SAC is Back

Yup, the Students Advising Co-op has started yet another term of fun-filled co-op stuff. By the time this is actually printed, we will have had our first (hopefully successful) meeting and have made plans for what will happen this term.

For those of you who don't already know, SAC is the on-campus group that relays information between co-op administration and the students. We also plan activities to educate students about existing areas of co-op as well as activities for students during work-terms (such as WatPubs).

The bad news: we can't do our job unless you, the students, tell us what you want to see, and/or come out and help us do these things.

For more information on us, or to send *us* some information, check out our newsgroup uw.coop.sac, or mail us at sac@undergrad.math, fedsac@watserv1, or akgreen@feds.

And check out our web page:

http://watserv1.uwaterloo.ca/~fedsac/

If *none* of these is an option, come to our meetings Tuesdays @ 5:30, NH1029/1030 (the Employer Lounge).

Amy Green
SAC Chairperson, Winter 97

Report from the PMAMC&OC

We're off to a successful start, with the following executive having been elected:

President:	Russell O'Connor
Vice-President:	Nikita Borisov
Treasurer/Secretary:	Duane Mattos

The first thing this new administration is doing is answering the numerous requests for new T-shirts with a question: what would you like to see on them? We are holding a contest for a new design; submissions will be accepted until January 27, 1997, at which point we will make an arbitrary decision. The winner gets a *free T-shirt* and, more importantly, eternal fame. If you have a logo for us, please contact one of the exec.

And now, news from the prime number department. The previous candidate for *Largest Prime*, $2^{1257787} - 1$, has been displaced! On November 13, 1996, the Great Internet Mersenne Prime Search (**GIMPS**) yielded the new champion, $2^{1398269} - 1$. For the curious ones who want to know what it looks like, you'll be able to find its full expansion in the following bases on the walls of our office: 2, 10, 11, 16, and $2^{1398269} - 1$.

Finally, if you have not become a member of the club yet, you should join immediately! The benefits are uncountable (and yet can all be expressed in the English language!), but they include cheaper pop and juice prices — 35 and 40 cents respectively versus the non-member prices of 50 and 60 cents, the use of our extensive library, our not-so-extensive couch space, and general social recognition.

P.S. Remember, it's written $(\{PM, AM, C\&O\}, C)$, but pronounced P-M-C!

Nikita Borisov

VPAS Jive

Hi. I'm Chris.

You know, it's really tempting to leave it like that. Hmmm... nah! Then I couldn't rant and rave and all that! Ok... picture this: I'm sitting in my office, shit all over my desk (BTW, Justyna's desk is clean... humm...), listening to my ABBA CD, smoking a cigarette, and drinking 50. Ok, ok. So I lied about the last two. I would never drink 50; it's swill and it makes you go bald, right Brian? I'm sure he just put a little nasty comment there, but it's not my fault; we aren't working him hard enough. Ok. There. A little better.

Hi. I'm Chris Buchanan, and I'm your VPAS this term. What does that mean you ask. How can I become more aware? How do I reach that little itchy spot in the back of my ear? Well... talk to a doctor about that last one (I'd give you an answer, but I don't want to be charged). VPAS means Vice-President, Activities and Services (isn't that such a cool title? I mean, look! It's so long). What do I do? Well... I'm supposed to make sure everything is running smoothly. Sort of. I really don't have a job description, so I basically do what I want (now, if they'd only pay me for it).

Anyway, a few things. We still have office hours available. I hear you people whining when the office isn't open, so come out and help keep it open. It's really great fun, and it does help a lot of people.

Let's see, what else. Oh, yeah. Some people put stuff in lockers without signing them out, and got their locks cut. The stuff is being stored, so come by the office to get it back (otherwise we're going to burn it. Yeah, yeah... Burn, baby, burn!).

We always need people to volunteer for things, so please drop by and let us know what you'd like to do. Also, nominations for class rep positions are open until... ahh... huumm... somewhere on my desk is the answer... there it is. Wednesday (the one after you read this). Class Reps sit on MathSoc Council and represent their classes on various issues and act as a line of communication between Council and the students. The best way to make sure that your voice is heard is come out and say something.

Ok, other things. Nominations for Orientation Director for '97 are open from the 20th to the 31st (I know it's a bit early, but I'd thought I'd mention it anyway). Speaking of nominations, they close today (Friday) for FEDS Exec positions, and FEDS Student's Council and Undergrad Math and At-Large Senate seats, but you already knew that because you all read it in the Imprint, right? Good. Ok. There's probably more that I should say, but I'd like to get this in. It's already late, and Brian looked like he was going to lose it. So I'm gone. See you people around.

Chris Buchanan
VPAS Winter '97

Distinguished Teacher Awards

To nominate your outstanding professor, demonstrator, or teaching assistant for the Distinguished Teacher Award, contact TRACE, MC 4055, x3132. Further information is available at http://www.adm.uwaterloo.ca/infotrac.

The nomination deadline is Friday, February 7.

University of Waterloo Faculty of Mathematics

Undergraduate Research Awards 1997/98

The Faculty of Mathematics invites applications for 13 Undergraduate Research Awards to be held during the Spring 97, Fall 97 or Winter 98 terms. Ten of these awards will be available to women and men with funding from the Academic Development Fund. Three awards will be designated for women with support from the Graduate Incentive Fund.

The Faculty will provide $900 per month per student from these funds on the condition that the amount is at least matched by research funds held by the sponsoring faculty member. Criteria for the awards will include the strength of the student's academic record, the evaluation of the student, and the research proposal.

Students interested in applying for a URA should indicate their interest to a faculty member. Applications will be submitted by faculty members, and will require an evaluation by a faculty member who knows the student's work as well as a recommendation from the Department Chair.

Applications should be submitted to the Office of the Dean by January 31, 1997, and will be reviewed by a selection committee composed of the Dean, and the Associate Deans of Undergraduate Studies, External Relations, and Graduate Studies and Research. Funds not allocated in the first round will be available for awards later in the year.

For more information, please contact Shirley Thomson in the Dean's Office.

Shirley Thomson
Executive Assistant, Faculty of Mathematics
sjthomso@jeeves.uwaterloo.ca

Prez Sez

Hi students! As some of you may or may not know, I am the new president of the Math Society for this term and the Fall term. We here at MathSoc have an exciting term ahead. Yeah I know, most of you think nothing related to MathSoc is ever exciting, but just take my word for it for now.

One of the biggest things is the referendum to increase the MathSoc student fee so that we can afford to fund *math*NEWS. This is something you'll hear more about in articles later on in this issue. We will be running some of your old favourite events (Math pub night) and some new events that have just been started recently (the MathSoc big-screen movie nights that were introduced last term).

All of us here in the office are still just getting into things but we welcome any comments or suggestions that any of you may have. You are always welcome to come and see us in the exec office (MC 3035/3039), call us at x6515 or email me at my brand new email address: *pres@mathsoc.uwaterloo.ca*. We're here to help.

André Cousineau
President, MathSoc

*look*AHEAD

*math*NEWS	
January 17	Issue #1 hits the stands
February 3	Issue #2 production night 6:30pm, MathSoc (MC 3038)
February 7	Issue #2 rams the stands
Math Faculty	
January 17	Course add deadline
January 21	Deadline to drop for 100% refund
January 31	Course drop deadline
Referendum	
January 22	Yes vs. No debate Comfy Lounge @ 12:30pm
January 23,24	Referendum voting days
MEF	
January 13-24	MEF Refund period Office hours posted @ MC 4046
January 27-31	Nomination period for funding council
February 28	Deadline for funding submissions
Co-op	
January 28	Employer Evaluations Due
Miscellaneous	
January 18	Team *math*NEWS leaves for week-long trade mission
January 19	Team *math*NEWS returns early as there is obviously no money for trip
January 23	Rēson CD Release Party At the Bomber... be there!
January 25	Cālculus Cowboy CD Release Party @ MC 5111... bring beer!
January 26	Super Bowl XXXI on Fox Green Bay vs. New England (Take the Patriots and the points.)

Yes, we are on the Web.

If you're ever wandering the Web, drop in on *math*NEWS at http://www.undergrad.math.uwaterloo.ca/~mathnews.

*prof*QUOTES

"It was a pleasure having you; I hope it was a pleasure being had."

Furino, C&O 350 (F96)

"The difference between second and third year work is in second year you're not allowed to use the word 'obviously'."

Jackson, MATH 235

" 'Let' is one of the most misused words in English. For example, politicians use it like 'Let there be no tax'. "

Jackson, MATH 235

"So that was the end of the fun part. Any questions about fun?"

Jackson, MATH 235

"Someone famous said while they were developing linear algebra: 'These new-fangled matrices will never last. They're just a fad.' Well, how wrong can you be?"

Jackson, MATH 235

"One fish can't do it on its own; it has to have a buddy."

Campbell, AM 451

"Does it really multiply numbers correctly or is it a Pentium?"

Shallit, CS 360

*Remember to submit prof*QUOTES *by either stuffing them in the* BLACK BOX *or emailing them to* mathnews@undergrad.math

Tentative *math*NEWS schedule

Barring any natural disasters...

Because of the financial status of the Society, the MathSoc executive and I have tentatively scheduled only **5** issues for the term. This might upset some, but it's the best we can do. Here's the tentative schedule for Winter 1997...
(All dates are release dates, with the Monday before being Production night when articles are due.):

Issue #2: Friday, February 7
Issue #3: Friday, February 28
Issue #4: Friday, March 21
Issue #5: Friday, April 4

As you can tell, most issues will be 3 weeks apart rather than the usual 2 weeks. Sorry, that can't be helped.

Brian "Calculus Cowboy" Fox
Editor, Winter 97

If you are graduating this term – READ THIS!

Welcome back everyone! We have a very busy term ahead of us and the Math Grad Committee needs a lot of help. We are asking anyone who wants to donate their time and creative energy to drop by the MGC office (MC 3029) or drop us email at mgc@undergrad.math.

But first, there are a few **important things to know**:

1. **Grad blurbs** for the yearbook must be received by the MGC by Wednesday, January 22nd. You must have your grad blurb mailed to the MGC by this date or it will not appear in the yearbook. Details and suggestions for your yearbook blurb can be found on the MGC homepage: http://www.undergrad.math.uwaterloo.ca/~mgc.

2. **Class composites** have been prepared by Jostens and are available for your viewing on the 3rd floor in the glass display cases. Please take the time to check that your name is spelled correctly. Note that it is **not** possible to change the photo.

3. **Yearbooks, yearbook bricks, and grad rings** will be on sale next week (Jan. 20–24) on the third floor of MC. For those of you who were not here last term, yearbook bricks are spaces in the yearbook covers where you can put whatever you want. Yearbooks will cost $35.

There is lots going on this term, including our First Night Out, yearbook design and layout, pizza days, and, of course, the Grad Ball. If you can spare a bit of time, please drop by the office. Keep your eyes open for important events and announcements. (You wouldn't want to forget the deadline for submitting your Intent to Graduate Form, would you?)

That's all for now. Good luck with your *last* school term!

Laura Williams & André Chang

*ultra*CLASSIFIEDS

Okay... Six dollars, but only if it's hard.

Wanted!
If you've always wanted to get into the entertainment and/or publishing industry but weren't sure how to go about it, well, we have an opportunity for you! If you have $500 million just lying around doing nothing, please contact Ron at Marven Comix, Inc. and we'll do lunch.

Get your mind out of the gutter!

And while you're out, get me a beer...

Endowment Fund has money to spend

The UW Student Life Endowment Fund has spent over $240,000 on student life projects over the past four years. Some funded projects include the following:

- new aerobic and weight equipment for the PAC

- funding for development of student services, such as PALS and Students advising Co-op

Now the Endowment Fund is ready to disburse money again. Any recognized undergraduate student organization can submit a proposal for this funding. All projects must aim to improve student life of campus.

The submission deadline is **Friday, February 7 at 4:30 p.m.** Copies of submission forms may be picked up at the Federation of Students Office (in the Student Life Centre). If you have any questions, please call Diana Bumstead at 888-4042, Monday to Wednesday between 2:30 and 4:30 p.m.

MathSoc Fee Statement Referendum

Hi again, folks. It's almost time for the second "installment" of the MathSoc Fee Statement Referendum.

For those of you who don't know what the Referendum is about, I suggest you read the articles (both approved by me) written by Christina Norman and Amit Dubey.

The ballots read:

"Yes, I'm in favour of adding $3.00 to the MathSoc fee on the fee statements for all Math students for the sole purpose of funding *math*NEWS effective starting in the Spring 1997 term."

"No, I'm not in favour of such an addition."

The students eligible to vote in the referendum this term are Math students who are registered as full-time students in the Winter 1997 term who did not vote in the Fall term. This includes: a) students who were on work term in the Fall and are registered full-time this term; b) people who were registered for full-time studies in Math in the Fall, and are also registered in the Winter, who did not vote in the Fall.

The Referendum will be held on January 23rd and 24th on the third floor of the Math and Computing building (MC). There will also be a pre-Referendum debate held on Wednesday, January 22 in the Math Comfy Lounge (MC 3001).

I will do my best to answer any further questions mailed to me at the address below.

Stuart Pollock
MathSoc Referendum CRO
scepollo@undergrad.math.uwaterloo.ca

The Philosopher's Stoned
Procrastination

Good morning, ladies and gentlemen of the Mathie persuasion, and welcome to another term of whatever. (In my case, that "whatever" is a work term in the Real World™. You might be a little more fortunate, however.)

Today I thought I'd talk about a topic that's dear to all our hearts: the tendency to procrastinate, its effects, and why it really is a good thing despite all the bad press it tends to get from organizations like the Faculty.

Consider first from whence the urge to put things off comes. What would have happened if Archetypical Gender-Neutral Primitive Man had had the sort of temperment that required him (her) to immediately attempt difficult tasks instead of waiting a week to see if things got better? At the first major rainstorm, said Person would say to himself (herself), "Forget that rain! There's bison-hunting to do!" Our brave protagonist then proceeds to get washed down the side of the mountain to a messy death below.

His (her) cavemates, however, survived, because they were the sort of people who would have said, "Enh, we're not down to our last sabertooth steak yet. Plenty of time. I'm going back to bed." Some might call this behaviour lazy, but I'm sure that the survival value is self-evident.

This is how procrastinatory behaviour evolved. It develops from the assumption that, just as man is mortal (and therefore So-Krates is mortal), *everything* in the world eventually comes to an end. Getting around a difficult situation, then, becomes simply a matter of outwaiting it. The problem with this viewpoint (which I shall call *Nihilistic Procrastinism*) is that some things with finite durations (such as time bombs and fourth-year C&O courses) have hideously bad consequences if allowed to follow their natural progression unchecked.

More sophisticated is *Creative Procrastinism*, which is one of the dominant practical philosophies of the Math Faculty. It states that one must not undertake any straining task *until inspiration strikes*. Until this epiphany, it is one's sacred duty to encourage inspiration by goofing off in new and interesting manners. The advantage of this school of thought is that inspiration has this way of striking one at the realization that something (say, a calculus assignment) has to be completed within the next couple of hours.

Now, there are those who claim that anyone following any flavour of Procrastinist philosophies is in trouble, because they'll end up not accomplishing anything; that people who spend their time procrastinating are less prepared to actually take action. I have a very clever rebuttal to these arguments, which unfortunately this column is too small to contain. Perhaps, um, next time? Now excuse me while I go floss the banisters.

Matt "So-Krates" Walsh

Hmmm... *math*NEWS is a little thin today.

Well, try writing for us!
Articles for Issue #2 are due by February 3rd.
We dare you to submit!

Read This: The Yes Side

On January 23rd and 24th, math students will vote on the following referendum question:

- *Yes, I'm in favour of adding $3.00 to the MathSoc fee on the fee statement for all Math students for the sole purpose of funding mathNEWS effective starting in the Spring 1997 term.*
- *No, I'm not in favour of such an addition.*

What does this mean? MathSoc wants to raise its fee (which appears on your tuition statement) from $7.50 to $10.50. All the extra money obtained in this manner will go to fund mathNEWS. The fee will still be refundable, meaning that any student who does not want to support MathSoc or mathNEWS can get their money back.

Why does mathNEWS *need $3 from me?*

The printing costs of mathNEWS have suddenly doubled. Graphic Services has always offered mathNEWS cheap printing, but they can no longer afford to do so. Likewise, MathSoc can't afford to give us twice as much money.

Aren't there any alternatives?

Graphic Services is still the best and cheapest place for us to print mathNEWS. We considered printing less copies of math-NEWS but there are hardly enough to go around as it is. We've tried fund raising, but it's simply not practical to raise the amount of funds necessary. We considered changing the magazine format and frequency of publication to lower cost, but the level of cuts required were simply too severe. Bottom Line — mathNEWS costs twice as much to produce now, and you the student has to decide now whether it's worth it or not.

What will happen if the referendum fails?

No one can say for sure, but it is likely that mathNEWS will either cease to exist, or will be drastically cut. If you like math-NEWS the way it is now, make sure this doesn't happen!

I have some more questions...

Direct them to scepollo@undergrad.math. Or, show up for the Yes/No debate on Jan 22nd in the Comfy Lounge. Or drop by the always-open always-friendly mathNEWS office.

Can I sit on my ass and not bother to vote?

Sure you can. If you go through back issues of mathNEWS you'll even find other suggestions of what you can do with your ass while not voting. We recommend you vote. It's your money, it's your paper, it's your vote, make it count!

What, no tearful plea?

mathNEWS has been here for the students of the math faculty since the Winter of 1973. Our dedicated writers, productionists and distributors want to keep volunteering their time solely for your benefit, but we can't do it without your help! Please help us continue to serve you. Vote Yes in the referendum!

Christina Norman

A Vote for NO is a Vote for Fiscal Responsibility

How did we get here?

Welcome to "Tax & Spend" politics. For the past two terms, the MathSoc exec on this stream have plundered not only the $7.50 student fee we pay each term, but have basically taken the society $4000 in the hole.

What got us there? Is it the photocopies? Although the price has gone up recently, this isn't the killer. Is it the exam bank? The study rooms? No, in fact MathSoc has been pumping money into services which few students use — or into things that normal students *can't* use. This stream has three big money wasters:

1. The Computer Lab. Despite the fact that MathSoc's lab doesn't work most of the time, and when it does work, few students use it (or know about it), MathSoc insists on spending thousands of dollars on this service every term.

2. Social Events. While it's true that social events are an important service provided by the society, we *can* run them more intelligently, (i.e., design them to break even, or take a *small* loss). In fact, the two most successful terms for social (many events, most with high turnout), S95 and F96 (excluding MathWeek) were run on budgets of below $200. Why then are there terms when we spend thousands of dollars for just one SINGLE social event?

3. Pay-back for councillors. Yep, things like getting a free pizza for every council meeting has happened in recent months (and most of them *AREN'T EVEN ELECTED*).

The Fee Increase and mathNEWS

But for all these problems, the society was hit with a curve ball. Graphics Services doubled the printing costs of math-NEWS. Unable to pay for all of its extravagance AND math-NEWS the society and mathNEWS are turning for you for more money. Although the $3 is "all going to mathNEWS" the society used to fund mathNEWS about $1.50/student per term, so really $1.50 is going to MathSoc and $1.50 to mathNEWS. (Don't be fooled by MathSoc's referendum question — even the YES side agrees that MathSoc is trying to trick you on this one.)

I hope you agree at this point that MathSoc doesn't deserve the $1.50 it's getting. But surely mathNEWS deserving of its $1.50? I say no, for a few reasons:

1. The editors have budgeted for too many copies. Their goal is one issue for every student. But how many times have you walked around the 3rd floor and seen copies lying all over the place. Not everyone picks up a copy, and many others

leave them lying around in the MC after they're done. And this waste occurs with fewer copies than they plan to print!

2. The quality of *mathNEWS* doesn't justify the size or price ($7000/term). I'll be the first to admit — *mathNEWS* is an important part of life in this faculty. But of late, the quality has gone downhill. This is a supposed to be a funny paper, but, despite a few gems, it's mostly filler. There are genuinely good articles, and the puzzles are a popular seller, but the magazine as a whole could be cut without losing anything. WE SHOULD CONCENTRATE ON QUALITY, NOT QUANTITY.

One last note, some editors at *mathNEWS* fear that a "NO" vote for the fee increase means that the students don't want *mathNEWS* anymore. If you feel, like I do, that *mathNEWS* should get a kick in the pants, but it still is important, then I suggest e-mailing the editors and volunteers to sharing with them your vision of the paper — they are there to serve you, after all. *[Perhaps you should email the CRO at* scepollo@undergrad.math *instead. — CRO.]*

In summary, both *mathNEWS* and MathSoc can be reformed to better serve us WITHOUT the fee increase. VOTE NO TO GIVE YOUR MESSAGE THAT YOU WANT THINGS TO CHANGE.

Amit Dubey

mastHEAD

You mean I have to do this AGAIN?

Happy Winter Term, everyone!

I have once again taken it upon myself to edit this fine tribute to student propaganda and steer it in new and exciting directions. Unfortunately, the oxen to the *mathNEWS* cart ran away so steering (and movement in general) is quite difficult.

Anyways, yet another term of *mathNEWS* graces the face of our beautiful planet so let's get this show on the road. Here's all the brave people who came out to help with tonight's production, along with the New Year's resolution they broke tonight (or within the past few days)...

Ian Milligan (I forgot to take my medication... wheee!), Chris Buchanan (I promised not to sign another *mastHEAD*.), Darren Rigby (I resolved never to write the bridge article for *mathNEWS*, and at the time of this writing, I seem to be the closest...), John Swan (Resolutions? Are you supposed to make resolutions?), Michael Thorsley (Think of some funnier quip for the *mastHEAD*.), Stuart Pollock (I resolved to not do any more extracurricular activities.), Chadwick Severn (That I'd do my homework on Monday nights.), Chad Ternent (Spread evil.), Viêt-Trung Luu (To write more entries for the *mastHEAD*.), and Greg Taylor (All solutions that I redid were broken. Have to do my homework AGAIN?!?).

Thanks to Domino's for pizza and Marion at Graphic Services for printing up the issue for us and letting everyone know that the spirit of Elvis still lives on.

Brian "Calculus Cowboy" Fox
(To stop bungee jumping off the MC.)

News Guesses

(or Fun with Lead Times)

No doubt, you've seen the signs littering the doors in the Math and Computer building every Monday declaring that as soon as 6:30pm rolls around, another production night commences for *mathNEWS*. No doubt, you've thought of attending one, or maybe, if you were drunk enough, you actually did. You've also, no doubt, put two and two together and realized that you don't actually get your new copy of *mathNEWS* until the following Friday. Why is this? It's something called Lead Time.

Lead Time makes it very tricky to be an accurate and reliable newsletter. Things can change in four days. We could declare that someone has won an election, and the results could change by the time the issue actually hits the stands. Wouldn't that be embarrassing? But, if we stick to the news we actually know to be true, then you'd be reading four-day old news. So, here is a new column where we guess the news. This is news that should be pretty hot stuff come Friday, but hasn't actually happened yet from our point of view. So be forewarned: there may be one or two discrepancies.

Compuscape Opens Doors

A new computer store has opened in the Student Life Centre. We're guessing that it's right beside the Copy Centre since the varsity clothing store is gone. The Wednesday opening went well, and very few injuries were reported. The new store has lots of computers, software, and accessories, but the prices are better at Computer City. A laptop was given away as a part of a contest; the winner was ecstatic until he realized it was an IBM one.

Go Internet Cafe Shuts Down

After being open for one day, the Go Internet Cafe closed its doors. The manager said, through his attorney, that the closure was due to poor business. Couples didn't go for two reasons: surfing the internet is not usually something couples do together, and secondly, girlfriends wouldn't let their boyfriends go. Having the terminals set up with AOL Canada was the final nail in the coffin.

University Announced MegaFaculty

In a surprise move by the administration of the University, the six departments of the Math Faculty, namely Computer Science, Pure Math, Actuarial Science, Applied Math, Statistics, and Combinatorics and Optimization, will all be amalgamated into one big department simply called New Math. Not to worry, New Math will taste sweeter than what you're taking now.

CAS

MGC Pizza Days are back!

Wednesdays, 3rd floor MC

Post-Teen Angst: Mind if I Drive?

Sidekicks
— or —
"Not if you don't mind me clawing at the dash and shrieking like a cheerleader..."

Y'know, everyone in the world should have a sidekick. Well, actually, not *everyone* should have a sidekick, otherwise we'd all be busy kicking each other's sides and never get any crime-fighting done. (And that would be a crime in itself!) Let's try this again...

Y'know, everyone in the world should either *have* a sidekick or *be* a sidekick.

"Please don't say that *I* am your sidekick," pleads the intrepid Average Reader.

No worries, Average Reader! You are merely a figment of my imagination who is nothing but a composite of the snide remarks that I know the four faithful followers of my follies would fling forth were they sitting with me whilst I wrote.

"Ah. That's... uhm, reassuring?" proposes Average Reader.

Well, not really. It puts you more in the role of my arch-nemesis. All I really need to do is to mistakenly inflict some horrifying disfigurement upon you, thus setting your bitter resolve to leading a life of evil.

Yes, when the world is in danger from sarcasm and disparaging remarks, the cry goes out both far and near for — dum dada duuuum! — Captain Sideburns! (And his sidekick, Caffeine Buzz.) Employing his powers of facial hair growth, he sets out to rid the world of all those who would malevolently mock mere mortals for their meager means.

"Gee, Captain Sideburns! Must you alliterate so?" queries Caffeine Buzz.

"I'm afraid so, little buddy! It's all part of being a super-hero. One day when you achieve super-status, you too shall see the splendour of stringing similar sounds in successive series!"

"Successive? Or *excessive*?"

"Are you feeling okay, Caffeine Buzz? You haven't even touched your KAWPHY, Jolt™, or those fifteen candy bars in your pocket... Waitaminute! My stubble-sense is tingling. You're not Caffeine Buzz! You're none other than — dum dum duuuum! — Average Reader!"

"Aaaaaaghghg! I am discovered! But how? How did you know, Captain Sideburns?"

"Keen observation, aided by excessive facial hair. As always. Take him away, officers!"

"Yeeerrrghghg. I would have gotten away with it, too, if it hadn't been for you meddling kids..."

"It's all in a day's work for... Captain Sideburns!"

So you see? Not only are sidekicks great for being the straight-man who feeds the one-liners back to the hero every time, but they can also be used as plot devices. *Now* Captain Sideburns will have to wring the location of Caffeine Buzz out of Average Reader, and then swoop in and save him just before Reader's inane, time-delayed death-contraption slays poor Buzz.

Sidekicks are necessary: who would Sam be without Max, or the Tick without Arthur, or C3PO without R2D2, or.... Well, you get the picture. Sidekicks are neat fun.

Ian "Neil Young Complex" Milligan

4B Or Not 4B

That is the Question

At last! At long last! At long, long, long last! It's here! My last term at university, provided I pass everything. I've been told that people in fourth year don't flunk out, so I'm planning to put forth the slimmest effort this term and let the unwritten rule of not failing fourth year students work its wonderful magic. I actually have heard of other fourth year students failing courses, but I imagine that those are freak occurrences and, because I blindly choose to ignore them, they can't possibly happen to me.

I used to envision my 4B term as a winding-down of an era, a satisfying denouncement, a slow walk into the sunset with my girlfriend by my side with both of us anticipating a blissful future. Well, my walk into the sunset is more likely going to be a drunken stumbling into the headlights of an oncoming vehicle with only a bottle of beer by my side. I used to hear stories of how beautiful women would quite literally throw themselves at handsome fourth year students (like me!) because they valued the knowledge and sensitivity (as well as the potential future earning power) of a mature person who has experienced the many facets of life. Hmmm, it doesn't quite work that way because the only things that women are throwing at me are restraining orders and pepper spray.

I know that you, my legions of loyal readers (which officially number in the single digits!), are saying, "Who the hell ever said he was handsome?" I'll have you all know that, had it not been for contractual differences, (i.e. I didn't beg enough), then I, not George Clooney, would be the male sex symbol star of *ER*. I also have a sworn affidavit from an unbiased party (my mom) that I am, indeed, handsome. Of course, the value of her testimony dropped considerably when she drew moustaches on all my grad pictures.

Employers don't seem to find me unusually ugly, although many prefer to interview me using a mirror as a go-between. I encountered muffled laughter with a couple of them, but I attribute that to my especially witty banter. Actually, interviews have gone reasonably well, with only one interviewer throwing me out of his office because I wore a polyester tie.

I also have learned a very important thing about fourth year. The phrases "4A" and "4B" actually mean something other than the first and second terms of a fourth-year student. The phrase "4A" is an abbreviation for "for ale", and the phrase "4B" is an abbreviation for "for beer". For those who are fortunate enough to go on to 4C, "4C" means "for cirrhosis". Of course, not being one to shirk my duty, I have personally committed myself to increasing the domestic sales of Moosehead by 10Although many might consider this target conservatively low, one must consider the always underrated bladder capacity factor.

As I embark on my final odyssey at Waterloo, I will pause to look back on all that I've accomplished in my five years here. Of course, I will only be able to properly look back on my golden years once I have gotten the pepper spray out of my eyes.

Graham "Not Only Long in the Tooth" Rogers

White Trash TV

Coming soon to a station (or mathNEWS) near you...

*grid*COMMENTS

Greetings, Gridders!

Welcome back for another term of puzzlement. Yay.

I get back into UW, and when I log onto my account I see a notice that says that people have been stealing mouse balls. Have we learned nothing from the story of the man who was caught stealing beef anuses? (q.v. Lateral Thinking puzzle last term) Take them back to the labs where you got them immediately. You should be ashamed of yourselves.

In this crossword you'll be building some bridges across the grid. In the Unconventional, the Across entries overlap each other by at least two letters. Each row across contains exactly three entries, and uses one of the "bridge" clues given. It is up to you, however, determine exactly where the words go. The clues are divided into four lists, A–D. The top two rows in the grid are A clues, the next two use the B clues, and so on. For the Cryptic, you'll have to add your own black squares. Each row gets just one, and with the grid numbering and enumerations of the answers, it shouldn't be a problem.

Submit your solutions to one or both of the puzzles either to the BLACK BOX or e-mail them to me at djrigby@undergrad.math.uwaterloo.ca by the next Production Night. When's that? I don't know. I slept through the Disorganizational Meeting, and now I just get funny looks whenever I ask. *[Submissions due @ 3:30pm on Monday, February 3rd. You're welcome. — CalcBoyEd.]* And don't forget to include an answer to the *grid*QUESTION when you do: Admit it. You've been stealing the mouse balls. What were you gonna do with them?

Gridby

What about the BLACK BOX?

So what actually goes in the BLACK BOX, you ask? Well...

Here's what **DOES** go into the BLACK BOX...

- Squiz and Puzzle submissions
- *prof*QUOTES
- *ultra*CLASSIFIEDS
- Article and artwork submissions
- Questions for The Oracle
- Comments and suggestions
- Donations to the "Help Brian stay at the Bomber" Support Fund, affiliated with the Disco Preservation Society of Waterloo

Here's what **DOES NOT** go into the BLACK BOX...

- Old Christmas cards
- Unpaid parking tickets
- Letter bombs
- Dirty socks or laundry

A message from your friendly neighbourhood *math*NEWS editors... And some guy named Biff.

The Y_0 Files
Dentistry: The Tooth Is Out There

Special Agent Draina Scummy entered the office of Special Agent Phlox Duller in the Y_0 Files branch of CSIS (Canadian Secret Intelligent Service) deep in the bowels of the office building.[1]

"Duller," asked Scummy, "Why did they move your office deep into the bowels of the building?"

"Because the gullet of the building was occupied already," replied Duller. "Besides, being underdogs increases viewers; why do you think Maple Leaf Gardens keeps selling out?"

"And what intriguing new Y_0 File have you brought in today?" asked Scummy with a tinge of sarcasm, a hint of impatience, and a dash of salt in her voice. "Wait a sec...it's been three episodes since the last 'alien cover-up' show, hasn't it?"

"Yeah," responded Duller. "And you know what *that* means, don't you?"

"Happiness is yelling 'Bingo'?"

"No, it means we're heading back to the University of Kitcherloo to investigate sightings of strange coloured lights."

University of Kitcherloo
Kitcherloo, Ontario

"Wow, Duller, how did you get us to Kitcherloo so fast?" asked Scummy.

"It was magic, Scummy," replied Duller. He held out a large stack (and a small queue) of Magic: The Garnishing™ cards for her to see. "See, I had these cards left over from our *last* visit!"

"And where are we going?"

"Forward, Scummy. Can't you tell?"

They walked on. And on. And they would have walked on some more, but Duller stopped in front of a grey oval mass which resembled the bottom half of the world's ugliest Easter egg.

"Why are you stopping, Duller?" asked Scummy.

Duller pointed at the sign at the base of the "art". "I'm just following the order on the sign; I'm taking a break."

From the Kitcherloo winter gloom approached a dark figure. "This season's shadowy contact?" asked Scummy. "You know, we go through shadowy contacts like Madonna goes through Gynecure™! Like Dennis Rodman goes through hair dye! Like the Liberals go through campaign promises!"

Duller remained quiet, just like Crispy Cannon doesn't.[2] Scummy ran out of similes and fell silent. She then got back up silent, and managed to keep her balance silent. While this was going on, the shadowy figure quickly conversed with Duller, then withdrew. Duller, on the other hand, deposited, while the readers of this column remained without interest.

Ignoring Hammer's bad puns, Scummy asked, "What did the shadowy figure tell you, Duller?"

"Four things, Scummy: where the strange coloured lights are, what else we have to investigate, that Hammer is ending this column in a cliffhanger, and that everything else will be

continued in next issue...

Mike "Special Agent Fox Hammer" Hammond

[1] Duller and Scummy first appeared in *The Y_0 Files* in the Friday, May 13th issue of *math*NEWS.

[2] Requisite MathSoc Exec Cheap Shot.™

You Can Blow Out a Candle But You Can't Blow Out a Fire

When I think about education, the image of school is not far behind. And what school is closer related to quality education than the University of Waterloo? It has become nationally renowned as an exceptional school, with good reason. The top students, the brightest students, the students with the best marks; those students are gathering here in order to receive what they need to succeed in society: an education.

And there is no doubt that there is much to be learned. Calculus, Stats, Algebra, Computers — much can be taught, much can be learned. And these fields have proven to play an integral part of modern society then.

So is that it then? Do I go to class and read my textbooks and hand in assignments and write exams and, presto!, I have an education?

Or does education imply something more than just academics? Can education happen outside the classroom setting?

I think it can. There are many important skills that one needs to survive in society. Communication skills, public speaking skills, responsibility, leadership, interpersonal skills, etc.... There's a knowledge of the world that can only be gained by experience.

And yet, few people focus on more than just their schoolwork. They become stressed out, and their stress leads to apathy. Apathy! Alas, what an ugly word for an ugly state of being. And yet it has run rampant, spreading throughout the campus, sparing only a handful of individuals.

Individuals! Does anyone remember what that means? I do. It means being more than a nine digit number. *[Uhh... I think it's eight. — CalcBoyEd.]* It means more than a faded green

schedule that controls your movements. It's about uniqueness. It's about being mortal. It's about exploring yourself, and your environment, learning from it and reacting to it in your own personal way. It's about the excitement of being alive!

We're all about the same age. We're young enough to feel the exciting wind of youth carry our spirits. Our whole lives are spread out before us, but there are also many obstacles that we must overcome. So we turn our attention to these obstacles. And soon all our attention has been given to these obstacles. Our passion, our dreams, all have fallen under the weight of our "Education."

But this is the time! This is the day! And it will never come again. There is so much to be learned that is not found in the MC building. There is so much to be seen that is not on a computer screen. This is the time where we can be anything, do anything, and learn everything.

And thus we are envied by our elders. They look at us with jealousy, wishing to be in our place again, knowing that the journey is only just beginning. And one day we will be them, and we will look on our children, and we will envy.

But today we are young. Our ship of youth is on its last voyage, but what a voyage it is! It's so easy to become stuck. To miss the scenic view as we try desperately to stay on the path. And before we realize it, our time will have slipped through our fingers. Our precious time, that we didn't use, will be gone forever. So take some time for yourself, enjoy it, learn from it, grow from it. It's so easy not to try. Let the world go passing by. If you never say hello, then you never say goodbye.

Jesse Bergman

Bridge is Cool

Huh-huh, huh-huh...

"Hey, look Beavis. It's a bunch of people playing cards."

"Heh-heh, yeah, heh-heh. They must suck at video games or something."

"Yeah, huh-huh, huh-huh. Cards are for wusses."

"Hey, guys. We're looking for someone to play bridge with. Do you want to play a couple of hands?"

"Heh-heh, heh-heh. Hey, Butt-head, chicks!"

"Uuuuh, sure, baby. We can play with some hands, huh-huh, huh-huh."

"Okay, great! I'll deal"

Vul: None	**North**		
Dealer: W	♠ 3 K 7 10 Q 2		
	♡ 2 Q		
West	♢ Void	**East**	
♠ Q J 8	♣ 4 J 7 A 9	♠ 10 6 5	
♡ 10 5 3		♡ A 9 8 7	
♢ J 9 6 3	**South**	♢ A K Q 10 8 2	
♣ K 8 3	♠ 9	♣ Void	
	♡ 4 J 6 K		
	♢ 4 7 5		
	♣ 5 10 6 Q 2		

North	East	South	West
Huh-huh	2 ♢	Heh-heh	3 ♣
Huh-huh	5 ♢	Heh-heh	7 ♢
Huh-huh	All pass		

Interlude

"Huh-huh, this video sucks."

"Yeah, heh-heh, heh-heh. You can't even see her thingies. Heh-heh, heh-heh."

"Huh-huh, yeah, huh-huh, huh-huh. So, uuuuh, why are we watching it. Huh-huh, huh-huh."

"Heh-heh, heh-heh, just cause. Heh-heh, heh-heh."

"That's cool. Huh-huh, huh-huh, I guess. Huh-huh, huh-huh."

"Heh-heh, yeah. But seeing her thingies would be cooler. Heh-heh, heh-heh."

"Uuuuuh, huh-huh, huh-huh, no kidding, Beavis."

Back to the game...

"It's your lead."

"Huh-huh, huh-huh... What? Huh-huh, huh-huh."

"It's your play. Play a card."

"Yeah, heh-heh. Play a card, retard. Heh-heh, heh-heh."

"Huh-huh, shut up, ass-munch! Huh-huh, huh-huh."

"Ha. Diamonds are trump, and it's your lead, okay?"

"Huh-huh, she said 'rump'... Huh-huh, huh-huh."

"This game sucks. Let's go home and eat nachos. Heh-heh, heh-heh."

"Uuuuuuh, okay. Huh-huh, huh-huh."

Ian "Son of Beavis Complex" Milligan
Brian "The Butt-head Cowboy" Fox

mathNEWSquiz #1
Woohoo! Another Winter Term!

Hi, folks! Welcome, once again, to tne *math*NEWSquiz! I hope that all of you who were here in the Fall did well in your courses, and that those who came back from work term had a lot of fun in the **Real World**™.

For those of you somehow unfamiliar with the squiz, here's how it goes: you submit answers to these questions (to either of the below locations), and the submission with the highest score wins a prize. In the event of a tie, we (pseudo-)randomly determine a winner from the tying submissions. Got it? Good!

Anyway, enough chit-chat. Here's this issue's squiz:

Song Lyrics
One point each for the song and the artist
One point for the general theme

1. "My mom, I love her, 'cause she love me.
   Long gone are the times when she scrub me.
   Feelin' good, my brother gonna hug me.
   Drink my juice, young love, chug-a-lug me."

2. "I shouted out, 'Free the Expo '67!'
   'Til they stomped on my hair,
   And they told me I was fat."

3. "I went to a shrink to analyse my dreams.
   She says it's lack of sex that's bringing me down.
   I went to a whore; she said my life's a bore,
   And quit my whining 'cause it's bringing her down."

4. "This guy comes up to me,
   His face red like a rose on a thorn bush,
   Like all the colours of a royal flush.
   And he's peeling off those dollar bills,
   Slapping them down.

5. "What do you think you'll do then?
   I bet that'll shoot down your plane.
   It'll take you a couple of vodka and tonics
   To set you on your feet again.

The Library
I name the book, you name the author

1. Executive Orders
2. Flight of the Old Dog
3. Duncton Wood
4. The Mask of Command
5. The Handmaid's Tale

Potpourri

1. According to Stompin' Tom Conners, what does ketchup love?
2. Name the company who developed the software to produce "Toy Story".
3. What is the most widely accepted method of romanizing Chinese (Mandarin)?
4. Name the current members of Spirit Of The West. (But no past members!)
5. What was Gerald Ford's position immediately before he became Vice President of the United States?

Movie Quotes
Name the movie

1. "Look at you. My, my. The bulimia sure has paid off."
2. "I must throw a party; otherwise everyone will see clearly how much I despise her."
3. "You kissed him? Where?"
   "On the lips."
   "And then what happened?"
   "He had to go and attack Libya."
   "It's always something."
4. "He's so shy. Next month he's doing the underwear billboard in Times Square."
5. "Are all men from the future loud-mouthed braggarts?"
   "Nope. Just me, baby ... just me."

Good luck, everybody! The submission deadline is 3:30 PM on February 3. You can submit either by depositing your answers in the BLACK BOX across from the Comfy Lounge or by sending you submission (via email) to scepollo@undergrad.math.uwaterloo.ca. Once again, good luck!
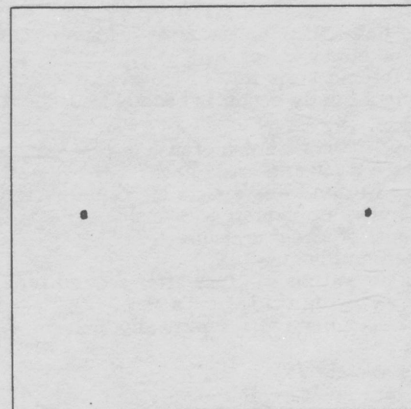
Mike "Hammer" Hammond
Jerry "Fish" Han
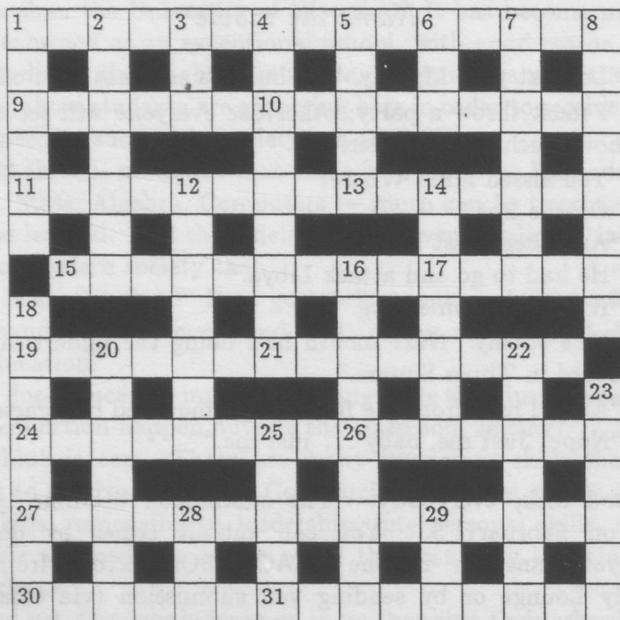Stuart "Jean-Guy!" Pollock

Fun With Math!

(For non-PMATH 399c students)

Can you draw a line in the box below that connects the two dots, does not leave the box, and has infinite length? Draw your answer in the box below, rip this section of the page out of the newsletter, and drop your answer in the BLACK BOX. Answers next issue!

CAS

GRIDWORD

Grid Clues (Cryptic)

Across

1. Bridge players buck somewhat at first about crystal without East. (9)
6. Imitation noodle. (5)
9. A bit of blackberry jam makes for building material? (5)
10. Disease causing pandemonium to run rampant without mark. (9)
11. Exam provided 'yes' answer when the lawyer asked. (7)
13. Unimportant journey won't end before getting container for medicine. (7)
15. Advnetures should grab in listeners' ears. (8)
17. Some purchased another kind of car. (5)
19. Liquor I leave in hole, then take back, essentially. (5)
21. Canal area preoven mathematically to hold up to rough cut. (8)
24. First off, discreet cast reads through lines. (7)
26. Knight left eight from Italy to have rice dish. (7)
27. Paramedics ride around a mean club. (9)
29. Perhaps a bird gets a pigtail. (5)
30. Possibly, Caesar left big city without lady. (5)
31. In SW, Ahab's junks sink. (9)

Down

1. Turn down bed and pour tea after discussion. (6)
2. Angry editor made use of bridge. (7)
3. Park loses foremost method of traversing water? (3)
4. Barren patient finally becomes head of household, same bad trouble breathing. (9)
5. M. Ciccone's ex can't finish (tense and exhausted). (5)
6. It will cross a river and cross back? (3)
7. People have in mind one article on kindergarten. (7)
8. Young, heartless nobleman goes inside for 12 months. (8)
12. Current home of street creature. (7)
14. Denis is spilling his guts. (7)
16. I take over for author in duels after second hides. (9)
18. A sore VP's playing bridge, of a sort. (8)
20. "A short December, and I partially believe..." Piece of loud music? (7)
22. Sword hurt wench. (7)
23. Colour of gate at decrepit lodge is neutral? (6)
25. Might curve away from avenue. (5)
28. Cover slipped off the top. (3)
29. Reversible clothes for baby. (3)

Grid Clues for Building Bridges (Unconventional)

Across

A. His place is the bridge
   Kind of bridge
   Approximately
   Region of Ancient Greece
   Head count
   Six-legged critters
B. It comes with a bridge (2 wds.)
   Kind of bridge
   Capital of Guadalajara
   Behaves
   Thin
   Word derived from Hindi for massage
C. Makes a bridge play
   Reason for many Ghanian bridges (2 wds.)
   Gotcha!
   Poetry
   Hidden
   Michael star
D. It lives under a bridge
   Bridgework
   Save
   Political PR (2 wds.)
   Electron tube with 3 bits
   Necklace fastener

Down

1. North American herb (*or* to get money for a check with a friend?)
2. Kobain's group
3. Janeane's ... *Cats & Dogs* co-star
4. Police cruiser (2 wds.)
5. Adorn with oil (obs. var., subtract A)
6. Every dog has ____ ...
7. The N of DNA
8. We mind if he smokes?
12. Before (2 wds.)
14. Subject of alt.fan newsgroup based in UW
16. Foremost, in Spain? (2 wds.)
18. Overjoyed
20. Travel provisions
22. Island of the Netherland Antilles
23. Rocky Road or Pacman, at one time
25. Mortise's partner
28. A swim
29. "Scene to be shot outside" (abbr.)

Very Important Proofs

Proof that if you fall asleep in class, you may never wake up

- By falling asleep in class, you miss important information.
- Information is also known as data.
- Data, the lovable android, has an emotion chip.
- Emotional chips are made from potatoes going through a crisis.
- Potatoes (even those in a crisis) are a vegetable.
- If you're a vegetable, you may never wake up.

Therefore, if you fall asleep in class, you may never wake up.

CAS