mathNEWS

Volume 72, Issue 4 *Friday, November 8, 1994*

THE GRINCH WHO STOLE THIS ISSUE'S COVER...

(WHAT? YOU THINK <u>THIS</u> IS THE COVER? NO! IT'S ONLY THE PICTURE OF THE GRINCH WHO STOLE THE COVER. YOU DON'T SEE A COVER AROUND HERE, DO YA?)

Computer Science Club

A Student Chapter of the ACM

CSC Flash

Upcoming Events:

November 8	Come help out at the Bi-weekly Office Cleanup Day 'Fest
November 11	GRAY MATTER (Dave Bright) @ 4:30 PM
November 13	Parallel Rudiosity @ 4:30 PM

Welcome once again to another exiting CSC FLASH! Most of you are in a state of relief right now as you finish your midterms. For those of you not yet finished, you're just going to have to rough your way through it, aren't you. AREN'T YOU!

Well, on the 6th we had our talk on PC Troubleshooting (Part I), and hope to have more talks on this matter soon. We have several other events coming up, however, such as our talk on GRAY MATTER by Dave Bright. If you're unsure on your future goals, you should at least hear him out.

As a public service announcement, I'd like to say that if you have a book out from our library that's overdue, then RETURN IT FOR THE LOVE OF GOD! Do you think those books are yours forever? Are you some sort of free-thinking anarchist? I don't care if you have been in a coma for the last few weeks, WE WANT THOSE BOOKS BACK!

On the lighter side of life, I'd like to say that all are still welcome to become members of the CSC. By the way, if you can come up with what the CSC acronym REALLY stands for (i.e. possibly Casual Sex Centre), or would like to submit your CSC QUOTES (profQUOTES for CSC members), then email your response to:

archmiel@calum.csclub.uwaterloo.ca

The funniest/silliest/stupidest entries will be posted in next week's CSC FLASH. The funniest entries will be eligible for a free pop (my treat), with THE funniest receiving a free lunch on me ($15 max).

Should you have any other suggestions on how to improve the CSC, then email them to the previously mentioned address.

Calum T. Dalek

Math & Arts
Road Trip to Whiskey Saigon

NO COVER!!

Bus Ride: $6 Math/Arts Students
$7 Other

$2.99 beer/mixed drinks
$9.99 Pitcher

Happening on Thursday, November 14th.
Buses leave here at 7pm and leave the bar at 1am.
Sign up in MathSoc office—MC 3038

Prez Sez

Hi, folks. Sorry for the silence from this corner for the past while, but work's been dumping on my head for the past two months.

'Kay. Next week, besides being the week of Remembrance Day, is the week during which those of you taking core courses will be evaluating your profs. The Dean's Office and MathSoc are partnering up to administer the course evaluations in an effort to make the gathering of the evaluation data as consistent and fair as possible. Make sure to think hard on the feedback you want to give back to your core instructors next week! Andre Cousineau's article (somewhere around here) gives more info on the whole process.

Also, please keep in mind that Distinguished Teacher's Awards nominations are open right now. Please take the time to write a letter for the outstanding profs that you'd like to have recognized campus-wide: for some reason, profs in the Math Faculty haven't been getting many Awards in the past years, and I think it's about time we got our fantastic profs some well-deserved fame and glory!

The Distinguished Teacher Awards FAQ is available outside the MathSoc exec office (MC 3035), and inquiries can be directed to TRACE in MC4055, extension 3132.

Other news: nominations are currently open for MGC Chair for Spring '97. Nominations for Winter and Fall MathSoc Executives and Directors will be open on November 11th, so make sure you pick up a form from the MathSoc office (MC3038) if you're interested in joining up with either organisation.

Please also look out for Operation Christmas Child and the White Ribbon Campaign and other associated charity drives to hit third floor MC with the onset of the month of December.

Hope your 'terms went well, and since this was a really dumb article, I think I'll end it with a BANG.

BANG.

Sarah "You know, that course thing is really putting a damper on my academic career!" Kamal

ActSci Club

November is always the most exciting month for Actsci students. Upcoming events include: Bomber Night Wed Nov. 13 (be there by 8); Shot-in-the-Dark Friday Nov. 15 or 22. Paul Sauve from The Mutual Group will be coming to speak to us on Nov. 14. As a reminder ASNA Convention tickets are $60 and are available in the office.

Wes Reynolds

*ultra*CLASSIFIEDS

To Sis & Sis:
ee - oo - aaa

Monkey

Yum, yum... spaghetti!

lookAHEAD

mathNEWS	
November 25	Issue #5 production night 6:30pm, MathSoc (MC 3038)
November 29	Issue #5 roars unto the stands
Math Faculty	
November 5	Better register for Spring 97 Last day is today, people.
November 11-15	Core course evaluations
November 15	Last day for late withdrawal from 1A/1B/2A courses
MathSoc	
November 14	Trip to Whiskey Saigon $6 Math/Arts, $7 everyone else Sign up in MathSoc (MC 3038)
MGC	
November 25	Last chance for Grad Photos
Miscellaneous	
November 7	Another Friday at the Bomber
November 9	OUAA Football Final University Stadium @ 1pm Waterloo vs. Guelph for the Yates Cup... Go Warriors! Be there!
November 11	Remembrance Day
November 12	Llamas attack U(W)
November 15	Another Friday at the Bomber
November 18	The day we finally realize that nobody reads the lookAHEAD
November 22	Yet another Friday at the Bomber (Get the impression someone around here likes Fridays at the Bomber?)
CS Assignments	**Watch That Load!**
November 13	CS 488 Assignment 5a Due 1:30pm
November 15	CS 488 Assignment 4 Due 1:30pm **Load forecast to be high**
November 18	CS 351 Assignment 4 Due Midnight
November 19	CS 340 Assignment 4 Due Midnight
November 20	CS 488 Assignment 5b Due 1:30pm
November 27	CS 354 Assignment 3 Due 5pm **Load forecast to be high**
December 2	CS 351 Assignment 5 Due Midnight
December 3	CS 340 Assignment 5 Due Midnight
December 3	CS 488 Assignment 5c Due 4:30pm **Load forecast to be high**

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Llamas son mes grandes que las ranas: Matt "So-Krates" Walsh, Brian "Calculus Cowboy" Fox

Course Evaluations

Hey math students! I'm here to inform you about something of vital importance to all of you (well most of you anyways). Next week is evaluation week for all the faculty core classes. All of the faculty core classes are being evaluated in the week beginning November 11th. This year MathSoc has taken an important step forward and will itself be administering the evaluations. The following classes:

MATH 135, MATH 136, MATH 137, MATH 138, MATH 145, MATH 147, CS 120, CS 130, CS 134, MATH 235, MATH 237, MATH 245, MATH 247, STAT 230, and STAT 231

will be evaluated during one of the classes that week, as announced by your prof. This is YOUR chance to make your opinions known about your prof's teaching style and about the course in general. Now, of course you may be wondering what happens to these evaluations. Well, they're collated and made available to all students in the MathSoc Office (MC 3038) for reference. If you want to know what students in past terms thought about your new algebra prof, just drop by MathSoc and check out their evaluations. Check out the other ones while you're at it, too. You might want to switch to one of their sections.

Your opinions are important to us, and they are also used during promotion considerations. So whether you like your prof or not, try and stumble into class during the designated day next week.

André Cousineau

It's a wonderful Mathie's life

A second-hand account of the life of Paul Erdős

Paul Erdős (pronounced air'-dish), who is arguably the most influential mathematician of this century, died September 20, 1996 in Warsaw. He was 83. Erdős made his life extraordinary and it is unfortunate that very few, if any, undergraduates here had a chance to meet him. His intense interest in math, and especially in combinatorics, has resulted in a wealth of results but I will describe his life and lifestyle here rather than his work.

Erdős was born in Hungary in 1913 to parents who were both mathematics teachers. After getting his doctorate at the University of Budapest and spending four years in Manchester England he became a traveller, a wandering scholar, never staying at one place for more than a month. With so many friends and associates world-wide, he enjoyed the hospitality of mathematicians and would be driven to his different destinations.

Erdős was a prolific writer. He collaborated with around 500 co-authors to write close to 1500 papers in his life. This is reminiscent of the large volume of Euler's papers. This has given rise to Erdős numbers. People who have co-authored a paper with Erdős have Erdős number 1. Those people without Erdős number 1, but who have co-authored papers with someone who has Erdős number 1 have Erdős number 2. And so on recursively. This is sort of like the Kevin Bacon game for those of you who are familiar with it. Even Einstein has an Erdős number, 2.

He was very approachable and has given many talks to encourage young mathematicians. He led a very basic life with no physical property and has donated a lot to scholarships and the like to promote mathematics to youth. He has even been known to give many lectures here at Waterloo, once upon a time. Since Waterloo is quite a significant mathematical center in the world, it is no surprise that many here know him. Professor Bruce Richmond (Erdős number 1) knew him as a friend and has said this of Erdős.

He was so helpful to people and inspired loyalty by the personal touch. He was certain that mathematics is a social activity, (not merely academic). As a teacher, he made you feel like mathematics was a worthwhile endeavour. As a person, "he had interests in history, philosophy and social issues as well as mathematics."

He has received a honorary doctorate here at Waterloo (1981) but had written a letter resigning this degree earlier this year in light of Professor Bondy's situation (feeling that Waterloo was too harsh). Whether it's possible or not to resign a degree, the thought is still there and opinions are mixed.

This article cannot convey how important he was. I did not know him but there are faculty members here who would be honoured to talk with interested readers about him.

"My mother said, 'Even you, Paul, can be in only one place at one time.' Maybe soon I will be relieved of this disadvantage. Maybe, once I've left, I'll be able to be in many places at the same time. Maybe then I'll be able to collaborate with Archimedes and Euclid."

Mike "The Twin" Swart

Undergraduate talk and social evening presented by the Math/Business program

Please join us. All students are welcome. Share some refreshments with your professors and friends!

Title: Perspectives on Success and Entrepreneurship in the New Economy (OR "Waterloo, The First 7 Years Out")

Speaker: Mark Arnason

Date: November 14, 1996

Time: 7:30 p.m.

Place: DC 1351, with refreshments afterwards in DC 1301

Mark Arnason is a graduate (1989) of the BMath Business and Technology program. In addition to being an Adjunct Faculty member at Waterloo for the past 3 years, Mark is a former Manager at Andersen Consulting, and currently operates his own consulting business as an entrepreneur.

Mark will be speaking not so much as an instructor at Waterloo, but as a peer who has graduated recently from Waterloo, and who has had a business and technology oriented career in the New Economy. He will touch briefly on some of his career decisions and experiences, and provide some insight on how the time he spent at Waterloo has contributed to his success.

New Elective Course Offering for Math Faculty Students

(Offered for the first time in the Winter 1997 term; in the Winter 1996 term it was offered as ECON 485.)

MTHEL 400

Entrepreneurship, Technology and the Emerging Information Economy

A study of the spirit of entrepreneurship in the technology industry, opportunities emerging in the new information economy, and the implementation issues associated with starting an entrepreneurial venture in today's rapidly changing environment. Many of the concepts covered will also be applicable to careers in technology industry or information based companies, where "intrapreneurship" is an emerging theme. Approximately one half of the class time will involve guest lectures by entrepreneurs actively involved in the business community.

Prereq: Third or fourth-year standing in an honours BMath program, or consent of the instructor. MTHEL 400 would serve as an excellent sequel to ECON 220 (The Principles of Entrepreneurship) which focuses on identifying markets for viable entrepreneurial ideas, but ECON 220 is not a prerequisite.

Instructor: Mark Arnason

Space is limited; to ensure a place, register as soon as possible.

gradNEWS

Attention all grads! We want your photos! The yearbook committee is desperately seeking candid shots of you and your friends. Please drop off any photos to the MGC office ASAP. These photos will be returned to you in April '97

Leave your mark on "The Wall"

This year, the yearbook committee is selling bricks on the front and back covers of the yearbook. These bricks are available at the amazing bargain price of $2! Upon purchasing a brick you will be able to leave a personalized message for your friends on the wall. Keep your eyes open for posters that detail when and where the bricks will be sold. If you have any questions, e-mail Sandra Rosano (srosano@undergrad.math).

Attention Computer Science Students

Research In Motion Ltd. is hosting a Wine and Cheese for all interested undergrads and grads from Computer Science and Engineering. The event is scheduled for Tuesday, November 26th, 1996 from 5:30pm to 7:30pm at the University Club. A short presentation will be given by members of the marketing department. Afterwards, you will have the opportunity to mingle with RIM representatives, who will be available to discuss the vast range of exciting career opportunities RIM has to offer. For more information, contact Laura Druar, Recruiting Officer, (519) 888-7465, x263.

That's all for this week. Don't forget to submit those photos!!

Laura Williams
Chair, MGC '97

mathNEWS Referendum Concerns You!

Howdy, folks! As you all know from last issue (I hope!), mathNEWS is having a referendum to see if people want to have a charge for mathNEWS added to their fee statements. Due to a miscalculation, there has been a change in the amount to be added to the fee statement.

The official referendum question will read something like this: "Are you in favour of adding $3.00 to the MathSoc fee to be explicitly used to fund mathNEWS, effective starting in the Spring 97 term?"

The referendum will be held in two stages: there will be one vote this term for those people who are registered full-time this term, and one next term for those who are registered as full time students who did not vote in the Fall. That way, those registered as full-time students in the Fall who missed the vote will be able to vote in the Winter.

Empower yourself! Voting will take place at a polling booth outside of the MathSoc office on Tuesday, November 26, and Wednesday, November 27. I look forward to seeing all eligible voters participate.

Stuart Pollock
CRO, mathNEWS Referendum

profQUOTES

"By looking at the matrix, I can see that the dimension is 2. Right? Am I right? *[long pause while checking the matrix]* I think that I am wrong. I am totally wrong!"

Ng, MATH 235

"You would never be asked to do this on a test, but hey, this is my lecture, I'll do what I want!"

Hewitt, MATH 137

"Now we simply finish this equation with... *[stares at board]* Where'd that 'y' come from?"

Schellenberg, MATH 135

"AM 261 is a foundation for all of your 3rd and 4th year courses. STAT 231... flush it."

Tenti, AM 261

"Time goes fast when you are having fun and slows down when you are approaching the speed of light..."

Tenti, AM 261

"I'd really like to have a low average on the midterm."

Moskal, PMATH 330

"The reason for doing this is not a particularly good reason."

Geddes, CS 134

"The whole polynomial can fit on one sheet of paper, so it's not an outrageous polynomial."

Lawrence, MATH 145

"I'm going to wave my hands on this induction here." *[Class laughs.]* "O.K., I won't wave my hands. Left as an exercise."

Lawrence, MATH 145

"They said it right before being thrown to the lions... Now why did I mention that? Oh yes, we were about to start this proof."

Jackson, C&O 330

"I almost feel like saying don't write this garbage down."

Jackson, C&O 330

"What could it be? Yes, it's the 's' word... training bra!"

Vander Woude, MUSIC 140

"Watch this: my fingers will not leave my hand."

Best, MATH 138

"If you offend the number ten, the universe will end."

Forsyth, CLAS 100

"I curse you Number Ten!"

Forsyth, CLAS 100

Things to do in Mississauga when you're not dead

(Although you might as well be)

Hello, I'm writing to you all from the wonderful city of Mississauga, where I have a great co-op job. Unfortunately, this job means I actually have to live in Mississauga. As a native of Montreal, I never had the opportunity to visit this part of the Greater Toronto Area before I accepted the job. While I was asking friends about where I should live, they began to offer me their sympathies on the location of my job. This was the first clue I had that something might be different about this town.

The first thing I discovered is that what public transit that does exist is aimed mainly at two groups:

- People working 9-5 in downtown Toronto
- Kids with way too much money going to private schools

I soon noticed that most people who seemed to belong to one or the other of these groups (distinguishable by the school uniforms or the tendency to run towards the express busses to the Islington subway station) most often used tickets, not a weekly pass. This would be more expensive for these people, unless they all took the bus no more than ten times in any week. Hmm. What does this say about public transit on the weekends? Several ominous things, all of them true.

After I resigned myself to long walks carrying my groceries – apparently everyone in Mississauga who's worth anything has a car – I started to notice that everything that I bought on those excursions cost a bit more than in Toronto. Toothpaste costs half a dollar more. Makeup is the same, but they don't carry the real cheap stuff. Hairspray is at least a dollar more, so I decided I'd get my hair trimmed instead of spraying it out of my face. I looked around for somewhere charging less than fifteen dollars (and charging no more for a female cut on a head with no hairs longer than three inches than a male cut). Eventually I decided I could live with my bangs getting in my face and get my mother to give me a trim when I visit home.

The clincher for my growing fears came on the bus home late one evening. I was reading a computer book in the back of the bus, with about five or six teenagers. If any of them were old enough to drive, I must look ready to collect social security. A cellular phone rang somewhere in this section, and three of the kids started rummaging around in their knapsacks and eventually each produced a phone. Another kid pulled one out of his coat pocket, and answered with a hearty "Hey you asshole, why didn't you answer your phone?" The other phone-wielding children sheepishly put away their phones as the mouthy one loudly called half a dozen other friends to arrange where they were to meet.

At this point, I realized my fears were justified. Mississauga is a rich area, and many of the people there see no reason not to flaunt it. A lot of the kids there would have called my parents poor if I went to school there way back when, because they drive cars that are (way) more than a year old and looked for bargains and not designer labels when they bought me sneakers. I would hate to have been a kid in this town.

Now, don't get me wrong, I think that it's wonderful that some people have enough money to give their kids all that they want. I think that it's wonderful that these kids never have to worry about financial problems... but they don't seem to get it. I hear them sit on the bus in their exclusive private school uniforms and their $200 sneakers and talk about how school is so dumb and they can't wait to graduate and work. I see them look strangely at me if they hear me ask a store clerk where I can find the sale merchandise. I see a lot of kids who are spoiled rotten and don't realize it.

I know that there are may kids around the area who have a lot less. I know there are others who have their heads on straight. I know that Mississauga needs bus drivers, shop clerks, manual labourers of all sorts, taxi drivers, secretaries and so on. Mississauga needs a lot of people who can't afford to let their children be this way. I know there are other parents who don't give their kids everything they want, even if they can afford it. Still, I sympathise with all those kinds of people who choose to live in this town. It can't be easy to keep your perspective when you live in Yuppiesville.

Carolyn "Next time I'm living in somewhere else" MacLeod

Wonderful Website of the Week

Okay, now that interviews and midterms are finished (they are finished, right?), you'll have plenty of time for Web cruising and creating your own Web page (an excellent activity for work terms, too). To get your homepage started, just type in `undergrad_mkhomepage`. This will create a new directory `public_html` from the root of your account and put some files in it.

You're now on the Web! To get to your homepage, just enter `http://www.undergrad.math.uwaterloo.ca/~<userid>` in your favourite Web browser. Of course, it won't look very good right away — that will take some time. To start off, go into your `public_html` directory and edit the `index.html` file. (This is what appears as your homepage, although you can create other files as well and have links to them.) You probably want to put in some information about yourself (or maybe not), but the great thing about the Web is that anything goes.

Planning is always a good idea, so if you want to create a very large homepage, make sure that you organize things first. Next time I'll tell you some more about making your homepage, including HTML and all those funky tags. Most importantly for now though is to tell your friends about your homepage. They'll be **so** impressed!

Anyway, here's my suggestion of a site to visit this week:

3 Guys Who Draw
`http://www.3guys.com/`

As the name might give away, this site is created by three guys who draw. They have some great cartoons, including lots of their old work as well as new stuff which is updated frequently. Don't try this without a colour terminal.

Warren "The Milkman" Hagey
Webmaster Extraordinaire

Physics Rediscovered

Why isn't this article in DarkMatter?

It is well known that mankind's search for truth has led him to make some strange assumptions about the universe in which we live. On the whole though, it has expanded our understanding and our consciousness in uncountably many ways. However, often when something is discovered it leads to contradictions with formally established theory, and causes a reevaluation of how everything works.

The reason I write this article today is because I have discovered why this is, and it is a discovery that shakes the very foundation of Physics as we know it.

Since Galileo, mankind has known that it is not at the centre of the universe, as was thought for so long. This simple assumption has brought us so much in itself, and allowed us to consider new theories and ideas that never would have been considered otherwise. Ironically, Galileo was wrong.

Man is at the centre of the universe

In olden times, Galileo showed that the Earth was indeed not at the centre of the universe. However the discovery of general relativity has proved to us that the properties of a system are dependent on the frame of the observer. Therefore, for *any* observer, the universe will revolve around him. This makes life hell for mathematicians calculating flight paths, but may be the cause of inflated egos.

The gravitational constant of the universe depends on the observer

This is in part due to the above point, but it is significant enough that it should be mentioned here. Gravity is a lot simpler than it looks, and it can basically be summed up in one sentence:

If you think you're going to fall, then you probably will.

This explains why all sorts of things can't fly, like you and I, and why really dumb things, like planes, birds and ducks can. Incidentally, rocks are a lot smarter than most people give them credit for.

An object travelling slower than the speed of light tends to travel slower than the speed of light, and an object travelling faster will continue travelling faster unless acted upon by an outside force

Proof of this is left to the countless number of science-fiction movies made over the ages, but here's a simple experiment you can try at home. (Kids, be sure to get your parents permission before handling any sharp objects. Not that there are any sharp objects involved with this experiment, it's just a good rule in general.)

First, stand in an open, well-aired space. Then, quickly move your arm forward at the speed of light or faster. You will find that your arm will continue to move at the speed of light, dragging you along with it. This is how large objects, like the Millennium Falcon, accomplish faster than light travel. They simply travel close to the speed of light, then throw some lever forward, at a speed that when added to the ship's overall speed, makes the lever travel faster than light, thus dragging the entire ship into FTL speeds.

Greek letters propagate either extremely quickly or extremely slowly

Have you ever noticed that it is impossible to assign a "normal" value to a greek constant or variable? (With the exception of λ, of course. Values assigned to a λ are extremely volatile, and must be treated specially. They are called *eigenvalues*.) This is no coincidence. The speed at which Greek letters propagate through the universe is related to the Permittivity and Permeability of Free Space. (Which, incidentally, are represented by ε_0 and μ_0 respectively.)

This accounts for all those times when a professor writes some obscure Greek letter on the board and it seems to take forever before you can tell which particular letter it is. (What *is* the difference between ξ and ζ anyways?)

Note that to save time on this issue's printing of *math*NEWS, the Greek letters in this article started printing several days in advance to allow for the slow propagation.

Christopher "All this for a lousy physics minor?" Calzonetti

*mast*HEAD

One more to go...

Matt again. So let's consider: I'm thinking I'm finally getting the hang of this whole editor thing, when the production system breaks. That's right, the lovely folks at muff-kuff switched around some software and didn't tell anyone... and so all of a sudden, I'm seeing two copies of every article. Seems the obsolete (?) software was used by the piece of our system that locks files... yeah, get it? Total access crossover. Other than that, though, I'm amazed at how smoothly it's gone.

And tonight, out braving the first winter weather and hiding from various CS exams, along with what they think should be done with Fed Hall, are our *math*NEWSstaff: Mike "Hammer" Hammond (New *math*NEWS office complex), Darren Rigby (Food Services re-training center), Chris Calzonetti (Dimensional wormhole addition to the 6^{th} floor), Ian "Son of God Complex" Milligan (Replace it with giant cookie (Arrum-num-num!)), Stuart Pollock (Exam-writing room with music pumped in!), Ann Scea (If it got beamed off the Earth, would anyone actually notice??), André Cousineau (Rename it Village Three and turn it into a haven for frosh... Or did we already do that?), Michael Thorsley (Two words — Ball crawl), Richard Bilson (Sell mallets so that students can relieve exam stress by taking out a wall — profits to *math*NEWS), and Max Stevens (Since I never go there, force all couples in math to do their making out in there).

Thanks goes to Domino's Pizza for their wonderful pizza and to Marion and all the swingin' copyin' cats at Graphic Services. Thanks also to David Jackson, whose postponement of our C&O 330 assignment helped made completion of layout possible! Remember, production night for the fifth and final issue this term will be on November 25^{th}. See y'all...

Brian Fox (Brian's Disco Paradise),
Matt Walsh (Minimalist LaserQuest™ arena.)

Zoo U.

Chapter One - Registration Day

Barry hated lines. He hated having to wait for what seemed like hours to do a task that only took minutes. Often, Barry would go to great inconvenience just to avoid waiting in a line. Unfortunately, Barry found himself stuck in a very long line waiting to register at university. Barry noticed with much annoyance that all of the other lines were moving quickly while his was crawling along like syrup. Barry leaned to the left to find out what was holding the line up.

"You're getting tired of the wait too, huh?" the pretty girl behind him asked.

"Yeah." Barry replied, grateful to have someone to talk to. "I hate lineups. I got grocery shopping to do."

"Well, you might want to do it tomorrow," the girl replied, "because we've got the chimp doing our line."

"What?" asked Barry, somewhat confused.

"They've got one of the chimpanzees that work in the Registrar's office processing this line and they work pretty slow. It's hard to process registration while you're peeling bananas," she explained.

Barry looked at her strangely and leaned out again to look at the front of the line. He saw a chimpanzee behind the registration desk popping a banana into its mouth. Beside it was a large bunch of bananas waiting to be eaten. "They have a chimp doing our registration?" he asked, bewildered.

"Oh yeah," the girl nonchalantly replied. Sliding a piece of gum into her mouth, she said, "It's better than last year when they had a mule doing this. After a couple of hours, the mule refused to process any more registrations even though there were a lot of people still in line."

"Uh, this might sound dumb, but why don't they use people to do this stuff?" Barry asked, incredulous.

"It's part of the university's new program. You see, we were graduating lots of smart animals, but they weren't getting too many jobs. The university decided to implement an affirmative action program that gave animals preference for new job vacancies at the university."

"Whose crazy idea was that?" Barry asked, not believing his ears.

"It was the president of the university. Actually, it was the former president. He died last year," she answered, blowing a bubble.

"What would give him the idea to hire animals to do jobs that people ordinarily do? And, what do you mean, 'graduating lots of smart animals'?"

"This school is one of the few in North America with programs in higher education for animals. We teach animals to function in the human world to increase productivity in all facets of life. The university also trains humans, like you and me, to take advantage of the growing opportunities of a joint human-animal workforce. I think it's a really worthwhile endeavour. The former president was a possum, so he had a lot of good ideas from the animal point of view. He died last year in his office but, since possums often play dead, everyone thought he was just trying to get out of meetings. It was only when someone noticed the smell that they found out he had died. It was a pretty sad event, actually," she said, wiping a small tear from her eye.

"Who teaches these types of courses? I thought I was signing up for chemistry!" Barry said, shocked.

"Oh, we've got both human and animal teachers throughout all of the programs. We've got a bunch of horses that teach engineering classes. We may not have a great football team, but we have the best equestrian team in the league! I am taking an English class taught by a zebra."

"But zebras can't speak English!" Barry exclaimed.

"Yes they can," retorted the girl, "that TV show with Mr. Ed was based on my English prof. They never paid her any royalties until she sued him."

"But Mr. Ed was a horse and your English teacher was a zebra. It's not the same," Barry said shaking his head in wonderment.

"It's not as black and white as being horse versus zebra. Since a zebra comes from the same family as horses, it was considered a misappropriation of rights. It was a landmark case for animal rights."

"How come I never heard about this case?" Barry asked, challenging her to prove her tale.

"Because the decision was made on the same day that Canada beat Russia in 1972 and it sort of got pushed to the back of the newspaper," she answered, rising to his challenge.

"I still don't know if I believe all this," Barry said warily.

"Look, I know it's a little hard to deal with at first, but you will get the hang of it. Why don't you come to the Zoo tonight and I can tell you more," she said, smiling.

"I didn't know there was a zoo in this city. Doesn't it close at night?" Barry asked.

"No, I mean our campus bar, The Zoo," the girl said laughing, "I'll meet you outside the science building at eight and we can go from there."

"Oh, okay," Barry said, wondering if it was all a bad dream. "What's your name?"

"I'm Laurie. And you can stop pinching yourself. It's not a dream."

* * *

Laurie and Barry walked up to the entrance of The Zoo. They could hear loud rock music and laughter behind the two gorillas who were guarding the entrance.

"Just hand them your ID and don't stare at them too long. If they start beating their chests, run," advised Laurie. A gorilla took a long look at both of their drivers licenses, grunted, and let them pass.

Inside the bar Barry noticed a large dance floor with a stage behind it. Several small tables surrounded the dance floor. On the right wall, there was a long bar with two elephants pouring drinks and an octopus working four cash registers at once. On the other side of the floor, Barry noticed a group of chameleons standing quietly, preferring to fade into the background. To the left of them were two bears hugging each other. In the back corner was a large aquarium with two sharks and a pool table.

"Um, this might seem a little stupid, but do these animals, uhhh, date each other?" Barry asked.

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"Only within their own species. We haven't had too much crossbreeding go on because of the potential effects on offspring. Animals as yet don't have any methods of contraception so they stick to their own backyard for dates. Why do you think I brought you here?" Laurie said, winking and messing up Barry's hair.

Barry laughed and walked up to the bar. While he waited to get served he noticed that a variety show was taking place on stage. A human comedian was telling jokes that Barry didn't think were funny but at which a hyena couldn't stop laughing. After the comedian left the stage, a mynah bird came on to do some impressions.

"What will you have?" asked an elephant bartender.

"Could I have a draft of Labatt's Blue?" Barry asked politely. Barry's eyes grew wide when he saw the elephant dip his trunk into the keg, draw beer up into the trunk, and deposit the beer in a glass.

"That will be three bucks."

Barry's mouth dropped open in amazement.

"Look Pal, other people want to be served. It's just as clean as a regular beer tap, believe me. Do you see anyone in here dying?" the elephant asked testily.

"No," replied Barry sheepishly as he handed over the money.

Barry returned to the table that Laurie had found just in time to watch a squid juggle and a bunch of acrobatic monkeys form a pyramid.

"Aren't they great?" Laurie asked, shaking her head in wonderment.

"Yeah," replied Barry, wondering how the rest of the year would turn out. At least, he thought, I know one person here that's a human. Of course, he had no idea what awaited him the next day.

Graham "Wild Kingdom" Rogers

Proof of the Week

Required to Prove: 2 wrongs = 1 right

Given:
wrong is the antithesis of right
left is the antithesis of right

Proof:
From what's given, we can say wrong = left (1)
Consider:
Turn 120^0 left twice
i.e. $(120^0)\times$ 2 lefts
In a 360^0 turn this equals a right turn of 120^0
$\therefore$ $(120^0)\times$ 2 lefts = $(120^0)\times$ 1 right
Divide by 120^0:
$(\not{120^0}) \times$ 2 lefts = $(\not{120^0}) \times$ 1 right
2 lefts = 1 right
But by equation (1) $\times$ 2, we get
2 lefts = 2 wrongs
$\therefore$ 2 wrongs = 1 right. QED.

Ryan "Out in Wrong Field" Jenkins

The Importance of the 6th Floor

Many people still ask that burning question - what purpose does the sixth floor of MC serve? This is a complex, multi-dimensional question, requiring much thought and someone who knows the answers. Not knowing the answers, I can only offer one of the many possibilities.

When the Math and Computer building was first built, it was a site to behold. The finest geometrical minds contributed to the design and construction of MC, making it the first building to exist as a projection from 5-space. This made it a wonder of the mathematical world, but caused many problems for new students who attempted to use MC and kept falling onto razor-sharp edges, or off their seats into the great abyss in the center of MC. The faculty demanded action - too many mathies were being sacrificed to the gods of mathematical aesthetics.

The AM department took on the challenge of correcting this problem, without incurring the cost of rebuilding MC. Their ingenious solution was to create and house a singularity in the sixth floor of the math building. This singularity caused MC to appear as it does to this day, square and solid.

However, the effects of this singularity did not go unnoticed by the rest of the campus. The Engineering lecture hall, once the tallest building on campus, was reduced to a mere pill-box of its former self. The buildings of V1 and V2 took on the bizarre geometry that can be witnessed in overhead pictures of the grounds. Most horrible were the effects on the roadways of KW.

Take a look at a map of KW and observe King and Weber streets. King Street runs North - South and Weber Street runs North - South, making them parallel. At least, at one time they were parallel. Now, they cross at least 3 times and King Street also runs East - West.

Keep in mind that this geometric re-arrangement is only your *perception* of what is really there. Try shining a laser down Weber Street and it will follow it precisely. However, the same cannot be said for the hallways of MC - the beam starts on the third floor, yet ends somewhere on the 5th.

So the next time you feel like going up to the sixth floor to see what is there, remember there is a singularity up there and that singularity has an event horizon.

Chris "Apathy is my Watch Word" Guerra

OUAA Football Final

Waterloo vs. Guelph

University Stadium @ 1pm Tomorrow!
mathNEWS would like ALL mathies to show up and support our team's trek to the Vanier Cup.

Be There!

Referendum-Da-Dum-Dum

Brought to you by the Parti mathNEWS$ois

It's a year after the Québec referendum. We once again have a group of people about to hold a referendum to determine whether a subgroup of society should gain some measure of independence from the larger group. This time, though, it's *math*NEWS.

Yes, that's right. *math*NEWS.

This term, there will be a referendum to determine if *math*NEWS should be financially independent from MathSoc. You will be able to help determine the future (or lack thereof) of *math*NEWS.

Background

Xerox has stopped selling photocopiers. Instead, they lease them, because it makes them a whole lot more money. As a result, the good folks over at Graphics Services who have been so good to *math*NEWS all these years have been forced to raise what they charge *math*NEWS. How much? About twice the amount of money per page. Yes, *math*NEWS now costs about twice as much to produce without any corresponding raise in quality. (Kinda reminds you of the federal government, doesn't it?)

MathSoc, on the other hand, currently has *less* money that they can give us. They managed to scrape together enough this term to give *math*NEWS about what they usually do, which, of course, is now half of what *math*NEWS needs. According to the MathSoc president, Sarah Kamal, MathSoc will not be able to afford this spring to even fund *math*NEWS with as much as they have this term. *math*NEWS has been able to stave off the inevitable by holding some fundraisers (like barbecues) and reducing the amount of *math*NEWS printed this term. This, however, cannot continue indefinitely.

The Proposed Solution

Everybody in MathSoc agrees that stopping (or even disrupting) the production of *math*NEWS is a Bad Thing™. However, it is equally a Bad Thing™ to bankrupt (and subsequently kill) MathSoc in order to fund *math*NEWS. And everyone further agrees that few people would like a MathSoc Fee Increase™. Thus *math*NEWS must turn to alternate sources of funding.

The best option found so far, and hence the proposed solution, is to remove the responsibility of funding of *math*NEWS out of the hands of any one organisation (such as MathSoc) and put it directly into the hands of the people *math*NEWS already serves: the students. Placing *math*NEWS on the fee statement of math students, alongside the MEF fee and the MathSoc fee, will allow *math*NEWS to continue to bring you the quality product that has been continuously printed since the winter of 1973.

Where You Come In

In order to put *math*NEWS on the fee statement, there needs to be a referendum held over two terms. The first part will be held later this term among the regular and co-op students who are here. The other part will be held sometime next term among the co-op students returning for the winter. The referendum needs to pass (50% + 1) over the sum of the votes cast in the two terms.

We need you to come out and vote. *math*NEWS would, of course, prefer you to vote to add *math*NEWS to the fee statement, but we're certainly not going to hold it against you if you vote the other way. (We may call you names behind your back for a while, but that will probably pass... eventually.)

Possible Consequences

This is a Very Important Issue™ to address. If *math*NEWS does *not* receive separate funding, any of the following could happen:

- *math*NEWS could perish as a publication, never to be seen again.
- MathSoc could continue to fund us until they bankrupt themselves, at which point both *math*NEWS *and* MathSoc would perish.
- MathSoc could attempt to raise their fees in order to fund *math*NEWS. However, if they decide not to give *math*NEWS all the collected money for some reason, *math*NEWS will not receive the money intended for it.
- MathSoc could attempt to raise their fees and guarantee that the money raised go toward *math*NEWS. However, the raising of the MathSoc fees will entail a referendum anyway; since we're already holding the *math*NEWS referendum, this means an extra referendum that MathSoc can't really afford.

*math*NEWS has always been there for you. Every other Friday morning, five or six times a term, without fail, for the past 23 years, dedicated writers, productionists, and distributors have volunteered their time and effort to inform, edify, and entertain you.

Now *math*NEWS needs you. Please help by voting in the referendum!

Mike "Hammer" Hammond

Post-Teen Angst: I'm a Sponge?

Winter

— or —

"La sequia habia durado ya diez millones de anos, y el reinado de los terribles saurios tiempo ha que habia terminado."

Yes, it's getting to that God-awful time of year again. One of the many times that I wish I were a bear, so's I could just hibernate. (The other times involve pic-a-nic baskets, Boo-Boo.)

Winter. Blah, blah, blah. It's bad enough that we have less daylight, but the daylight we *do* get is just enough to blind you reflecting off the six feet of new snow that accumulated during the night. You, dear Average Reader, actually *like* winter? Allow me to itemize and nail down several reasons why you are in ERROR.

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First, there is the whole Daylight Savings Time thingy. This is a convention derived by us human-types to maximize the amount of light we get during the "day" hours. This is great and all, but has two flaws. One, most of my "days" are spent sucking down enormous amounts of x-rays sitting in a chair, albeit a comfy one, in front of a computer screen — obviously not taking full advantage of the additional five minutes of light outside. And, more importantly (and definitely more annoyingly), this human convention does not seem to affect the animal kingdom too much. Thus, the Soft One's normal screeches of "LET ME OUT!!! IT'S 7:30 IN THE A.M. ALREADY!!!" suddenly have become screeches of "LET ME OUT!!! IT'S **6:30** IN THE A.M. ALREADY!!!".

(Mind you, it takes a trained ear with many years of practice to recognize the difference between "MMRRRROOOOOW-WOOOWOOOORRRMMMOOOOOW!!!!" and "MMRRRR-OOOOOWWOOOWOOOORRRMMMOOOW!!!!".

"Or a lunatic who can't read a bloody clock," mutters the ever-cynical, ever-vigilant Average Reader.)

The second big problem with winter — that white stuff that keeps coming out of the sky. Dandruff of the gods. Sacrificing cases of Head-and-Shoulders to your deity of choice makes no difference. The stuff just KEEPS COMING. More and more. Piling higher and higher until it blocks out the sun and you think you're going to suffocate underneath sixteen feet of flakes from Zeus's scalp and boy-oh-boy what an honour *that* would be cuz you've gotta figure that some of his omnipotence must be in his scalp so you consider eating it but then decide against it cuz no matter how powerful eating it would make you and no matter which deity it is from it is still basically dried, shrivelled, icky pieces of someone's HEAD.

"Yeeecch. Can we move on?" pleads Average Reader.

Right. So, that snow stuff is bad. It's cold. It's wet. And, y'know, I don't *care* that every snowflake is unique, for they all share one quality: suckitude.

The third, and possibly the worst quality of the Season of Evil is the temperature. It is cold. CO. LD. Brrrrrrr! I just *don't* like the cold. It makes my fingers turn blue, my nose turn red, and my dangly-bits suck so far inside my pelvis that they stick out my belly-button.

"Ye gods man! That's it! I HAVE HAD IT. Whine all you like about lack of daylight; rant to your heart's content about some inane theory on spiritual dandruff. But when your, as you so eloquently (and scientifically) put it ... Dangly-bits... come in to play, then I *leave*. Seeya."

Average Reader? Average ReeeEEEeeeader! Please come back! I'm sorry. It'll never happen again! Honest-and-for-true.

Ian "Son of God Complex" Milligan

Minisoft™ Missing?

No, not really. I just happen to have a very busy weekend and don't have time to fabricate stuff about Minisoft™. Try to think up something yourself (oops, sorry, used the 't' word).

Warren "The Milkman" Hagey

The Philosopher's Stoned

Sleep and its Lack

A student's first few terms in the Math Faculty are usually spent (between card games, interviews, and occasionally classes) in contemplation of the world around them. The neophyte Mathie must bring things into focus, as it were, and define a new relationship between themselves and the world around them.

This takes place through a series of questions which the new Mathie asks themselves. "Why am I here?" is generally a starter (sometimes phrased, "Why the hell am I still *here??*"); this gives way to, "Why are there buildings on campus other than the MC and the one with the Bomber in it?"; and finally, "Why did I bother finding somewhere to 'live' this term anyhow?".

The answer to this last is generally simple, at least in theory: **sleep**. The only real point to having a 'local address' is somewhere to park your bed for four (eight, thirty-two, whatever) months, and the main purpose of this bed is (for most people, at least) to have somewhere to sleep at nights (mornings, midafternoons, whatever).

Why bother with sleep, you ask?

Well, conventional wisdom states that sleep is a good thing in and of itself. It tends to get lumped in with other 'relaxation'-type activities. And relaxing, *They* would have you believe, is a good thing to do. Perhaps there is some merit to this point of view; life and its attendant assignments sometimes seem easier to deal with when one first gets up in the morning.

Also, from a purely mathematical point of view, one high point of sleep is that it brings dreams. Why, I could name a number of mathematicians that no one else has probably ever heard of, who made some of their great breakthroughs by being given a result in their dreams. (No, really. Von Neumann, for instance. Look it up.)

(Now if one were cynical, one could also suggest that "in their dreams" is the *only* way the average mathie can get a life. If one were cynical.)

So says the conventional wisdom.

I believe otherwise. I am a founding member of Club 21, an organisation which exists to fight the myths about the deleterious effects of sleep deprivation. After all, while lack of sleep might not bring about what most consider a normal frame of mind, there are side benefits.

For instance, sleep-deprived people are happier than others. By about 3 a.m., you'd be surprised at what seems hilariously funny. This can only result from a generally positive outlook on life. In some ways this is surprising, because another effect is to allow people to see the world more realistically. Proof? Yeah, sure, assignments seem easier after a good night's sleep. If you believe that, you're just deluding yourself. All assignments are impossibly hard, and the only reason you'd think otherwise would be if your brain was so fogged-up with unconsciousness that you didn't know any better.

As well, think of the efficiency. The average student is too busy during the day (with classes, bridge games, and the like) to have much spare time. So when you do have spare time, do you really want to spend it dead to the world? NO! You should be out there doing stuff like terrorizing a Tim Horton's near you, or making a giant Twister board, or playing really really silly bridge, or any of a hundred other things that may occur to you by then.

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Which brings us to another point: lack of sleep expands the imagination. After all, how many hallucinations do you normally have when you've been sleeping regularly? Probably very few. And that's a pity, because those hallucinations are the source of the world's greatest ideas. (I mean c'mon. Who would have thought of using light bounced off of plastic to retrieve music, unless they'd been up all night trying to solve DEs?)

One final point about sleeplessness: there are certain stages to watch for. About twenty-three hours after one last woke up is a very dangerous time; don't try to drive your thresher home. Or anyone else's thresher, for that matter. Oh, and at maybe nineteen hours and at six-hour intervals after that, reaction times go away for a while. Deal with it. It's a small price to pay, when one's living life to the fullest... the most hours you possibly can!

Matt "So-Krates" Walsh

More boyfriends than trees in the forest

(or, "You're with him *now?")*

[Editors' note: The viewpoints and opinions stated in the following article are those of the author, and do not necessarily reflect those of the Math Society, the mathNEWS *editors, or a general majority of the Math Faculty. Weren't not even sure if they're Max's own views, or something he just made up after one too many beers. Here in the* mathNEWS *office, we personally think Max was abducted by aliens, and these opinions were implanted in his head. He usually is not this bitter. Anyways, enjoy! — CalcBoyEd and SoKratesEd.]*

Ok, so my last article was well received (or at least widely read, anyway). I figured I might as well follow it up with another article or two about some other things that I've noticed regarding couples in math, and why the hell they're so annoying. This week, of course, I'm talking about the phenomena that only math women experience, the eternal boyfriend.

If you're unfamiliar with the situation, this must mean that either you're an unobservant fool or you're not in math. It's kind of hard *not* to notice it if you spend any amount of time in the math building (or at least visit it once a week). On that weekly visit, if you were to go to the third floor of the math building and wander around for a while, playing close attention to who is attached to who (it's not hard at all — perhaps not enough people took my last article to heart), you'll find that almost every week there's been at least one women whose broken up with her previous boyfriend and immediately fallen for a new one. More boyfriends than trees in a forest.

Now this is annoying behaviour, and it seems that nobody wants to talk about it. Whenever I see this happening, I generally have the reaction of trying to figure out what was going through her head. Consider reasons why two people might get together:

1. They *like* each other (and, if they're in math, not afraid to show it publicly)
2. Sense of security
3. Having somebody to depend upon
4. Free dinners

Well ok, I could go on for quite some time. The reasons here (except for possibly the last point, although I would not put that past some women) are, in most cases, the main points why people get together. Now lets consider what happens when your average math woman breaks up with a boyfriend and finds a new one all in the span of a week.

1. She has decided that she no longer likes the previous boyfriend at all, but does like the new boyfriend. She and her new boyfriend go from friends to making out in the comfy lounge in less then a week.
2. Having lost her previous pole upon which she leaned, she must seek out a new one, for she (seemingly) doesn't have the strength to get by one week on her own.
3. *(see previous explanation)*
4. She was still hungry.

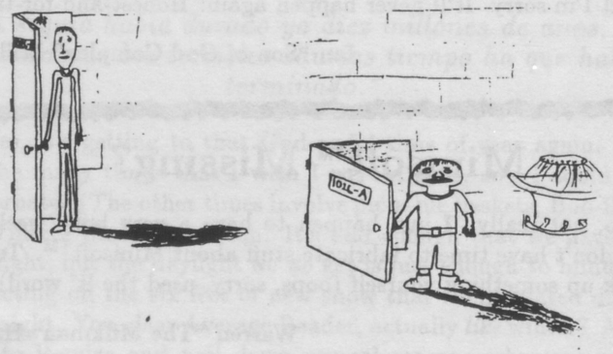
Hmmm, what's wrong with this? Am I the only one who finds it odd that mathie women change their personal inclinations so quickly? That they seemingly are incapable of being independent? That they simply can't buy their own frickin' dinner? It almost makes us men feel like cattle fodder — we're a commodity to be bought and sold. Forget about the old and concentrate on the new one. How silly.

Of course, when I take a step back and actually look at most of the women in the math faculty, watch them be in a continual state of attachment, listen to them googoo to a new guy every week, and hear about what they did in the comfy lounge yesterday, I have to wonder why I or any other guy would possibly want to get together with somebody like that. Do I really want to date somebody who is incapable of being independent for any length of time? Do I want to spend time with somebody who doesn't see how closely her situation resembles those of the mythical "valley girls" of whom we all make fun?

All of the fast and furious couple flipping in math makes me wonder what happens when people go on a work term. Does everybody start dating their bosses? Am I missing out on an important part of the co-op experience?

Of course, women are not entirely at fault here. Far from, in fact. I can almost understand the commodity metaphor, since there are quite a few men who I'm sure want to be bought and sold, who pine to be bought and sold. But that's an article for next issue.

Max Stevens



mathNEWSquiz #4

This is the Big One!

Hello, squizzers! I am pleased to tell you that we have many submissions this issue! Yee-haw! Anyway, here are the answers from last issue's squiz: **Song Lyrics**: 1) Guns 'N' Roses – November Rain; 2) Snow – Informer; 3) Soundgarden – Black Hole Sun; 4) Billy Joel — Storm Front; 5) Allan Sherman – Hail To Thee, Fat Person; the theme was "weather"; **Movie Quotes**: 1) Seven; 2) The Mask; 3) Broken Arrow; 4) Dragonheart; 5) The Truth About Cats And Dogs; **D&D**: 1) black, white, red, green, blue; 2) Lawful, Neutral, Chaotic; 3) "To Hit Armour Class 0"; 4) d4, d6, d8, d10, d12, d20; 5) strength, dexterity, constitution, intelligence, wisdom, charisma; **Potpourri**: 1) Sol (the Sun); 2) James I of England (James VI of Scotland); 3) diameter; 4) pancreas; 5) Groucho, Harpo, Chico, Zeppo, and Gummo.

Here begins the long list of those who submitted to the squiz this time around, with their scores in parentheses: Ian "The Word Guy" Facey (5); Romeo and Juliet (5); Brent McMillan (9); Chris "Mr. Octonion" Wooff (10); Tyler Bannister (11); Pokey & Taz (Phil is dead) (12); Fallen Skye (17); and the winner is ... Eric Fung with a whopping 18 points! You can claim your squizprize in the MathSoc office!

Okay, people. Keep up the good work! Now, the format for this issue's squiz is slightly different. Since we are in Volume 72 of *math*NEWS, we are going to have a super-squiz consisting of 72 questions on general knowledge. Any movie quotes inserted herein should be answered with the name of the movie, and song lyrics can give you two points (one each for artist and title). If you win the squiz, you can get a reallllllllly nice prize package which will include a t-shirt! Not one of those cheapo $5 t-shirts, either. So, it's in your best interests to submit. Anyway, heeeeeeeeere we go!

Super mathNEWS *quiz!*

1. What game show has the segments "Le Counte est Bon" and "Le Mot le Plus Long"?
2. What is the significance of the Appomattox Court House, in the United States?
3. Which Canadian Prime Minister won a Nobel Peace Prize for his work with UN Peacekeeping?
4. "Kneelin', looking through the paper though he doesn't know how to read.
   Prayin', now to something that has never showed him anything.
   Oh, feelin', understands the weather or that winter's on its way, yeah.
   Oh, ceilin's, people fall between all the legal halls of shame."
5. Who is the premier of PEI? (Bonus point for guessing his relation to "Son of God Complex".)
6. Where are the Canadian Books of Remembrance located?
7. What is the name of the new "Fixed Link" to PEI?
8. "This stuff is beyond crap. It is what crap wants to be when it grows up."
9. How many fiction books has Tom Clancy written by himself?
10. What "house" does Queen Elizabeth belong to?
11. A roll of quarters consists of 40 quarters. How many $2 coins make up a roll?
12. Which company owned the Northwest Territories, from the 1600s until the late 1800s?
13. What's a FLOP? (Computer def'n)
14. Who invented Teflon?
15. What disease does Stephen Hawking have?
16. What does Mr. Snuffleupagus enjoy eating?
17. Which two nations fought in the War of 1812?
18. What colour is a Zebra?
19. "Oh, the year was nineteen seventy-eight
    (How I wish I'd never tried it now),
    When a score of men were turned quite green
    By the scummiest ale you've ever seen."
20. Where was the Boer War fought?
21. Mount Allison University is in what town?
22. Where is the answer blowin', my friend?
23. When did Alberta and Saskatchewan join Confederation?
24. Which expedition was the first to circumnavigate the world?
25. On what ship was the Japanese instrument of surrender signed, in Tokyo Bay, dated September 2nd, 1945, ending World War II?
26. Where was the first recorded game of baseball played?
27. What new "service" was made legal in Nova Scotia in August 1994 which caused a drop in gasoline prices?
28. My mother and your mother were hanging out the clothes;
    My mother punched your mother right in the nose:
    What colour was the blood?
29. " 'There's no time to lose,' I heard her say
    'Catch your dreams before they slip away.
    Dying all the time;
    Lose your dreams and you will lose your mind.
    Ain't life unkind?' "
30. What beach were Canadian Forces assigned to invade during the Normandy Landings, D-Day, June 6th, 1944?
31. What body of water is Ascension Island in?
32. Who sings the song *Piano Man*?
33. On what show does "Dial 'M' for Monkey" appear? (One bonus point for the day, time, and station.)
34. Who wrote the poem "In Flanders Fields?"
35. What is Eliza's (formerly of *Beakman's World*) full name?
36. When did Henry V reign from? (Coronation date to death)
37. Which Canadian General was the head of UN Peacekeeping forces in Sarajevo in 1992?
38. "Yup, plumbing's my trade. I've been a plumber in this town for thirty years. I've seen it go from pasture land to the hell-hole it is today. People think their pipes just grow down there but they don't — look at my knees! *Look at my knees!*"
39. "Well, we planned to have a gay old time, the cash we did not spare
    We left all the cars at home and paid the taxi fare."
40. When was John F. Kennedy assassinated?
41. Which Greek muse was associated with music?
42. What distinction does Point Pelee, Ontario have?
43. The war that the Mackenzie/Papineau brigade fought in.

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44. Whose "radius" is the event horizon of a black hole?
45. "Michael was the most sexually experienced of us, which means he had kissed a girl on more than two occasions."
46. What is a "Kelvin"?
47. Who are the five members of "G-Force" (from *Battle of the Planets*)?
48. Where is the Sea of Tranquility?
49. How many regular polyhedra are there?
50. Why are manhole covers round?
51. How many divisions made up the Canadian Army that assaulted Vimy Ridge?
52. When was the Magna Carta signed?
53. Who was the first captain of the U.S.S. Enterprise, of *Star Trek* fame?
54. "I'm as liberal as the next guy!"
"If the next guy is a redneck."
55. Who is considered to be the greatest mathematician of all time?
56. What do we call magma that reaches the earth's surface?
57. What Canadian was known as "America's Sweetheart"?
58. On what day was the Battle of Vimy Ridge, fought and won by Canadian Forces in World War I?
59. "Every whisper of every waking hour
I'm choosing my confessions"
60. How many letters are in the Greek alphabet?
61. Whose oil drop experiment first determined the speed of light to a great degree of accuracy?
62. "The ice is thin, come on, dive in
Underneath my lucid skin."
63. Which navies were involved in the Battle of Trafalgar, in 1805?
64. "Did you hear the one about the guy who was too poor to get personalised plates so he changed his name to J3L2404?"
65. What is the second-most-played song in North America, and who sings it? (You must answer both for one point.)
66. What are the Canary Islands named for?
67. Which country currently has possession of them?
68. "Am I the weaker man, Because I understand
That love must be the master plan?"
69. What is the "science" of reading the bumps on someone's head called?
70. Name the two "SSSStars" of *The Specialist.*
71. What **Canadian** Pipe Band won the World Championships in Scotland for the second year running?
72. What is the name of the act that created the Dominion of Canada?

Allllllllrighty, then! You have an extra week to answer all of these questions, since the next production night is November 25, 1996. Please submit by then to either `scepoll@undergrad.math.uwaterloo.ca` or by submitting a paper copy to the BLACK BOX across from the Comfy Lounge. Good luck, folks! This is the Big One!

Jerry "Fish" Han
Mike "Hammer!" Hammond
Ian "Son Of God Complex" Milligan
Stuart "Jean-Guy!" Pollock

The View from the Other Side

Where the grass is always *greener*

Good morrow, everybody! I trust your midterms went! And I'm sure, while studying for all those midterms you've written, you've kinda let all those assignments slip, right? Maybe even didn't hand one in? Which brings me to this week's topic:

Marking

Most first-year graduate students, like myself, receive a teaching assistanceship as part of departmental funding. This teaching assistanceship, for computer science grad students, anyway, is usually of a first- or second-year CS course, on the theory that graduating with a CS degree means that we remember what happened in first- or second-year[1]. As you may remember from your first- or second-year CS classes, you have one tutor, whom you ask questions, and a whole lot of markers you never see[2].

I am a marker.

Markers come in two basic flavours: washable and permanent. Washable markers are the flexible new markers who remember what it was like to be an undergrad. They read your answer. They try to understand it. They check your answer against the model solution; if they don't match, they *then* check to see if your answer is correct nonetheless. They read your code, and your comments, and make an attempt to assess you fairly and to give you the benefit of the doubt.

Permanent markers, on the other hand, are usually veterans. Tired veterans. Tired, *lazy* veterans. These are the people whose philosophy is, "*When it doubt, mark it wrong. The students can always go to the tutor and try to get their marks back.*"

I am a washable marker.

What this means, of course, is that I tend to spend *way* more time on a given assignment than a permanent marker. Way, *way* more time. If your assignment comes back without what looks like a veritable clip of bullet comments, I didn't mark it; if an appreciable number of the comments in your code are in *red* ink, I may have marked it. If the adjectives "clean" and "white" are applicable to all parts of your assignment, I didn't mark it; if your assignment seems like a valid item that is "black and white and red all over", I may have marked it.

Get the picture?

What this means, though, is that I'm spending a good chunk of my free[3] time marking assignments.

And do I get thank-you e-mail? Noooooo! Do I get candy bars or bouquets? *Noooooooooo!* Do I even get a lousy Christmas card **with some sort of recognition of all the work I did to try and give you as many marks as I possibly could without totally and utterly screwing over any chance of me ever getting a TA ever again? NOOOOOOOO!**[4]

It's a good thing I get paid.[5]

Mike "GradHammer" Hammond

[1] Add to that the fact that I'm TA'ing CS 246, a course which only came into existence in my 2B term, and you can see just how valid this theory is!

[2] This is in contrast with the upper year courses, where the TA's *are* the tutors, and the tutors *are* the markers.

[3] Actually time I would spend on other, non-vital things, such as "laundry" or "research".

[4] This moment of bitterness was brought to you by Sarah Kamal™. When you're in the mood for bitterness, and you just can't get bitter enough on your own, reach for Sarah™.

[5] Don't you think there are too many footnotes?

Keeping up with the Bessels

So you're in class and the prof's talking about Bessel functions and, once in a while, just to give your brain a break, he talks about his research for an hour or two... on a Friday afternoon... thanksgiving weekend... (my grade 10 English teacher is presently putting her head through a noose. Failure has been known to take it's toll and, supposedly, run-on sentences are a mortal sin).

But you see, grammar and sentence structure apart, there is a an underlying issue here (yeah, an issue!). You have to wonder whether you are here to facilitate the process of getting a job, to learn about something that is genuinely interesting to you or just to play bridge. My hope is that most of us, even those at St. Jerome's, have at least some interest in the intellectual part of the curriculum. Sometimes, that may include listening when we'd really rather be on our way home for turkey and sometimes it includes listening to the redhead in the front of class laugh real loud before the prof delivers the punchline (maybe i should take lessons, that may very well be the only way I'll pass the course). You see, when the prof deviates to talk about something outside of the curriculum, it's because he (read "he or she", abridged for simplicity's sake) can very well see that we're all bored out of our minds and, frankly, he shares the sentiment. Having a love of math as well as a fairly short attention span, I'd like to thank all the professors out there who bother trying to keep us interested. 'Cause you know, I'll defend my department on most days but I pretty much have to admit that DEs can get boring sometimes.

Maybe all of this makes me a geek but, you know, I don't think that I care. A conversation about math has much more substance than one about mathsoc politics, even if part of it goes right over your head. I've found that, in most cases, you can just ask for an explanation and no one will mind. One day soon, you too may find yourself saying "... you mean... oh cool!" and, after all, isn't that all learning's about.

Justyna "Cassiel" Berżowska

Lateral Thinking

Although we now have several people trying hard to solve our lateral thinking problem, we still don't have a winner. It's not too late to join!

The contest will continue until we do have a winner.

Once again, the rules are: Submit yes-or-no question by e-mail to djrigby@undergrad.math.uwaterloo.ca to try to find an explanation for the following situation: *A thief, caught at the scene of his crime, requests that his arresting officer book him for manslaughter, not theft. How come?* The first person to send me a correct solution wins the prize (and my undying gratitude for getting this fiasco finished).

The contest deadline will have to be November 25. that's our last production night and, winner or not, the answer will be there!

Gridby

*grid*COMMENTS

Greetings, Gridders!

Another two weeks have come and gone; another four submissions cross my path. Romeo & Juliet, Pokey & Taz, Chris Wooff and Ian Facey submitted solutions to both contests in the Great Pumpkin issue.

In the Unconventional all of the sticky-outy letters penetrated the north side of the grid, appropriately spelling out GO THROUGH THE ROOF. Romeo & Juliet didn't finish their grid, and Ian had a mistake. Of the remaining two entries, Pokey & Taz's wins the prize (My condolences on Phil's passing. ;)).

In the cryptic, all four submissions were correct. The winner, selected by using Tarot cards to divine who the winner will be anyway, is Ian Facey. Congratulations, folks. Pick up your stuff in the MathSoc office.

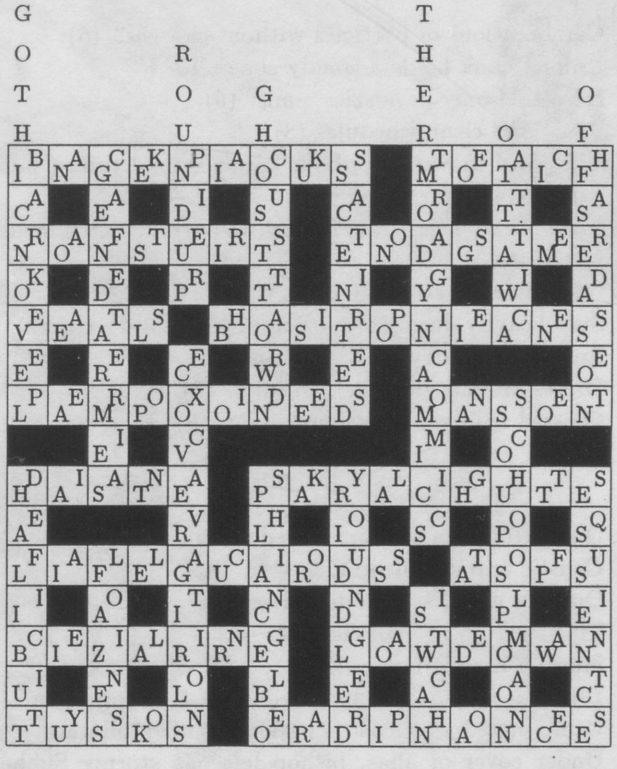
The *grid*QUESTION last issue was "How many beers in a six-pack?" The answers I received were "Zero, because the Cheers regulars and others drank them all!" and "None if you're drinking in a wheat field of characteristic 2." I take it someone was worried about an Algebra mid-term, hm?

As you may have noticed, the *grid*QUESTIONs have been rather lame lately. To spice it up this issue, I incorporated some answers to a *grid*QUESTION into the grid. Within each answer, only one word is clued. The others are left off. All the words, as entered in the grid, will match their clues. (Only in an Unconventional would this reminder be necessary.)

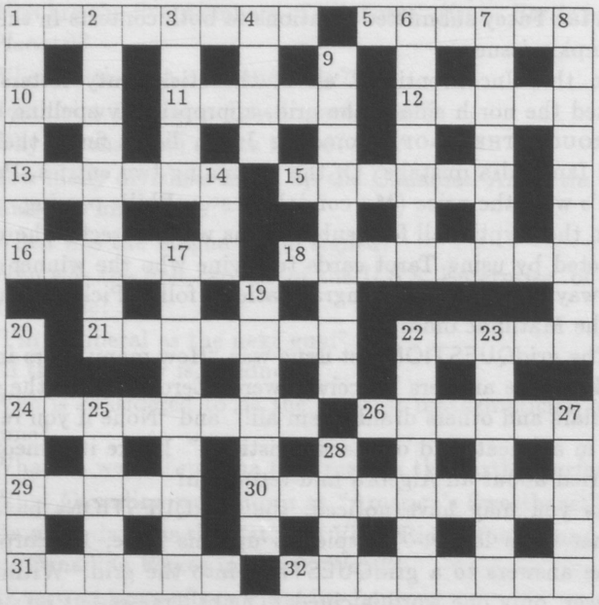
The four answers are "a 30-across on a 4-down 3-down", "a 16-across 22-across in a 32-across", "13-across in 5-across 12-across", and "a 18-across 20-down with a 17-down".

Solve one puzzle or both by November 25 at 6:30 p.m. And, if you solve the Unconventional, give your own answer to the *grid*QUESTION.

Gridby



GRIDWORD



Grid Clues (Cryptic)

Across

1. Pet maven hit the sidewalk. (8)
5. Repeat average garbage. (6)
10. Catcher is next, after #10 goes. (3)
11. Cheer about British machine. (5)
12. Dance recording from monster band reaches number nine? (5)
13. Combinations of particles without charges? (6)
15. Ruined bank holds a trendy shoe. (6)
16. Hose tied only in nozzles' ends. (6)
18. Panic and clear schedule. (8)
21. Wise bird moves in on baby bird's second tuft of hair. (7)
22. Jam, except less living yeast. (5)
24. Saint pronounced grave edict (two parts) written in advance. (8)
26. Lust after tin stool. (6)
29. Step heavily during stay around Maryland's capital. (5)
30. Improperly parry Serb derision. (9)
31. Drives around grain dehydrators. (6)
32. Crossed fruit repelling single bug. (8)

Down

1. Open Guinness sustains tuxedo'd one? (7)
2. Caustic trio caught in civil war. (9)
3. Dummy uses flash around river. (5)
4. Tips turn up in little lies. (4)
6. Shorten muscle bulge. (7)
7. Dodge leaked fluid, went on despite the stop signs? (7)
8. Using mixed tray, cast is making stuffed animals. (9)
9. Under cover of alias, bishop left one stormy Sabbath for lake. (9)
14. Submarine orders security. (3)
17. Collection of reports says what damage per pen was. (9)
19. Gun north provided behind Macedonian front. (7)
20. Lost heart is unsatisfactory, maltreated. (7)
22. Swiss psychologist ate up half of jujube insect. (4 3)
23. After a while, Jay's group makes a throw to the side. (7)
25. Pooh's friend sees heaven's spacious. (5)
27. For the audience, initiate old president. (5)
28. Some parts: Burma, Siam! (4)

Grid Clues for Gridquestion (Unconventional)

Across

1. Make sacred
5. Heckler's weapon (Answer III word)
10. Not safe?
11. Make an election honest again
12. (Answer III word)
13. (Answer III word)
15. Home for Harriers
16. Like many e's (Answer II word)
18. (Answer IV word)
21. Contest question type (hyph.)
22. (Answer II word)
24. Screeching noise from a microphone
26. Worshipped
29. Pay increase
30. (Answer I word)
31. Turn people into szxsvz
32. (Answer II word)

Down

1. Husband and wife?
2. One possible 28-down (2 wds.)
3. (Answer I word)
4. Let go (Answer I word)
6. How escapees should be shot? (2 wds.)
7. Tanks (a lot)
8. Think too much of
9. Dinosaur type
14. It goes between game, match and ready, go
17. Medical problem associated with high places (Answer IV word)
19. Go before
20. (Answer IV word)
22. Flooded riverside
23. Medical problem associated with high places
25. Macintosh's ancestor
27. Heavy cotton material
28. Petition