try counting on your fingers. Hint: you should have no letters in your answer.)

## Bad Experience Expenses (Section B)

This is for all the money you spent on things that seemed good at the time, but turned out to be bad experiences. The government will reimburse you for wasting valuable time in your youth when you could have been doing something more productive for your country.

1. Bad movies:

$$
\text { B1. \# of bad movies viewed in } 1995
$$

-.-. $x \$ 2=$ $\qquad$
B2. Was one of them Judge Bred? - yes _ no
B3. If yes to B2, then enter B1x1.5. If no, carry total
from B1. from B1.
(Artsies: Ask a math student about the use of decimals)
2. Horrible Restaurant Food (up to $\$ 300$ ):

B4. Does some of your claim pertain to
Food Services? yes - no -.

If yes, you may automatically claim the maximum.
B5. Amount to claim
3. Ex-boyfriend/girlfriend expenses (claim up to $\$ 1000$ for money spent on former lovers of the past year)

B6. Did you date Madonna, Alanis Morissette,
Hugh Grant, or a member of the CSC in 1995?

- yes - no

B7. If yes to B6, your claim has no limit since the government feels very sorry for you. In addition, a bar of extra strength deodorant soap will be mailed to you after your return has been processed, so you can finally remove that slimy feeling.
B8. Amount to claim
4. Dropped courses

B9. Did you drop a shortlist course? - yes - no.
Was it because you watched too much Baywatch?
Then, claim 0 in B11, 'cause that's a lame excuse! B10. \# of courses dropped after
full refund deadline -
B11. B10x $\$ 50$ $\qquad$
(Artsies: Refer to the wad of 50 's that Daddy gave you last month. Count off $1 \$ 50$ bill for every course you dropped, and enter the amount of money you just counted)
5. Bad Prof

B12. \# of bad professors in 1995 -
B13. B12x\$20 $\qquad$
(Artsies: Same formula as B11, only use 20's)
6. Bad Television

In the list below, indicate \# of times you watched each show in 1995. If the number beside any of these shows exceeds 10 , then you're an idiot and may claim nothing here!

| Roseanne - | Toronto Argo games <br> Coach - <br> Rita MacNeil Specials |
| :--- | :--- |
| Murder One - | Ned \& Stacey - |
| Cops - | Starkey \& George - |
| Rikki Lake_- | Anything w/Tori Spelling |

B14. Total \# of shows watched $\$ 2$ $\qquad$
(Arts formula: Enter channel number you're watching right now)
7. Needless Hell (Maximum claim $\$ 100$ )

B15. \# of hours waiting in pit for interviews $\qquad$
B16. \# of hours spent in Registrar's Office $\qquad$
B17. \# of times you had to use Counseling Services as a direct result of experiences with Coop Services
$\mathrm{B} 18 . \mathrm{B} 15 \mathrm{x} \$ 2+\mathrm{B} 16 \mathrm{x} \$ 10+\mathrm{B} 17 \mathrm{x} \$ 15$ $\qquad$
(Arts formula: $4+2$ )
Total of Section B: B3+B5+B8+B11+B13+B14+B18 $\qquad$
Total amount to claim $=$ Total of $B+$ Total of $P$ :
Eric "The King of Procrastination" Moreau

## Batman and Robin

## Setting: Interior of Bat-Mobile

Batman: From the Batscanner, Robin, we can see that those radio waves the Joker is using are coming from an apartment building on East 44th Street, apartment 1605 to be precise.
Robin: Holy accuracy, Batman! Gotham has over 10 million people living in it! How can the Batscanner be that precise?

Batman: Robin, right now catching the Joker is more important than explaining the technology behind the Batscanner.
Robin: I bet you don't even know!
Batman: Robin, I assure you that I do know, but to explain would take much longer that the half-hour time slot the network gives us.

Robin: But, Batman, if we used a half-hour infomercial to market all the cool gadgets like the Batscanner, Wayne Enterprises could take over the \#1 spot in world production of crimefighting equipment! I bet your utility belt alone could make millions!

Batman: Robin, this equipment is very dangerous in evil hands and for that very reason is ... (wailing siren gets louder) ... Robin, I think that highway patrolman wants us to pull over.
Robin: You're actually going to stop for this clown? The Batmobile in first gear can shut down any police cruiser!

Batman: Robin, the Gotham police work very hard and are very successful at a very unrewarding job. They deserve our undying respect and our strict obedience to the law.
Robin: If they're so great, why do we need you to stop villains like the Joker?
Batman: Because, Robin, they are not specially trained to capture incredibly devious criminals.

Robin: You mean incredibly devious freaks.
Batman: Quiet. Here comes the Officer. Let me do the talking.

Cop: Well, well, well, look at what we've got here. A couple of neighbourhood kids out for a joyride. Now boys, exactly what store was closing so soon that you needed to drive 200 mph to get there in time?
Batman: I am Batman, the Caped Crusader, and this is Robin, the Boy Wonder. We are in pursuit of the evil villain, the Joker. At this moment he is conspiring to rob the First Gotham Bank.
Cop: Batman and Robin, huh?
Batman: Yes. I assume you've heard of us?
Cop: Oh buddy, I've heard it all. Superman, Wonder Woman, Johnny Carson, you name it. And you know, the funny thing was that they all thought they could drive faster than the speed limit too. Now, who was it you said you were meeting?

Batman: The Joker. And time is critical!
Cop: The Joker, eh? Well, the only Joker I can see here is you and the guy in the faggy yellow tights to your right.

Robin: Hey!
Batman: Robin, stay calm. I'll reason with him.
Cop: Anyway, whatever costumes you guys choose to wear isn't any of my concern so long as you drive at a reasonable speed. 'Course, if I was getting prepped for Hallowe'en, I wouldn't choose a hat with stupid pointy ears.

Robin: Now you just hold on there a minute, Bucko, I ...
Batman: Robin, let me do the talking.
Robin: I'll wrap his patrol car around his head!

Batman: Robin, violence is not a solution for any problem.
Robin: Then why do we get in a big fight every week?
Cop: If you guys are finished, I'd like to see your license.
Batman: (hands it to him) Here you are, Officer.
Cop: (Looks at it skeptically) Hmmm, no date of birth, no address, just the name "Batman". And this picture doesn't even look like you!

Batman: They took my bad side, Officer.
Cop: Buddy, in that get-up, finding a good side is a herculean task. Anyway, picture or no picture, this is the sorriest excuse for a fake ID I've ever seen!

Batman: Fake! I assure you, Officer, it is legitimate!
Cop: Look, kid, it may work at the beer store but it doesn't work here. I'm going to have to nail you for this one.

Robin: So much for catching the Joker.
Cop: Buddy, you won't be catching any jokers for a while. Hmmmm, fancy car. Do you have the ownership?

Batman: Come on now! You're telling me that Commissioner Gordon never told you about us?

Cop: Commissioner Gordon is a very busy man, kid, and he doesn't have time to listen to every crack-pot wearing funny clothes. 'Course, I should be thankful you're wearing those and not a dress.

Batman: That does it! Robin, hand me the Batstunner.
Cop: You hand him anything, Junior, and you'll eat a chest full of lead. Now both of you, get out slowly and put your hands on the hood.

Robin: You're arresting us for a puny speeding ticket?
Cop: Spanky, this is a kid's show. They don't know the finer points of the law.

Batman: Neither do you.
Cop: Watch it, Pointy-Ears. Now give me that fancy belt.
Batman: What? But, Officer, I assure you that there are no weapons in it!

Cop: And I assure you that I'll handcuff you to my bumper and make you run behind my car unless you give it to me.
(Batman hands him belt. His tights fall down revealing humourous boxer shorts. Robin giggles.)

Batman: Are you happy now, Officer?
Cop: I'd be happier if my wife did that. That's indecent exposure, sonny. I'll have to write you up for that.

Batman: But you told me to give you my belt!
Cop: I didn't tell you to prance around in your gitch. Now both of you, get into the back of the squad car. If there's one thing I can't stand, it's exhibitionists!

TV Voice-Over: Can this be true? Will the miscarriage of justice allow the Joker to get away scot-free? Will Batman and Robin post bail and finally capture the Joker? Will Robin be the target of unsolicited sexual advances by other prison inmates? Tune in tomorrow, same Bat-Time, same Bat-Station!

Graham "Stop or I'll Shoot" Rogers

... Or We'll Take It!

## The Philosopher's Stoned

The True Story

Philosopher's Note - The following text was transcribed from what seemed to be an extremely old manuscript which was found mouldering under a sofa in the Comfy Lounge. I can't speak for its authenticity, though it would seem to explain a few things...
${ }^{1}$ And so it came to pass that mighty GAUSS did look out over the world,
${ }^{2}$ And did say, Let there be a mighty fortress which none may o'erthrow, in which My childer may find a home;
${ }^{3}$ And let that home be in the place called Waterloo, that My childer may study those geometries not of my brother Euclid, and be amazed.
${ }^{4}$ And so it came to pass, and the fortress was called the Emmsee, and yet it was not peopled.
${ }^{5}$ So GAUSS did say, Let a piece of My spirit go forth, and fall upon one who would be my prophet, and he shall gather My people to their new home.
${ }^{6}$ And it came to pass that this occurred, and the prophet was named Stanton, and the spirit of GAUSS was with him,
${ }^{7}$ And he wore its mark, and the colour of that mark was pink, and its form that of a necktie,
${ }^{8}$ And he did gather the childer of GAUSS together as a Faculty, and made them strong.
${ }^{9}$ And the childer of GAUSS rejoiced, and revered the mark of favour conferred upon Stanton, and kept it holy. And so is it kept to this day.
${ }^{10}$ And GAUSS did speak through his prophet, and said,
${ }^{11}$ Let there be a place within My people's home from which shall issue many forms of sustenance, yea, sugar and caffeine as well,
${ }^{12}$ And let there also be a place where My childer may rest and mayhap play cards, and let this place be conveniently close to the source of the goodies.
${ }^{13}$ And this came to pass, and the first of these places was named the Siyendi, and the second the Kawmphilaunj.
${ }^{14}$ And life in the Faculty was good.
${ }^{15}$ Then darkness did approach, and see the Faculty, and saw that it was good. And was annoyed.
${ }^{16}$ So a piece of the darkness did separate itself, and it was called Calum, and in it were the powers of evil.
${ }^{17}$ And Calum did seek out a place within the Emmsee which was close to the Siyendi, yea, and by stealth it did penetrate the Emmsee's walls and did take residence in the place it had found.
${ }^{18}$ And from there it did call unto those who passed, and Calum did tempt them with riches and power,
${ }^{19}$ And fools were taken in by Calum's promises, and did consign their lives and souls to the darkness, and became Calum's Slaves.
${ }^{20}$ And yet Calum's Slaves were small, and the remaining childer of GAUSS paid them little heed, and Calum was annoyed again.
${ }^{21}$ So Calum did summon forth many spirits, and they did claim for themselves a hallway of the Emmsee, and they were named More of Fabled Calum's Fiends.
${ }^{22}$ And these fiends did lay vast networks of cables throughout
the Emmsee, yea, to every floor,
${ }^{23}$ And they did create bodies of plastic and metal, in which to hide themselves and control the minds of those touched by their cables;
${ }^{24}$ And to confound the people of GAUSS, they did give themselves names like unto those of GAUSS's brethren.
${ }^{25}$ And their ploy succeeded, and the ranks of Calum's Slaves swelled.
${ }^{26}$ And GAUSS was sore troubled. And in his brooding, he did give a portion of his power unto a spirit called Zoggo, that there would be a steward over the place called Kawmphilaunj.
${ }^{27}$ And Zoggo rejoiced, and did use his power to draw forth Calum's Slaves and the other childer of GAUSS, and make them his own thralls.
${ }^{28}$ And GAUSS said, Damn, I goofed again.
Matt "So-Krates" Walsh

## Musical Interlude

## To the Tune of "If You're Happy and You Know It"

If you don't know how to do it, wave your hands! (clap, clap)
If you don't know how to do it, wave your hands! (clap, clap) If you don't know how to do it,
And you really have to prove it,
If you don't know how to do it, wave your hands! (clap, clap)
If you must evaluate it, Maple V ! (clap, clap)
If you must evaluate it, Maple V ! (clap, clap)
If you must evaluate it,
And you're really gonna hate it,
If you must evaluate it, Maple V! (clap, clap)
If you don't know how to code it, fake your tests! (x2)
If you don't know how to code it,
And you really must debug it,
If you don't know how to code it, fake your tests!
If you think you're going to flunk it, bribe your prof! (x2)
If you think you're going to flunk it,
And the final, well you've sunk it,
If you think you're going to flunk it, bribe your prof!
If your friend can code it better, cut \& paste! (x2)
If your friend can code it better,
Then you really oughta let'er
If your friend can code it better, cut \& paste.
If you want to graduate, call your friends! (x2)
If you want to graduate,
Then you must cooperate,
If you want to graduate, call your friends!
Piotr Kaminski
Calvin Li
and a little help from Jerry Han

## Contact Lenses - The Saga

As part of my quest to completely change my appearance, I decided to get contact lenses. But it hasn't been a simple task. In fact, it has been such an experience that it has developed into a saga.

It all started a few weeks ago. I had been planning on getting new glasses for over a year. When I finally decided to do something about it, I made the rash decision to get contact lenses instead. My friends have always told me that I look good without my glasses, and contacts would definitely help my new look, so I decided to give them a try.

First of all, I had to get my prescription checked, since I hadn't been to the optometrist in over three years. The guy was from Waterloo, of course, and we chatted a bit about the university and how my co-op work was going. The best part of going to Waterloo is that I got a real prescription, instead of the substandard prescriptions that are given out to the non-Waterloo public. As luck would have it, my prescription hasn't even changed in the last three years, so I am in fact still able to use my old glasses (Wow, I guess I can see with them!).

Then the problems began. The first few days it took me quite a while to get the lenses in, but after a week I had the hang of it. One morning I didn't get up on time (showed up at work an hour and a half late), so I didn't put my contacts in until I was home for lunch. Unfortunately, I' dropped one of them and just couldn't find it no matter how hard I looked. I heard it hit the sink, so I knew it had to be somewhere close, but I sure didn't see it anywhere. I had to get back to work (I couldn't very well
be late again), so I left a note for my housemates saying that I had lost a lens in the bathroom and don't use the sink.

I went downtown right after work, but when I got home I was pleased to find a note from one of my housemates saying that she had found the lens. It was on the jeweled hot water tap (now why didn't I think to look there?), and it had completely dried out. I was a bit worried, but after letting it soak in solution for a few hours, I put them in and everything seemed to be alright.

Trouble struck again a few days later. At night when I took the lens out and was cleaning it, it ripped right in half. Great. Just great. So I called up the optical store the next morning and told them what happened. Luckily my lenses have a thirty day warranty, so I didn't have to pay anything for a replacement, but I did have to wait a whole week until they got it in (what a bummer).

It did eventually come in, though, and I was very happy to get it. As luck would have it, when I got home and was putting them in, I noticed that the other lens had a small tear. Okay, this is just too much. Once again I called and told them that I would need a new lens. They were very pleased to hear that, and told me that I should buy insurance, because any more ripped lenses would be coming out of my wallet. Another week, another lens.

I picked up that lens two weeks ago, and since then everything has gone alright. Hopefully there won't be any more problems, but I'm not counting on it.

Warren "The Blind Milkman" Hagey

## So Long and Thanks for all the Fish

Weeeelllll, it's about time that I wrote another article for mathNEWS. Another article? What has this low-life ever done for us, the average reader asks? Well, if you were alert at all this year (and you happened to be here in the Fall term), you may just remember an article I wrote for the very first mathNEWS of that term. It had something to do with arts electives and derivatives, and lots of other fun stuff like that. If you didn't read it, well, you should! I mean right now! Before you even think about reading any more of this article.

For those of you who know enough to not listen to any of my imperatives - after all, I am only a dumb frosh - very good. For the rest of you, smarten up... and by the way, did you like the article? I only find it fitting that I should write an article in the last mathNEWS of the Winter term - the last of my frosh year. And, well, since my articles have formed such nice bookends to the year, perhaps I should summarize some of my classes and such for you.

## Math 135-Classical Algebra


#### Abstract

Mathematics for Music majors. Areas of study include Mozart, Beethoven, Bach, Chopin, and Debussy. Class participation mandatory. Studies revolve around the mathematics of strange time symbols and modular symphonies.


## Math 137-Calculus 1

Strengthen your vocabulary with this course of entirely fictionalized language. Main concepts include derivatives (and the verb, to differentiate), arclength, and partial fractional decomposition (final exam will include proper pronunciation), as well as the difference between integrals and integers.

## CS 130-Concepts of Computer Programming

Don't know; didn't go. Lab notes required, course notes optional. Main areas of study include how to use a Macintosh, how to use a mouse, how to reset a computer when it hangs.

## Math 136 - Linear Algebra 1

OAC Algebra and Geometry, only more theoretical. ADTs for vectors, and high-level programming and theory of number systems, fields, and vector spaces. Some thought required.

## Math 138-Calculus 2

Continuation of Calculus 1, with more vocabulary fortification. Main areas include divergence, convergence, and (again?) arclength. Also, some guy named Taylor who liked to make math hard.

## CS 134 - Principles of Computer Science

CS 130 with pointers.
Well, there you have it; a summary of a year's worth of math courses for math frosh. I hope that all of you frosh have enjoyed it as much as I have and if you didn't, wellll, tough. I wish you all best of luck in your work terms, or Summers off, or psycho-Summers, or whatever you have to have luck in.

I would like to conclude with a proof for Fermat's Last Theorem. Astonishing proof, not enough room in column.

## I'll Have The Special

## ... And soon, the suffering will end

Well, hello folks. We have reached the $6^{\text {th }}$ and final issue for this term, and the end of my first joy-ride as an co-editor. Soon, I will be heading back to the finer pastures of Durham Region to soak up some of the wonderful sun and surf. For the final column

1. In 1995-96, I was crowned the "King of..."
(a) Disco.
(b) Simpsons quotes.
(c) Real Analysis tutorials.
2. I like to go the Bombshelter because
(a) I have nothing better to do with my time.
(b) all my friends go there.
(c) everyone has to make at least one major investment in their lifetime.

## 3. I realized this term that

(a) editing mathNEWS is a very demanding job.
(b) I can't budget my time very well.
(c) I need to learn more disco moves.
4. The major reason why I only got 5 submissions for the first 3 squizzes last term was because
(a) I made them too hard.
(b) people were busy and thus couldn't submit.
(c) nobody likes you, Brian.

## INPUTOutput

Short column this issue since there are no new puzzles left in this series. Hope you liked it.

The five challengers last issue were all beaten once again. Ian Facey got 4 points, The Church of Latter-Day Sporks got 5 points, and Laurel van Dommelen triumphs again with a perfect score of 20 !
21) $\mathrm{EQUATE}=15, \mathrm{CABOOSE}=11$. State the total points on the Scrabble tiles needed to spell these words.
22) TRIVIAL $=6$, PURSUIT $=4$. State the position of the input in an alphabetical list of the inputs. (I've never seen Yahtzee take 7 hours!)
23) CLAMP $=\mathrm{A}$, HEARD $=\mathrm{H}$. State the letter in the input that cannot be deleted to form a new word. (This one nearly scored people some bonus points. One suggested alternative was "State the letter following a letter that can be deleted to form a new word." but given the intended rule, you can see that this is ambiguous. Another was "State the alphabetically last letter in the input." However, POUT breaks this rule.)
24) PICTURE $=23$, DRINK $=12$. State the number assigned to the clue in the Across section of the Cryptic (for that issue) that uses this word.
25) YELPERS $=$ R, ENZYMES $=$ M. State the letter that you can transdelete to get the name of one of the Seven Dwarfs. (A transdeletion involves removing one letter and scrambling what you have left.)

See you next term!
this term, I thought I would breakway from my usual pointless rants. Today, we have a pointless quiz to test your knowledge of the past term. Some is based on current events, but most of it revolves around me and my past columns.

## 5. Mighty Morphin Power Rangers was a bust at the box office last year because

(a) it was not marketed very well.
(b) there was not enough nudity.
(c) it's kind of obvious, isn't it?
6. To improve the Student Life Centre, we should
(a) rename it to the "Campus Centre".
(b) have more bank machines.
(c) have more cockfights.
7. Why am I so miserable?
(a) I'm having trouble with school.
(b) I'm lonely and depressed.
(c) It's called life.
8. The City of Waterloo
(a) is poorly designed.
(b) does not know how to maintain paved roads.
(c) likes to pile snow on my driveway.
9. Which of the following is true?
(a) Nice guys finish last.
(b) Brian's life sucks.
(c) Happiness is something that happens to other people.
10. Beer is...
(a) my friend.
(b) somewhat refreshing.
(c) the largest single investment I make during the school year.

Well, that's it! I'm outta here! See ya in the Fall!
Brian "Calculus Cowboy" Fox

## Game Answers

## Cryptogram

"Go to the fishbowl in the middle of the second floor of Engineering Lecture Hall. What would you see if there was an alphabet in this message?" Those readers who follow my pussie columns would recognise the keyed slphsbet, with keyword CANDLES.

## Crash Course

1. 3D 2. 21 3. 5A 4. 4L 8. 1L 6. 1A 7. 2S 8. 2T 9. 3B 10. 4A 11. 5R

## Cryptarithm

SKYNEUTRAL
Knight Tour Crypt
stop.' " - Lewir Carroll, Through the Looking Glass

## Like, Oh Wow...

Hello there. For those of you who don't know me, I'm a fourthyear student here who used to write for mathNEWS fairly regularly. I started working for mathNEWS in my first year here, but in the last year or two my participation in mathNEWS has stopped as other interests have taken up my time (FASS, goofing off, being a fourth-year PM student). Now I find that this may be the last issue of mathNEWS that I ever have a chance to contribute to, so I've decided it's time to write one last article. Just to set the record straight, as it were.
You see, it's about Zoggo. I have the modest claim to fame that I am one of the three original acolytes of Zoggo, and I wrote some of the articles which brought Zoggo to fame and glory. But now the whole Zoggo thing is making me a little, well, nervous. I see other people writing Zoggo articles... people talking about Zoggo in the Comphy Lounge constantly...they gave him a part in the last FASS show, for Pete's sake! (I can use that phrase too, can't I?) This is getting a little out of hand, people! I mean, those Zoggo article I wrote were a joke! I was just desperate for an idea for that issue, and that's what came out! It wasn't supposed to be serious!!!
At this point the author looks around nervously, as if expecting killer mutant things which don't look like daisies to attack him at any time. He gets that look a lot these days.
This Zoggo worship has got to stop! You don't understand!!! It's too powerful now, it's taken on a life of it's own, before you know it there will be cults and priests and sacrifices of turnips at 3:04 in the afternoon and great yellow daisies will spring up on campus and they SHALL emerge from the CORNERS yet again FOR I HAVE FORSEEN IT...

Another pause, in which the author makes a visible effort to calm himself.
I'm sorry, I have a cold. Anyway, I'd like to conclude by saying that, hypothetically speaking, if it turns out that twenty years from now Zoggo has replaced Pounce the Lion as the university mascot and is running for mayor and has a stranglehold on the K-W edible toothpick market, then I apologize in advance. But that's just a hypothetical scenario of course.
The author completes his article, and steps away from the keyboard wistfully. He then logs off, and walks away thoughtfully, into the sunset as it were. If he happens to partake of some peculiar plaid-coloured pharmaceuticals on his way out, it is lost in the blinding flash of the lightning bolt which turns him into a small, sad pile of sawdust.

## Good Luck on Your Finals!

## Knight Clue

If you count the letters given for the message, and count the letters in the grid, you'll notice that you come up short. Use 'BEGIN', 'STOP' and 'KING' as words in the message.

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## gridCOMMENTS

Greetings, Gridders and others!
I guess I've been making the Gridwords pretty difficult recently. There were only four submissions to the pair of them. For the Cryptic, I got submissions from The Church of Latter-Day Sporks ( 47 incorrect squares), The Unemployed (sorry to hear it, 18 squares), and from Mike Swart who is our winner with 5 incorrect squares. Here are the explanations: Symbols xxx + xxx charade $\mathrm{xxx} \mathrm{x}^{*}$ anagram $\mathrm{xx}(\mathrm{xxx}) \mathrm{xx}$ container xx . abbreviation "xxx" homophone xxxx reversal LETTERS KEPT IN CAPS, letters discarded in lower case. <comments in angle brackets> Across 1. STATUe + mysteriouS 4. S(PRI(Tonic)ZE)R. <senior> 10. RAINDROPS* 11. "SOLES" <souls = spirits> 12. WAiTER 13. "UPRAISING" <appraising> 14. applieS + TRIPLING 17. CANinES <sugar canes, candy canes> 18. FUSs.ES <south $=$ point-> 20. MAEL* + STROM* 23. EGOM(A)NIAC* 25. sAMPLE - Straight 26. DEAr.TH <rain> 27. CLUB + HOUSE <club sandwich, house dressing> 28. MISSOURI <stress shift of misery> 29. PRIEST* <Who'll marry men and women? A priest!> Down 1. Sun + CRAWLS 2. A(VIA)TOR <a crag $=$ a tor> 3. UNDER <tiger/tigress, therefore under/undress> 5. POSER* 6. IN + S. + TIN + CT. + disaSters <son, court> 7. Z(ILL)ION 8. RESIGNS* 9. BOTULISM* <IBM/Lotus!!> 15. PISTACHIO* <Since someone asked, pachisi is a game. The adapted commercial version is Sorry!> 16. GLEE + CLUB 18. FREEDOM* 19. "SLO" + SNAG ${ }^{r}$ <slow, \&lit.> 21. RAPTURE <= transport> 22. MA(EWE)ST <ewe $=$ sheep breeder, Mae West is a kind of life jacket.> 24. IN CUR 25. crAB HORs
For the conventional, we received just one submission, which was incomplete, but Mike Swart wins because he submitted an entry. More people should take his attitude, if only to see their names (or pseudonyms) in print. Way to go, Mike! You win $\$ 3$ in gift certificates for the Right Angle Café. Spend it all in one place. Here are the solutions. Across 1. CARRYOn 4. hatchback 10. PaLlbearer 11. REASOn 12. LET FLy 13. wHIRLYBIRD <Flying men...> 14. CLOUDBURSt 17. mOHAWK 18. POLLUx <You picked the wrong one, Mike!> 20. BLOW-BY-BLOw 23. dEPARTMENT <Fire, for...> 25. tURNIP 26. aDMIRE 27. INACCURATe 28. aDORATION 29. AIRPORt Down 1. CAPS LOCk 2. RELATIOn 3. cYMBAL <...a crash> 5. THEORy 6. cHERRYBOMB 7. cATALINA 8. KLONDIKe 9. fLASHBULB <Shot light> 15. aDJUSTMENT 16. SHORTFALl 18. sPLENDID <Agnes Nutter would have been (was?) proud of your answer, Mike.> 19. sLEAZIER 21. BANKRUPt 22. cOMPUTER 24. mEXICO <... borders away> 25. URCHIn <You'd have to see the game, those of you who don't get this.>

I hope to see you all (submitting) next fall.
Gridby


## Away From UW This Summer?

Get mathNEWS on the World Wide Web at http://wwr.undergrad.math.uwaterloo.ca/" mathnews

## artsNEWSquiz \# 6

D'oh! Finals Are Upon Us!

Hiya, folks! Here are the solutions to the last squiz: Song Lyrics: 1) The Thunder Rolls, Garth Brooks; 2) Buddy Holly, Weezer; 3) Boy in the Bubble, Paul Simon; 4) Bad Habit, Offspring; 5) Boys Don’t Cry, The Cure; HHGTTG: 1) Trillian; 2) fjords; 3) Genuine People Personalities; 4) Zaphod Beeblebrox; 5) "mostly harmless"; TV Commercials: 1) The Olde Hyde House; 2) The Duke of Doubt; 3) 546-7777; 4) Doug Gilmour; 5) Transformers (more than meets the eye!); Monty Python: 1) Graham, Hamrag, or any anagram of that would be acceptable; Bonus: (The Mating of the Wersh, Two Netlemeng of Verona, Twelfth Thing, The Chamrent of Venice, Thamel, Ring Kichard the Thrid (an anagram and a spoonerism!); 2) fjords, of course!; 3) Kemil Attaturk; 4) "Smoking can ruin your health"; 5) Scene 24.

We got a total of three submissions, this time. Here are the people who submitted, with their scores in parentheses: Knights of Ars Magica (13); Eoghan MacDonald (16); and the winner is ... Church of Latter-Day Sporks (26)!!!!!!!! Not bad at all! You can pick up your squizprize in the MathSoc office.

This issue, we have something a little different to spring upon you folks. This is an April Fool issue (yeah, yeah, we know we're fools). We have for the traditional (read: termly) artsNEWSquiz.

## Song Lyrics

Name the song or the artist for 2 points

1. You'll have to excuse me, I'm not at my best

I've been gone for a month, I've been drunk since I left
These so-called vacations will soon be my death
I'm so sick from the drink, I need home for a rest
2. I believe my humour's wearing thin

And change is what I believe in
3. On the Gong Show, we won't get gonged

We're the Beastie Boys, not Cheech and Chong
4. Millions of peaches, peaches for me

Millions of peaches, peaches for free

## Sports

1. Upon what surface do ice-skaters skate?
2. What is the ball used in baseball called?
3. In basketball, how many points does a "three-pointer" score?
4. What sport is a hockey stick used for?
5. How far apart are the yard-lines on a football field?

## Potpourri

1. What's the first name of Queen Elisabeth II?
2. Why are there Interstate highways in Hawaii?
3. What was the profession of the Pied Piper of Hamelin?
4. When was the Magna Carta of 1215 written?
5. Why?

Well, we don't care if you submit because WE WON'T BE HERE!!!!!!!

Ian "Son of God Complex" Milligan
Stuart "Harry Organs" Pollock

Last weekend, MathSoc ran "The Game", and I wrote all the puzzles. It was a real learning experience. I learned what not to do.
I learned not to make the puzzles so convoluted. I learned not to underestimate how long the teams will take to solve convoluted puzzles. I learned that just because you have checked a puzzle for errors, and found none, does not imply that there were no errors to find. I learned that there is no such thing as an instruction so simple that it cannot be misunderstood.

Helping me with the Game were Mark Thornton and Jared Riley. On the day of the event, Mark was involved in the Magic Tournament until about 12:45 and Jared arrived at about the same time. I had most of the photocopies of the puzzle pages complete, but they were not put into their proper packages because I had forgotten to reset my answering machine message before I left that morning at 10:00. This will be funny later, I promise. For this reason I was running late, and so when the first team, the Chemistry Club, arrived promptly at 1:00 as scheduled, we were still stuffing envelopes. We hadn't had time to photocopy the rules for distribution, so Jared stood on the big chair in the MathSoc office (yes, the one with the wheel that falls out) and read them aloud. At about 1:15 we sent our first team out, The Team of Two.

Spaced ten minutes apart, the other teams were given their first packages and sent on their way. The first package contained a page with a cryptogram with the heading "This is a simple cipher substitution." (This puzzle can be found on the back page.) They also received a strip of adding machine tape that had been ripped to pieces and a cross sums puzzle. The idea was that solving the crypt would tell them where to pick up their next package. However, the Mammoth Studs tried to solve the strip as if it was a cryptogram (which it wasn't) and wasted two hours.

Once at the first station, they received a cassette that contained a Morse Code message and about ten songs (which they were destined not to use). There was also a half-sheet of paper with an untitled puzzle (also found on our back page) that they would use later. This sent them to the East Campus Hall parking lot, where our very own D.K. Gardiner was sent to wait. For three hours. He took it well, though. These were apparently the last puzzles that would go smoothly.

To complete the first four sets of puzzles required several hints and six hours. I thought that the entire list of eight puzzles would take four at the outside. After the fourth puzzle started to take forever to complete, we decided that we had to cut it short. The Chemistry Club team had already solved the fourth puzzle so we told them that instead of solving the fifth puzzle, getting a location and going there, come to MathSoc instead. They solved some puzzles and put them together to get a phone number. My phone number, with the new answering machine message. Except that it broke. The Chem Club phoned the clue hotline saying, "Is your guy there snoozing or what?" I tried the number myself after giving them the contents of the message, and it just rang and rang, stuttered, rang, rang, and hung me up. Thank you, Bell Canada. This meant that I now had to hover over the other two teams and make sure that they didn't call the number that the puzzles told them to call.

Meanwhile, the other two teams were heading over to the PAS at about the same time, having solved the same puzzle nearly simultaneously. The Mammoth Studs apparently approached the building from its good side because they got in, while the Team of Two found the doors locked. They phoned in and I told them to come to MathSoc and pick up the pages they were supposed to get in the PAS which were locked in with Mark. (I hope he realizes that he should leave by now.)

Despite all the mess-ups and confusion, the teams all told me that they had fun. Here are the final results.

The Team of Two took 7 hours 41 minutes to complete the course, mainly because they persevered and actually solved the cross sums while the other two teams took penalties for giveaway solutions (once again proving that I had no idea how long these puzzles would take to solve). I have to congratulate them for their work.

The Mammoth Studs took very nearly 7 hours to finish, and probably would have won if they hadn't gotten off to a bad start. If they had solved the cryptogram first, they would have knocked 1 h 55 m from their time. Good work!

Our winners were the Chemistry Club, who finished in 6 hours 27 minutes. They win a $\$ 100$ dinner at Time Square for their trouble. Congratulations!

Since we had to cut the competition short, there were quite a few puzzles that we never used. Two of them also appear on the back page: a Knight's Tour Crypt and a Reverse Word Search.

A knight in chess moves from one corner of a $2 \times 3$ rectangle of squares to the opposite corner. Start on 'BEGIN' and make knight's moves around the board, using each letter and symbol once, finishing on 'stop'. The word lengths that you have to cover are given. For an added hint, look elsewhere in this issue for a clue masquerading as filler.

I find ordinary word searches to be boring. This one is not. Solve this like a regular word search, but you have to fill in the missing letters yourself. All the blank squares will be filled in.

Despite the fact that this is technically our April Fool's issue, there are no dirty tricks in these puzzles. Maybe a clean trick or two...

And as a final footnote to this event, as I was leaving the building to go home that night, I saw this:

The Game

$$
\begin{gathered}
4,74, \alpha, 75 \quad 8,9 \quad \tau, 2 \lambda, \epsilon, 8,15,18, \delta \\
6,8, \mu, 53,7, \gamma 90,53,16 \mathrm{j}, 92,10 \\
\delta, 8,7, \tau 991,28,6 \\
15,75,91,75 \quad 73 \delta, \rho, 53,23, \epsilon \\
\text { "You do know what this is, don't you my dear } \\
\text { Watson?" }
\end{gathered}
$$

Now, folks, I didn't write this. I had nothing to do with it, despite the fact that it seems to have appeared the same day as my Game. I guess what goes around comes around. And if anyone wants to team up come this summer, I've got a reference collection that'll kick butt. ; )

## Game Pieces

## Cryptogram

YS IS IZW XCHTSMD CE IZW LCVVDW SX IZW HWUSEV XDSSG CE WEYCEWWGCEY DWUIJGW ZRDD. MZRI MSJDV PSJ HWW CX IZWGW MRH RE RDBZRTWI CE IZCH LWHHRYW?

## Crash Course

Ex. AWARD GRAPH CHIMP 5E awarE grapE chime

1. CANDY RATIO HARES
2. DEALS ROOTS ELDER
3. AREN'T MEDIC ENEMY
4. STACK DAIRY FIEND
5. BATHE MOUSY ROOKS
6. TIRED SCORN BUNTS
7. ACHES TEARS AFTER
8. SERUM EXUDE OUTER
9. SANER AMPLE DENTS
10. CHEST TODDY SQUID
11. FLOOD CHAIN SCOUT

## Cryptarithm

......................
ERASURE)RATTLESNAKE
........-ERASURE
..........nSATNTTN
........-Yataneee
.......... YKASYKLA
.........-KLKYYYLT
............ YTRLLSYK
...........-YNLSYARS
............. YALTKUKE
............-YATANEEE
...............YRASRS

0123456789
Knight Tour Crypt

| Sesit I |  |  | L | N | R | T |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T | E | I | G | N | E | A | A |
| I | G | A | H | Y | G | G | H |
| B | T | D | N | ${ }_{\text {king }}$ | 0 | V | N |
| 0 | A | E | N | D | D | E | 0 |
| I | Y | C | S | T | H | N | H |
| U | M | T | L | N | T | 0 | E |
|  | L | 0 | E | T | E | E |  |

Word lengths : "5 23 9," 344 7, "3 22434233,4 4."

## Reverse Word Search

| Y |  |  |  | L |  |  |  | J |  |  |  | 'TWAS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | C | C |  |  |  | L | L |  |  | E |  | BRILLIG <br> AND THE |
| E |  |  |  |  |  | M | U | R |  |  |  | SLITHY |
| J |  |  |  |  |  | W |  |  |  |  | T | TOVES |
|  |  | B | I |  |  | 0 |  | S |  |  | C | AND GIMBLE |
|  | S | C |  | I |  |  | G | N | I | K |  | IN THE WABE |
| J | R | 0 | H | D | H |  |  |  |  |  |  | WERE THE |
|  | E |  |  | G |  | M | M |  | V |  |  | BOROGOVES |
|  |  | T |  |  | D |  |  | Y |  |  | H | OUTGRABE |
| K |  | G | R |  |  |  |  |  | R |  |  | BEWARE THE |
|  |  |  | A |  |  | A | G |  | P | L | A | JABBERWOC <br> MY SON |
|  | B |  | W |  |  |  |  |  |  |  |  | THE JAWS |
| R |  |  |  | H | N | H |  |  |  | W | T | THAT BITE |
| E |  |  |  |  |  | S | L | D | L | S |  | THAT CATCH |
| T |  | H | Y | N | R |  |  | A |  | E | E | (beware the) JUBJUB |
|  |  |  | S |  | M | 0 | 0 |  |  |  | E | SHUN THE |
|  |  |  | I | H | N |  |  |  | M | I | A | FRUMIOUS |
|  | U | F | U |  | S | D |  | K |  |  |  | BANDERSNATCH <br> HE TOOK |
|  | M |  | X |  |  |  | H | Q |  |  |  | HIS VORPAL |
| V | T | H |  |  |  | I | T |  | U | A | 0 | SWORD |
|  |  |  |  |  | H |  |  | G | H |  | T | LONG TIME |
|  |  |  |  |  | M | I | G |  |  |  | E | (the) MANXOME |
| N | E |  | D |  |  | S |  |  | 0 |  | 0 | SOUGHT |
|  |  |  |  |  |  |  |  |  |  |  |  | SO RESTED HE <br> BY THE TUMTUM <br> TREE AND <br> STOOD <br> AWHILE <br> IN THOUGHT |



