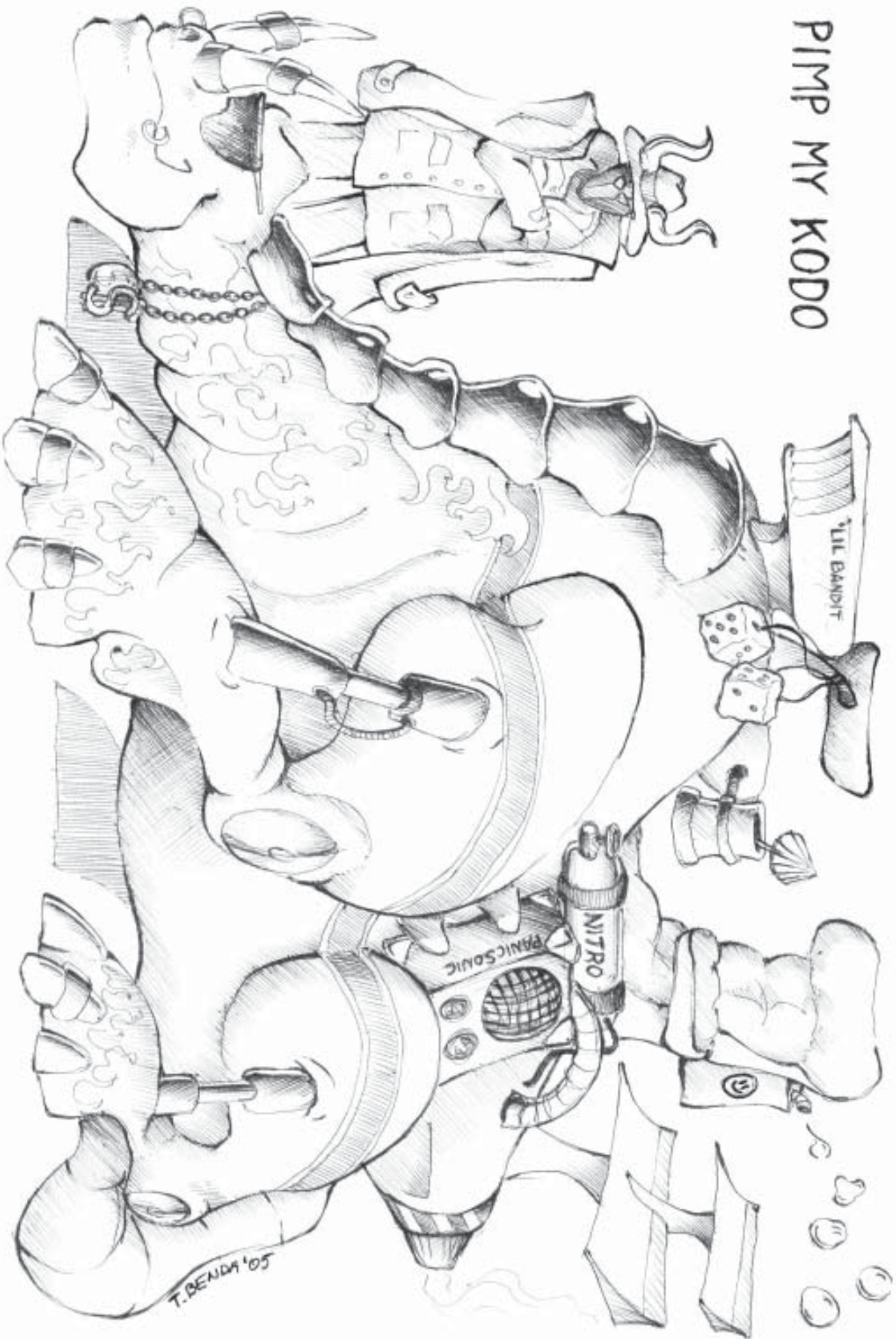


MOUTH NEWS

Friday, March 18th, 2005
Volume 97, Issue 5

PIMP MY KODO



lookAHEAD**mathNEWS**

March 18	Issue #5 released into the wild
March 28	Super secret production night! 6:30 PM, MathSoc (MC 3038)

Math Faculty

March 25	Good Friday, University Holiday
March 31	Math & Eng. lectures end
April 5	All other lectures end
April 8	Exams begin

MathSoc

Thursdays	Movie Nights, 7:00 PM, MC 2066
March 28	Office Marathon begins
March 30	Blackout, SLC Great Hall
April 1	Office Marathon ends

MGC

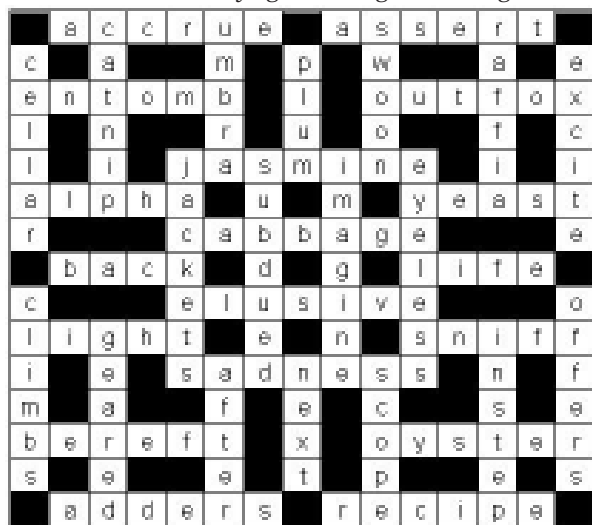
Wednesdays	Pizza for sale, 3 rd floor MC
March 24	MGC Pool Tournament and Free Play 7:30 PM to 2:00 AM Dooley's (on University Ave)

Co-op

Thursdays	Weekly rankings available at 8:00 PM
March	Daily job postings
April	Daily job postings
May 2	Summer Work Term begins

Misc

March 20	First day of Spring
March 27	Easter Sunday
March 31	FEDS General Meeting, SLC, 4:30 PM
April 3	Daylight Savings Time begins



ISSN 0705—0410

mathNEWS is normally a fortnightly publication funded by and responsible to the undergraduate math students of the University of Waterloo, as represented by the Mathematics Society of the University of Waterloo, hereafter referred to as MathSoc. *mathNEWS* is editorially independent of MathSoc. Content is the responsibility of the *mathNEWS* editors; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or *mathNEWS*. Current and back issues of *mathNEWS* are available electronically via the World Wide Web at <http://www.mathnews.uwaterloo.ca/>. Send your correspondence to: *mathNEWS*, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid mathnews@student.math.uwaterloo.ca on the Internet.

The editor(s): Mark "Beatlemaniac" Toivanen, Emerald Kushnier, Chris MacGregor

mastHEAD*Where the trees have cycles*

It's that time of the term again. The end. And with that end comes the term's last issue of *mathNEWS*. By some freak occurrence, we had nearly double our normal production staff this issue, so it's extra big and extra good! That's right, it's gooder! And now, for a limited time only, there's an extra large helping of SoftEng writers, because frankly, we go everywhere in groups.

Confused as to why so many people came out, we asked our brain-slaves, "Why did you show up tonight?": Eric "inkEd" Logan [2B.5 CS/C&O] (Had nothing else to do), Peter "MoviesGuy" Lukow [2A Undeclared] (FREE FOOD and rant space), Theresa "SuperTree" Kim [3A SoftEng] (Where... am I? Did gninnies bring me here?), Alex "Val" [2B CS] (It's better than sleep), Cass [3A English] (To get my artsie revenge), Andrew "Squee" Chan [3A SoftEng] (Writing about WoW is as close as I can get to playing it while on campus), Natalie "Math.random()" Owen (Class is over-rated), Peiran Guo [3A SoftEng] (I'm allergic to Imprint), Diana Chrisholm [4A ActSci] (For sweet, sweet candy), Steven "Snuggles" Scrzydlo [BMATH - CSIS] (For some special red pie), Kaitlyn "Half-pint" Holman [2A (probably) Pure Math] (Same reason pi isn't - again), Joscelyn "GridMaster/WordMaster" Kleingeld (What? I left? But... without me, the BYOB would win!)

Lastly, the editors would like to thank our writers and proof-readers, because without you, we'd have a lot less work. Waiiiiit a minute...

Mark "Beatlemaniac" Toivanen (2nd vacation/"I'm not dead")

Chris "SheepNine" MacGregor [3A SoftEng] (*mathNEWS* money isn't going to embezzle itself)

Emerald "StatsEd" Kushiner [3A Stats] (Me? I'm *always* here. I NEVER LEAVE!)

Delicious Tofu Pizza

Love pizza, but wish you could get some veggies too? Want a healthy way to enjoy a favourite staple? All you need is:

- A pack of firm or extra-firm plain tofu
- One stalk of broccoli
- Brick of mozzarella cheese
- Parmesan cheese
- Soy sauce
- Bottled Garlic and olive oil
- Pizza dough

Set the oven to 350 degrees, and follow the directions to prepare your pizza dough.

Cut the tofu into four thin blocks, and dry with a paper towel. Put oil into a frying pan, and turn to medium heat. Cut the tofu into blocks, and toss in soy sauce. Put in the pan, and brown on both sides until cooked through.

Steam the broccoli and cut it into pieces, and grate the cheese.

Spread the dough. Cover it with garlic and olive oil. Spread the tofu and broccoli, then cover with cheese.

Put in oven for around 10 or 15 minutes, or until bubbly. Enjoy!

The Vengeful Artsie - I had to write an article

Prez Sez

<Begin Rant> Welcome to my week of complete business from pi day to midterms, to campus day to interviews... <End Rant>

Alright, now that that's done, let's get onto everything that has been happening on the wide world of campus. Oddly enough, compared to my last report, quite a bit has happened around campus. So, without further ado:

- Russell Peters came to town on Monday the 7th and Wednesday the 9th to perform to two sold out crowds. Although I didn't attend, apparently everyone who went had tonnes of fun.
- There is a referendum coming up on March 28 and 29 on the termination of the WPIRG fee. I don't want to get into too many specifics here, but basically, a yes vote would see the termination of the WPIRG fee and a no vote would continue the refundable fee being added to our tuition. Anyone with specific questions should feel free to e-mail me.
- Pi day was Monday. The day started off with the introduction of some new MathSoc novelties in the form of a Pi shirt, which has more than 1300 digits of pi on the back, and pi pins with >500 digits. I'd like to thank Kaitlyn Holman for the t-shirt idea and Jenny Mecking for the implementation. Around 1:45, the guest servers for the day (Dean Alan George, and his Executive Assistant Shirley Thomson) showed up with pie served promptly at 1:59. The day was a big success with some notable events, like a delicious chocolate cream pie in the face for me by the VPAS (don't worry, I got her back some time later), as well as a documentary about pi day from a group of students from Humber College. Thanks to everyone who organized the event, especially Ehsan Safani, as well as the numerous volunteers who helped cut up and serve the pies and ice cream after the guest servers had to leave.
- Campus day was on Tuesday. We all had a great time being able to introduce our future peers to campus, and plugging the good things about Waterloo. Thank you to all volunteers for showing why the Math Faculty is the one that counts. The reason is volunteers like you!
- Feds is having their Annual General Meeting on March 31, and it happens to coincide with President Wroe's birthday. Everyone is encouraged to attend and see what FedS have been up to for the past year.
- I have 4 assignments due this week that I should start, I think I passed my Music 246 midterm, and interviews went badly.

As this is the last *mathNEWS* of the term, I would like to wish all the grads good luck as they begin a new chapter of their lives. Whether you are going to Grad school, working, or doing whatever else you choose to do, I wish you the best in all your travels.

As for the rest of you, enjoy your summer term, whether at school or work (as the case may be), and I look forward to a great fall term.

As always, anyone with questions about my report should feel free to e-mail me at prez@mathsoc.uwaterloo.ca

Michael A. Tersigni
MathSoc President
W/F 2005

VPAS Sez

Housekeeping!

It hit me today, while in an extra help session for PMath 340, that the end of term is quickly approaching. All good things must come to an end, including my first term as VPAS. I hope you all have enjoyed the many activities and services MathSoc has provided for you. Please feel free to e-mail me at vpas@mathsoc.uwaterloo.ca. I love e-mails and I love ideas for Fall events!

Three Events Left!

- Outdoor Games Night — On March 23rd at 10pm, MathSoc will host a fun outdoor games night. Classics like Capture the Flag will be played. Please meet on the 3rd floor, and we'll head out. Hot chocolate will be served afterwards.
- MathSoc Office Marathon! During the last week of lectures, MathSoc will be open for all your exam needs! Come in, as we'll have games, food, drinks and more importantly, photocopiers, staplers, and yes, old exams! Mingle with members of the MathSoc Council, or just come in because we'll probably have a GameCube in the office for the week.
- Pints with Profs — the ever popular event where you mingle with your favourite profs will be held at the Bomber on March 30th, starting at 4:30 PM. So, start your day in the SLC, watch some great stunts being done by Team Ryuoko, enjoy FREE food provided by the Math Society during Pints with Profs, then stay for the last Bomber Night of the term.

Fancy invitations will be available for students to pick up and give to their favourite profs starting on Friday from the Mathsoc Office! Just ask the friendly mathsoc office worker at the desk!

Thank you!

Events like Pi Day and Campus Day, as well as the Math Society would have never been as successful without some great volunteers. From beginning to end, they jump in trying to help whenever possible. at any time of day. Thank you to all of you, it's been a crazy few days, but your spirits have kept me amused, even when all of us are running on less than 4 hours of sleep. I salute each and every one of you.

Elaine Wong
Vice President, Activities and Services

Work-term in Toronto?

Like Saving Money?

For those of you out there who, like me, who will be working this summer in Toronto but commuting from some where in the GTA: if you need to take the GO Train or GO bus to work this information will be valuable to you. At Needles Hall, you can pick up a student GO pass. This will cost you the sum total of \$10.

Don't be scared by this seemingly high price. The student pass will, on average, save you about \$60 a month (that is \$240 over a 4-month work term). This is the only way to get a GO student pass. So if you are working in Toronto, taking the GO, and you like saving money, buy the GO student pass.

Heather "Rain Water" Perry

VPA Sez

VPA is VPAwesome

Well this is the last *mathNEWS* of the term apparently. I can't believe that next school term I'll be in third year (technically 2B). Anyone see Russell Peters?? This Crew thing seems pretty awesome, the Blackout thing in the SLC March 30th looks like it's gonna be off the hizzook! Yeah that's right, I went there. MathSoc funded team Ryouko, these INSANE martial arts/acrobat guys. How cool is that? When your friends are slackjawed and foaming at the mouth at how awesome these guys are during Blackout, you can be like, "MY faculty's student society paid for that, BEYATCH!" then flip them off and walk away.

OK ON TO ACTUAL NEWS. Instructor of the Year nominations are OUT NOW. Please nominate your favorite prof. This is a great way to recognize great teaching in our faculty.

Also, the School of Computer Science is trying to split 4th year

CS courses into 2 categories, technical and multi-disciplinary, to "ensure that students in our programs get sufficient technical depth".

In other news, if you have any feedback/complaints about CECS, there will be an external review team for CECS in TC1208 on March 22nd between 11:30 and 12:15. They are looking for student opinion about what CECS does well and what it needs to do better.

My goal for next term is to implement some ideas I have for co-op/career-focused events that would be interesting to the majority of math students, especially those who wouldn't normally be interested in mathsoc events. You know, the normal ones. ZING!! OK freaking off to DC or MC to do CS241. TTYL!! LOLZZZZ

Andrew Lo
MathSoc VPA W/F 05

VPF sez

Over the weekend, an unnamed food services establishment in Waterloo suffered a humiliating loss at the hands of my roommates. In the most recent incident in a string of petty thefts, 5 pint glasses and a Stella goblet were most unceremoniously removed, one by one, from the table. Winter coats are the mule's sliced bread. I first noticed there was a problem when the only glass left on the table was mine. It's notably tough to keep a straight face when you're watching someone lurch across a parking lot with a pint-sized bulge protruding from their thigh. Oh, and one of the girls took the mustard and ketchup, in case you think only guys are felonious.

Math.random(): stumped by the black question. Indeed, what is the difference between a black shirt, a blackish combination of paints, and the light-less, windowless rooms mathies resort to for coitus? I have yet to receive a satisfactory answer. Absence of light? Not all mathies are over-weight. Inability to reflect? Not all

mathies drink before engaging in the sack race. What is it then?

Before answering that question, let me tell you something serious. At the last council meeting, I presented a plan to invest MathSoc's extra funds in 0-risk investments (savings accounts, money markets and GICs). The extra funds are currently sitting in our chequeing account, earning no interest. Simply by creating these accounts we can earn interest without any additional risk. The income will be reported term to term in the budget as interest income we can spend on more MathSoc initiatives. This isn't to say that we will be collecting more money to invest more money; instead this plan is simply the correct thing to do with the surplus we've collected. I encourage all of you to continue coming up with good uses for the society's money.

Back to the black question. Which I'll answer... In September. So long suckers, I'm out of nyah.

VPF David Wheatley

Games

Office Update

Hello. I have a quick update for anyone interested: MathSoc has new games. As you probably already know, MathSoc keeps a supply of games freely available for anyone who hasn't requested a student fee back this term. Feeling bored or just procrastinating, just head to MC3038 and swap your watcard for the use of any of our fancy games. Just recently, we've added by popular demand) Blockus and Carcassonne, with more to come!

Blockus

Blockus can be played with anywhere between 2 and 4 players. The objective is to place tetris-like pieces onto the grid board, and the player left with the least pieces is the winner. There's a catch: you can only play pieces if they only touch another of your pieces on a corner. Battle out with your friends to capture territory and become ultimately victorious!

Carcassonne

This is a game of strategy and development. Players develop

the area around Carcassonne by placing land tiles. Each turn the area becomes larger as the players expand and add roads, fields, cities, and cloisters. The players may also deploy their followers as thieves, farmers, knights, and monks to control and score points off the land. With limited followers, the player with the best strategy shall be the champion!

Please come by and take advantage of our services, that's what we're there for after all. Just to let you all know, for the week of the 28th to the 1st the MathSoc office will be open 24 hrs a day! That's right several days of MathSoc madness, over a hundred hours, more fun than you can manage! Feel free to go sign up for a few hours of it, every bit helps and you're guaranteed to enjoy yourself.

That's all for now, drop by sometime soon.

Val
1/3rd Office Guy

The Final Curtain

MathSoc Movies Rant

So, this is the final issue. I feel that this is my final attempt to attract you to come to movie nights through this glorious publication. I have some important information that I need to tell everyone: I have really awesome movies for the rest of the term.

For your viewing pleasure, for the remainder of the term, I am going to be presenting the following movies, in some semblance of an order.

March 17th

That was yesterday for those of you who pay attention to dates. Anyway, I showed The Incredibles and The Polar Express.

March 24th

This week, I decided that I am going to show a film about wine... or something to that effect: Sideways [*Wine... it deserves to be in a glass, not on the screen!* — *BeatleEd*]. I am also going to be showing a movie about airplanes, and pilots: The Aviator.

March 31st

This week, I decided that this was going to be a really fun week. I decided that I would be showing a pocketful of Python. Meaning of Life and Life of Brian will conclude the term that was mine.

So to all of you who came out to movie nights this term — I would like to thank you for coming out and supporting my directorship. To my loyal board members, thank you so very much; movie nights would be the same without you. And to the rest of you who don't really care, I don't expect you'll be reading this anyway. Au Revoir!

MathSoc Movies Guy

The Crew Column

First off, thanks to all math students who were able to attend the Russell Peters shows last week. We've received a lot of positive as well as constructive feedback from both nights and are pleased to have been able to offer UW students a night off from studying.

Following the success of Russell Peters comes a brand new style of event here at the university: BLACKOUT! On March 30th 2005, at 12:30pm and again at 2:30pm, the SLC Great Hall will undergo a complete transformation. From covering up the hundreds of skylights and killing the houselights, to bringing in full stage, sound, and concert lighting, we hope to present a show unlike any other.

Groups that have been invited to perform include: UW Breakers, UW Hip-Hop, the UW Dance Pack with special guests — the unbelievable Team Ryouko. This will truly be a spectacle so crazy it will make π look rational! (That's right, we have mathies on the crew). To top it all off, we will be offering the *cheapest food in Kitchener-Waterloo*. Pizza slices will be on sale for fifty cents. That's right — below cost! Basically this event is an end of term 'thank you', and an exciting way to cap off the Winter 2005 term with a free show and some close-to-free food. We hope to see you there.

Your friendly neighbourhood Crew members

Mathies Can Help Too

We're not social workers, we're not environmentalists, and we're not doctors. But, to dispute a popular UW myth, we *are* people. And people, even mathies, can work toward making the world just a little bit better.

In school we learn about corporate responsibility and about ethics. But people brush these topics off as formalities in our education. They have to teach us this stuff, right? Even if it's not true. But it is true. And it's unfortunate that they try to teach us that it's true in a classroom. Because you can't learn ethics and social responsibility in a classroom.

This August I will be travelling with a group of (mostly UW) students to the Masaai Mara region of Kenya to contribute to the construction of a local school through the organization Free the Children. The people of this particular region of Kenya have traditionally been underserved by the Kenyan government, and are lacking the ability to provide an education to their children.

None of us think twice about going to school. It's a part of our lives, and it always has been. That's because we happened to be born into a wealthy family or in a wealthy nation, or some other combination of circumstances occurred to make this route available to us. We have to remember that most of the world doesn't have this choice. Most of the world doesn't have a lot of the choices we take for granted.

So, everyone: go out, take your vows and become the next Mother Theresa. No, that's not what I'm saying.

But, go and visit the local soup kitchen, go deliver meals on wheels to people who can't cook for themselves, take a few months and work in an orphanage in India or build a school in Kenya, or walk into the comfy lounge and give a lonely mathy a hug. You'll be surprised how big a difference you can make in someone's life. [*Another option here is volunteering with youth organizations :D* — *BeatleEd*]

Free the Children builds schools all over the world, and other organizations do things that are equally positive, both in Canada and abroad. Everyone should take some time, a minute or a lifetime, to teach themselves about ethics, and to teach themselves about the world. You won't get this education in school, and most people certainly won't get this education at work. But it's the most important education you can receive.

Tonight, Friday March 18, the participants in this school-building project will be getting together in the Multi-Purpose Room of the SLC, from 5:00 PM to midnight. We will be fasting, to raise money toward the effort, and with the help of several guests, we will be educating ourselves and others about life in Kenya and the problems that we are trying to help solve. All are welcome and encouraged to attend, to bring all their friends, and to give a hug to that guy standing outside the SLC having a smoke on their way in.

If I don't see you on Friday, still heed my message. Get involved. You'll make a difference in someone else's life, and in your own.

Mike Mitchell

fortune Filler

"How many seconds are there in a year? If I tell you there are 3.155×10^7 , you won't even try to remember it. On the other hand, who could forget that, to within half a percent, pi seconds is a nanocentury." — Tom Duff, Bell Labs

In Defence of WPIRG

PIRGatory Considered Harmful

WPIRG gets picked on a lot, so it is no surprise that eventually its existence would be decided by referendum. Some people don't understand what WPIRG does. Others believe it is ineffective, redundant, bureaucratic, expensive, and the last bastion of extreme liberalism. At times the organization is guilty of these charges, but for the most part WPIRG and its volunteers do good work. WPIRG makes lasting positive contributions to the university and the broader community. Overall, we benefit from its continued existence on campus.

Put simply, the \$4.75 refundable fee full-time undergraduates pay each term finances infrastructure — infrastructure to broaden student education, and infrastructure to provide opportunities for students who want to volunteer time and energy to social and environmental justice issues. Infrastructure is not cheap (especially when it comes to paid staff) but it is important. Too many good student ideas fall apart when midterms and class projects roll around. Too many good ideas get abandoned because students have to scramble around for petty funding instead of devoting time to turning their projects into reality. Too many successful projects lose all momentum when key members graduate. WPIRG action groups are not immune to falling apart, but their survival rate is improved thanks to the services and stability WPIRG offers. This stability shows: over the years WPIRG has nurtured such long-term projects as carpooltool.org, the Food Not Bombs collective, and Recycle Cycles. WPIRG also collaborates with other groups on campus: it has recently supported Engineers Without Borders, The UW Sustainability Project and UWHIDA. All of these projects are initiated and driven by students and community members; WPIRG's job is to provide support. By supporting the fee you are guaranteeing that WPIRG is able to continue providing this infrastructure.

If you don't have the time or inclination to volunteer with WPIRG, why should you support WPIRG and its fee? There are several reasons. First, you can benefit from the many events and speakers that WPIRG brings to campus. Many of these talks are fantastic, and none of them requires much of a time or energy commitment to attend. Secondly, supporting WPIRG you are making a strong statement that social and environmental justice work is worth money. Those who would relegate all social and environmental work to volunteerism are in essence saying that nonprofit work is not an activity that is worth money. Those who would leave nonprofit work to the free market do not realize that nonprofit organizations generally do not make money from those they serve because those they serve have little disposable income to begin with. Sustainable nonprofit organizations get external funding, and if you believe that nonprofits deserve funding then supporting the WPIRG fee is a good way to put your money where your mouth is. Remember: terminating the WPIRG fee will not reallocate the money to some more worthy nonprofit cause. Although in principle people could donate the money they save to their favourite charities, it's not hard to see that in practice this will not happen.

This referendum is more about ideology than economics. For all our debts, most of us can afford the \$4.75 per term, and our spending power will not increase much by striking the fee. In contrast, we will lose an organization that we can change and improve, and which opens opportunities for us to further our educations and build our skills.

If you are eligible to vote March 28 and 29, I hope you will be able to see past your fee statement to see the value that WPIRG offers. WPIRG has been doing good work for over 30 years. With your support this good work will continue.

Paul Nijjar

Leakage at Atomic Producer

Narrowly Avoided

The atomic-powered producer on the sixth floor was suspended last Friday night to avert what seemed an imminent catastrophe. The operators on duty that night were executing a routine evaluation of the producer's control-flow, when, at 23h43, the pipe operator unexpectedly short-circuited. The hapless producer branched uncontrollably, but the administrator suspended the operation before it could leak any of its atomicity. “[The producer's] control-flow looked like it was going to propagate a multi-level exit without freeing its dynamically allocated locks.” said the administrator. While such an exceptional occurrence would have been dangerous on its own, it would have been compounded by the fact that this time it almost happened inside the producer's critical section.

If it weren't for the administrator's quick computation in suspending the producer, the multi-level exit from the critical section would almost certainly have caused a leakage of atomicity. A leakage of this magnitude could have caused the proliferation of mutexes throughout the area.

Despite the programmer's best efforts, the producer was not fixed and resumed in time to avoid a buffer underflow. The benches in the C&D were filled with starving consumers. “I've

been blocking here since 11 this morning,” commented one consumer, who declined to give his name, “the hard part is that we can't do anything else until we get our items.” Some of the other consumers, however, were able to fill the monotony with activities such as “spinning” and “busy waiting.” One group of consumers even invented a game that they called “baton passing.” “We've been passing the baton around for hours,” said one such consumer. Another commented that it wasn't as great as it looked, because the baton was “only imaginary.” Two consumers decided to pass the time by racing each other, but their inappropriate activities were halted before it could corrupt the queue.

After the near-incident, many mathies were shocked to learn that an atomic-powered producer was operating in such close proximity to their lectures. “Those things are so dangerous, we should replace them all with windmills,” said one mathie. Another suggested that the University moved its producer off-site, and connect it to campus using an unbounded buffer. “It's the latest and best technology available,” she explained. A spokesperson for the administration said that finances at this time are insufficient for an upgrade of the University's existing fixed-size queues and buffers.

Peiran

FEDS and WPIRG

Real news. Real BS.

On Sunday March 13th, the Federation of Students Council passed a motion announcing the official stance of the council on the WPIRG referendum. In summary, FEDS says to vote “No”, or to not terminate the collection of the WPIRG fee. As a math co-op student councillor, as YOUR student councillor, I fought this motion with every reasonable argument I could.

I know that many of you signed the petition. I know that many of you have concerns in the way the WPIRG fee is collected, the way in which the WPIRG fee is used, the projects WPIRG supports, and fundamentally who WPIRG represents. I told student council that the voice of my constituency was clear. 11% of Waterloo students signed this petition. Clearly this is a controversial and divisive issue. This councillor was NOT willing to accept a NO stance.

That is to say, this EX-councillor was not willing to accept the actions of council. Burdened by an oppressive stance I did not support, and fully believing enough of my constituency did not support this same stance, I resigned and left the meeting to write this article. If the FEDS is willing to force their opinions on me despite my sincerest objections, then I have no choice but to remove myself from the organization. But the fight is NOT over.

An amendment was brought forward that effectively watered down the original motion. The amendment justified the stance, saying that FEDS believes this is not the appropriate way to deal with refundable fees. Specifically, a few years ago a FEDS committee suggested reforms to the ways ancillary/incidental/refundable fees are collected. The report of the committee was not even ACCEPTED by council. When directly asked if President-Elect Anderson would commit to addressing the issues of refundable fees in his coming term, he explicitly said he could not commit at this time. I ask all students now: if this referendum is not the correct place to deal with refundable fees, can we trust our student government to find one? I have no confidence they can.

Indeed, FEDS will have you believe that there is a blanket solution for dealing with refundable fees. This is incorrect. Re-

fundable fees truly should be decided on an organization by organization basis. If you do not believe you should give YOUR money to WPRIG, or do not like the way in which YOUR money is collected for this purpose, you have a responsibility to vote “YES”.

Do not let the amendment blind you to the facts. At least one councillor believes that this referendum is the biggest threat to student life seen in the past three years. Members of FEDS do support WPIRG. I believe that some members of council allowed the wool to be pulled over their eyes, and accepted this amendment as reasonable justification. It is not. Your student council is not only attempting to force a stance on its councillors, and thus unduly sway the outcome of the referendum — your student council is misleading you.

WPIRG is run differently from many other organizations that collect refundable fees. MathSoc collects refundable fees, but ALL of the money goes straight back to the math students. WPIRG is not run by students, and at least 65% of fees collected are paid out in salaries. Collect the facts. Study the platforms. Do NOT listen to the FEDS stance, because they blatantly shrugged off their responsibility to represent the students’ concerns. This motion involves back-bench political maneuvering to protect WPIRG. If the council as a whole truly believed “No” was the correct stance to take, then councillors from three different faculties would not have voted against the motion.

Let this referendum light a fire under the proverbial seats of the FEDS council. Let your voice be heard. Force council to address the issues of refundable fees. Force WPIRG to act responsibly. Spread the word of democracy, and protect your rights as a citizen to not have an interest group with very narrow-minded views dip its fingers into YOUR pocket. Your student council no longer represents your beliefs. I can no longer represent your beliefs. But YOU can. Vote “YES” on the WPRIG referendum, and send a loud and important message to council.

David Wheatley

Are You Sleep Deprived?

Mathematician Norbert Wiener

After reading the article titled “Am I Sleep Deprived?” from volume 97, issue 3 of *mathNEWS*, are you feeling sleep deprived?

If you feel sleep deprived, but have trouble figuring out a way to gain more sleep, you may want to learn something from the great mathematician Norbert Wiener.

Norbert Wiener, born in Columbia, Missouri, founded the field of cybernetics and made significant contributions in harmonic oscillators, quantum mechanics, and ergodic theory.

He was a founder and prominent participant of the Conference on Cybernetics. Wiener had been held in high regard by the fellow participants in the conference, but he was also notorious for sleeping (sometimes noisily) while others spoke during conference meetings.

Curiously, being asleep does not prevent him from perfectly comprehending the contents being presented. He often awoke from his sleep to make insightful remarks once a speaker finishes speaking.

At MIT (where he served as a faculty member), he was known to relate all sorts of discussions to ergodic theory. His colleagues were sometimes annoyed by his seeming obsession with ergodic theory. Once, one of his colleagues at MIT was presenting his research results. Wiener dozed off and slept noisily.

The speaker ended his presentation by saying “... and this has nothing to do with ergodic theory.” Upon that statement, Wiener got up from his sleep and said, “It does too!” He then went up to the board and proved a lemma that showed, to everyone’s satisfaction, that the research presented is indeed very much related to ergodic theory.

The sleep deprived among you may want to start practicing Wiener’s sleeping technique during lectures.

[Reference: [John von Neumann and Norbert Wiener by Steven Heims](#). MIT Press.]

J.Y.

Pimp My Ride

The World of Warcraft Edition

One day, I happened to be flipping through channels and came upon the show "Pimp my Ride" on MTV. It was a fairly entertaining show, where they took a really crappy car and turned it into a different crappy car with lots of suede and pink and chrome and crap. Later, in a fit of what can only be called insanity, I somehow superimposed the memory of that show with the memory of a recent play session of World of Warcraft. I thought to myself, "Self, what would I do to pimp out a kodo?" The results were scary.

So, take your standard issue kodo. Brown, twelve feet long and eight feet high, dopey-looking and cow-like. It's really a lot more fat than phat. But like the magical mechanic-rappers on Pimp my Ride, we can rebuild it. We have the technology.

First off, we have the bare necessities of pimped out rides: rear spoiler, chrome rims, cathode tubes, low-clearance tires, and *front* spoiler. Any car that doesn't have these parts isn't fit to have a drag race with greasy, 85-pound nerds riding their tricycles. And if a kodo is of lower calibre than a nerd, we've done something horribly wrong to it.

Next, we need to add a few special touches that'll make it really shine when it's parked next to another kodo. These include flame decals, racing stripes, naked women silhouettes, more chrome rims, and one of those double mufflers that make lots of noise. With these modifications, all the hot chicks will be checking it out, and looking to break off a piece. Aww yeah.

The sound system deserves special attention. Most sound systems are judged based on their ability to make the ground shake, but kodos can do that just by walking. Clearly, then, we need to up the stakes, and equip our kodo with a sound system that can cause localized earthquakes. People standing within ten feet of this system should go deaf, and be knocked back by the concussion wave. It wouldn't matter, then, if you're blasting Celine Dion

from the system, since no one will be able to actually hear it. Paradoxical.

Now we have a flashy kodo, but, its bark isn't nearly as big as its bite. So, we need to add a nitrous system and ram scoop to feed a military-grade jet engine strapped to the back. Watching two tons of phat ride blast by at some mach greater than three will be sure to get the homies' attention. While we're on the topic of movement systems, we'd better put hydraulics in there to, so that we can move the beast up and down in time with our block-rocking beats.

Finally, there's the finishing touches - suede... interior..., big drink holder, and a huge, flashy horn ornament and shades for the kodo, so it can look good at the same time it's being cool. Also, you gotta load up your kodo with about a year's salary worth of gold chains. Make Mr. T jealous and you can make him *your* fool. Blinging.

At this point, we have a totally pimped-out kodo, the kind that would be driven around and stolen on *Gone in 60 Seconds*. However, one thing I noticed from watching the MTV "Pimp my Ride" show was that they're not done pimpin' until the vehicle has some completely useless contrivance. In the spirit of our kodo's origins as a mount from a MMORPG, we'll add in features that every hardcore gamer would need - a coffee maker, and a catheter. That way, you could ride the kodo for DAYS and not need to get off.

And that's that. If you've got an income approaching the GNP of a third-world country, you can make it happen (this includes, among parts and labour, the genetic engineering of a real life kodo). For University students, however, the best we can hope for is that Blizzard implements "Pimped-out kodo" as a new elite epic mount.

SheepNine
Krusk on Elune

Got Stress?

A Definitive Guide to Stress Relief for Math Students

Alright, we all know that the university life is stressful. There's no denying it. The real question is: what is the best way to relieve stress? I consider myself fairly relaxed about the whole university experience, and have thus decided to share some of my techniques for dealing with the trials and tribulations of daily life.

1. *Sleep in.* Make sure there is at least one day a week where you don't wake up to an alarm, no matter how long you sleep.
2. *Pay attention in class.* All you really need is a full lecture. You'll realize that the material isn't actually that hard.
3. *Steal knowledge from others.* This can be done either through eating the brains of others or simply waving your hands in front of their faces and observing the blank stares you get in return. You'll be amazed how much less your work load will seem with a more competent brain.
4. *Exercise.* It takes care of that extra energy. You can't be stressed

if you can't stand anymore.

5. *Play video games.* For some reason, battling demons in a foreign land makes problems here less significant.
6. *Go drinking.* Alcohol has the amazing property that, for a brief while, you can forget all that shit that's been bothering you. (Note that this might also help with not being able to stand).
7. *Yell.* Pick a wall or a funny looking piece of tape and bitch it out. You'll feel much better afterwards.
8. *Break things.* Preferably your own things, but what your friends don't know can't hurt you.
9. *Actually do school work.* You'd be amazed what getting those pesky assignments out of the way will do for your stress level, and the best thing is that the stress stays gone!

I hope any of this can help you in your quest for survival in this heavy stress environment. Good luck on finals to all of you!

Val
Taking in some relaxation

Irritable LOTR Syndrome and WoW

[5. WorldDefense] The Crossroads is Under Attack!

[5. WorldDefense] Tarren Mills is Under Attack!

If you were a Horde player on Elune and joined the WorldDefense channel, those two lines or some other variations would be spamming you more often than not. It seems that the Alliance on the server have nothing better to do than to pick on the mid-level Horde towns. One thing you need to about Elune is that it has an Alliance to Horde ratio of 4.5 : 1, the second worst of all realms with Uldum having the highest (5.5 : 1). The Alliance enjoy nothing better than to sail across the sea from Strangethorn Vale and harass an isolated outpost in the Barrens. My beef is that it is really not hard to get access to the Crossroads: hope on a Boat and head west with impunity. I could go on about Blizzard favouring the Alliance all day but that's not what I am trying to get at here.

Now I am sure you guys are saying that there are servers where Horde outnumber Alliance. True enough, I'll even go even further and give you some examples: Stormreaver, Boulderfist, Bloodscalp, Sargerass, Tichondrius, Illidans and Mal'ganis. The last 3 even have 50% more Horde than Alliance. However, if you look closer you'll see that ALL the servers I have listed are PvP. Seems to me that more Horde players enjoy the true PvP experience whereas the Alliance prefer the safety of PvE servers (*cough* wussy n00bs *cough*). Looking at the overall picture on all the North American servers, there are 50% more Alliance than Horde.

Now for the big question: So why then are there 50% more Alliance players throughout the world? You probably won't agree with me, but this is my article/rant/complaint. My reasoning is the Lord of the Rings Syndrome. Let me explain. All of us have seen the entire trilogy at least once. Thus, at some level, we see Alliance as mirroring the "good" factions of Middle Earth (really not hard to see the connection). The courageous and noble humans, the graceful and fair elves, and the stout and comedic dwarves, these good guy archetypes appeal to us. Of course they do, they are the protagonists, fighting evil and saving the world, what's not to love. Alas, this means that the natural inclination is to associate to Horde with the forces of Sauron. They both have Orcs and Trolls and are the less-visually appealing of the two factions. So it's not hard to see why so many are easily drawn in to fantasy that is living the LOTR life through WoW. We innately want to be associated with forces of good and defeat the bad guys. News flash: the Horde is not evil, they are a victims of circumstance as we find out in WC3. So to all you Alliance-loving folk: get over your holier-than-thou attitude and prepare for the lag fest as you all try to crowd in to Battlegrounds. I'd like to go in to more detail but I hear a certain MMORPG calling me

Morale of the Story: Play World of Warcraft, Join the Horde! Loktar! For the Horde! — write for MathNews

Squee of the Forsaken Legion (soon to be Nastrand)

ElseWhen

25 Years Ago in mathNEWS

Welcome back to the *mathNEWS* archives! It's convenient that this is that last issue of the term, because I've also hit the end of Volume 22. Here's a summary of Issue #4 of W80.

inkEd

The Marcia Mathie Advice Column

Dear Marcia:

Better watch what you say. Ever heard of libel?

Geoff the Pain

Dear Dzeph:

Yes, I've heard of it and if you keep making passes at me, I'm liable to kick your teeth in!

Dear Marcia:

Girls never take me seriously. Is it my face, my clothes, what?

Ronald McDonald

Dear Ronnie:

Are you McSerious? Do you mean, of all those people who work for you, nobody can do it?

Dear Marcia:

Sex and drugs and downhill skis?

A. Fass

Dear A.F.:

Sounds different. My place, Friday, 7:00 p.m.

Marcia

bwlutek's bits

'Twas quite late, by the watch on my wrist,
When our STATs prof chared in (some persist!):
Although panting and tired,
He quite calmly inquired:
"Any questions on what you have missed?"

Elsewhere in the news...

- Arnie Dyck (yes, that guy) is looking for tutors for CS140 and CS180 next fall. Interested parties should contact Ms. Anne Harris of the CS office in MC5100.
- **WORP** (The **W**aterloo **O**rganization of **R**easonable **P**eople) is formed to suggest that a 7.5% increase in tuition fees is not unreasonably high.
- There is some talk of kicking Grad Students out of the Federation of Students.
- Athletics report: The Polish Connection (Broomballers) are going to the playoffs, and the Seahorses (Inner-Tube Water Polo) finished at the top of their league.
- Thanks to Ken Hunt, *mathNEWS* has finally been granted its own office, MC3035. [*We've since moved... — inkEd*]

Midnight Capture The Flag

Enjoy Capture the Flag? Dislike sleep? Come out to Comfy on Sunday, March 20th at 11:59 PM for an hour or so of capture the flag!

The Management

Not Burning the House Down: Adventures from a first apartment

Week 5: Food Tips, or, Not Getting Scurvy

Well, it's a good thing that this is probably the last issue, as I don't feel like I'm learning many useful lessons that I can pass on to you. You can be promised the token "packing tips" column next time if there is one.

In the mean time, I'd like to pass on a few tips for grocery shopping.

Tips for eating well (if not healthy) without going broke

Shop at discount grocery stores. It sounds easy, but the reality is, you have to travel farther to find these, they keep reasonable hours, AND they don't offer free plastic grocery bags (boxes are provided). The 24-hour Sobey's down the road will start to look appealing, it's true, but when you are paying anywhere from \$0.25 to a few dollars extra *on each item*, the gas money (or even a cab) becomes worth it.

Half-pint suggests: Food Basics (Fischer-Hallman and University) or Wholesale (big-box mall at King and Weber, behind Chapters)

Share certain staples with a roommate or two. If you can't finish four liters of milk before it starts going Napoleon on the rest of the fridge, try to buy with a roommate who drinks about the same amount. You can spend less than a dollar more than you would for two liters, and split four liters every week. This works well for bread, eggs, etc. If you don't like splitting bills, just alternate paying the bill every trip.

Half-pint suggests: Don't try this unless you are close with said roommate, and arguments about money are unlikely.

Pack lunches. Whether you are working or studying, you can save yourself money and eat more healthily by packing a lunch. A loaf of bread can run you (tops) \$2, deli meats \$5-\$10 (depending on cuts), and one bottle of mustard \$1.50 (which will last you a term). Tomatoes, lettuce, and pickles will run you max \$2

for 5 sandwiches. You're looking at \$15, rounding high, for 5 sandwiches made just the way you like them. Pop is much cheaper when bought by the case, and even cheaper if bought in 2L bottles. Expect to pay ~\$3.50 per 12 cans, or < \$1.50 for a 2L bottle. At a place like Wholesale (no membership required!), you can even buy a case of snack-sized chip bags or chocolate bars.

Half-pint suggests: 2 sandwiches (~\$2.50 each), a piece of fruit (~\$0.25), juice from concentrate brought in a refillable container (~\$0.20), and a yogurt (~\$0.50) (don't forget to pack a spoon), make a feast of a (healthy!) lunch for less than \$6.

Clean out your fridge before every shopping trip. This will help you remember to throw out food gone bad, make sure you don't forget to buy anything important, and maybe even remind you to eat something *before* it spoils.

Half-pint suggests: Check dates in store and when you go to use anything from the fridge. If something doesn't have a date, or has been sealed for a long time before its first use, write the date of opening on it with a Sharpie. You can sniff test most things (we are repelled by rotting things by instinct), or call Mommy to check how long fresh chicken should last. Date things before freezing so that you can use up older ground beef before the newer stuff.

This feels as if it is taking up most of a page already, so I will depart with a final tip: eat oranges (or else, really, I haven't said anything about scurvy).

Thanks for reading at all this term. Since readers probably won't be interested in Baby Blues (a column about my best friend having a baby this summer), I'll probably be taking a break of undetermined length until anything in my life is relevant to other Math students again. So thanks for the two term run.

Half-pint, who is looking forward to not having to go grocery shopping next term

Dual Booting is for Wussies

You see it everywhere these days. People boot their computer, and grub or lilo comes up with a list including (but not limited to) Windows, Linux, and that bios pong hack. But what's the point? You can only use one at a time. Many people would suggest getting a second computer if you see this as a problem, but this would mean that you need two separate computer cases. My solution is much more 1337.

The solution isn't even all that complicated - anyone could do it. All you need is a beefy power supply, a nano-ITX form factor motherboard, an extra hard drive and an ethernet card, and you're good to go! Slap that board in the space where your PCI expansion slots are (you know you're not using them), hook the built in ethernet on the nano-ITX board into the new ethernet adapter that you just installed via a nice 4-inch crossover cable, and you now have two computers in one.

Install your favourite flavour of Linux on the second hard drive, and use your windows side to ssh into the Linux side. Be sure to install Cygwin to get the X11 server on your windows side, so you can still use all the graphical programs available on the Linux side. You could even use virtual desktops available on either side to use the other side as a normal computer as well, since the

other computer is basically just another box on your LAN. Alternately, you could get a small VGA cable splitter, and somehow hook up the switch to the front of your computer. Then you could get around the issue of running your OSs as picture-in-picture, and still use the dedicated video hardware on both sides! If you do this, don't forget to use the same switch on the front of your case to split the USB connections for your mouse and keyboard, too.

For the truly 1337, instead of having the master/slave setup for ethernet that I described above, you could get a switch or router instead of the ethernet card and crossover cable combo. Strip the casing off of that sucker, stick it in the remaining space in the front of your case (under the drive bays), and voila - you are now the centrepiece of any LAN gaming extravaganza, and now you don't need to start up the master side of your computer to give the slave side internet access.

This is a small taste of what you can truly do with your computer hardware. I believe that this is the *true* meaning of dual-booting - two OSs, two sets of hardware, two boots on startup. When you put two OSs on your machine, and only load one of them, you're only a half-booting wussy.

DutchSheep

Brit music best of all time?

Where Brit includes all islands of Great Britain

Is music originating from Great Britain the best the world has ever seen? Some people may disagree, but some of the most prolific bands have originated from there. Think The Rolling Stones, think U2. Sure, The Beatles only lasted 6 years in North America before disbanding, but they'd been around for years in Germany before. We're talking about bands that have "staying power", as opposed to the "hit of the week" artists that we're seeing today. I mean, really, what artist do we have today that has produced more than one or two albums, and how many *good* tracks are on each? I can think of artists that put out as many bad tracks per album as The Beatles had in their entire career.

So, why not do an analysis of what's out there today:

Today's "Hit" Music

Using information from <http://edge102.com> as our gauge for "hit" music, we've got the following bands on their "Thursday 30":

1. Sum 41 (Canadian)
2. U2 (Irish)
3. Billy Talent (Canadian)
4. The Killers (American)
5. Queens Of The Stone Age (American)

Now, even Edge 102 is acknowledging that Brit rock is good rock here. But let's analyze this a touch more: Sum 41 has released four albums, Billy Talent is on their original release, as is The Killers, and Queens Of The Stone Age have released two. So, we cannot really establish the staying power of Billy Talent or The Killers, but we know that not many "Hit" bands make it to 10 years.

Brit Rock

Where to start? Why not with the cr?me de la cr?me. The Beatles. How many hits did they have? How many albums were released with ABSOLUTELY NO NEW MATERIAL and still made awesome profits? Yeah. I thought so. Next: The Rolling Stones. Still touring. They started at about the same time as The Beatles, and that was all the way back in 1964. Next: Let's hit up the '70s with Pink Floyd. Probably some of the best psychedelic music of all times. The late '70s, 80's and beyond belong to U2. Really. How many bands can say they've lasted that long (ok, besides The Rolling Stones)? So, based on longevity (and you've not even gotten me started on quality of music), Brit Rock totally takes the cake here.

Album sales. Well, I haven't done the research, but when The Beatles have a large number of top selling articles one does not typically argue with sales counts (I believe Michael Jackson's Thriller is the top selling album of all times, followed by The Beatle's Sgt. Pepper's and Abbey Road). So, if anyone want to argue, that's their prerogative...they can reach me by email at m_t_cmd@hotmail.com.

Peace Out!

Mark "Beatlemaniac"

profQUOTES

"When all else fails, quack like a duck."

Dube, FR 192A

"We don't teach nonlinearity enough. I could go to a pub and say to a UW grad, 'HEY! Can you take two solutions and superimpose them to get another solution ALL the time?' And they'd say, 'Duuuhhh... yeah!'"

Stastna, AMATH 361

"The reason why this is — almost is proof by picture."

Chan, CS 341

"By now you know how worthless first ideas are."

Chan, CS 341

"Oops, the magic doesn't work."

Chan, CS 341

"I don't really care about your stress, but I *do* care about my stress."

Kierstead, CS 343

"I will hang you outside my office as a public effigy for people to mock at."

Kierstead, CS 343

"Copying is the only way anyone learns anything."

Cormack, CS 343

"The boys will say 'I'm a boy' far more often than the girls will."

Spencer, PSYCH 253

"That's how you teach a class at university: you don't have to know what you're doing... just present it confidently."

Goulden, MATH 239

Prof: "So I'm going to put that down and play with my toys."

Student: "Toys!"

Prof: "Toys: Perfect for a Friday morning."

Goulden, MATH 239

"I can't spell, but I know tons of synonyms!"

Wolczuk, AMATH/PMATH 332

"What's an equation without plugging in numbers? It's like having a can of beer and not opening it."

Bissonnette, CHEM 123

"You know, my wife is right: I need glasses. Whatever, I'm still the best driver on the road."

Bissonnette, CHEM 123

"If I had hardware that worked like that, I would call up Intel and tell them 'you suck' [hangs up invisible phone], and then I would do that everyday for twenty years: 'you suck' [hang up], 'you suck' [hang up]"

Brecht, CS 350

"Now, I don't want to do your homework for you, so I'll just go really close and use ones instead of twos."

Younger, MATH 235

Students go missing at UW

UW Bulletin announced today that there have been several incidents where students have been disappearing within the Mathematics and Computer building on campus. According to the UW Campus Police, by the time the Police arrived at the scene, students have disappeared from the location without a trace. However, they were able to obtain some important clues that might give them a lead to the investigation.

All students who went missing were students of School of Computer Science and Software Engineering program, and it appeared that, at the time of the incident, they have been working on the User Interface assignment #2. In this assignment, a combination of two words (“TAs”, “rock”, in this order) was to unlock a button on the interface that students could click on. Upon a closer look at this assignment, however, before students went missing, they were able to unlock a secret button with the combinations of words that formed the sentence, “You’ll never get your midterms back! Muahahaha!”

UW Police was able to talk to a TA (who wished to remain anonymous) about these incidents. “I’ve heard about this legend that existed forever in the Computer Graphics Lab... There has always been some kind of secret way of unlocking a portal to an alien world. I suspect this assignment was the key to this portal, and smart students found this key.”

According to this TA, the portal connects our world with the alien world of far, far away, which has been known as “Planet Gnimmel”. Aliens in this world, called “Gninnies”, are suspected to have come through this portal, and abducted students for secret experiments involving digging holes on the ground, running into walls and madly dashing towards the exits.

The staff of the Computer Graphics Lab were not available for any comments.

Theresa Kim

Missing First Year Student Found

Clue left in bathroom breaks the case

Ayami Flush was finally found this week after a long and dedicated search by Campus Police and student volunteers. She was found on North Campus, where septic tanks had left her slightly broken.

The case-breaking clue was discovered by Obi Servant who found Miss Flush’s broken watch on the floor next the toilet she was using on Monday. “I’m always terrified that something will happen in the bathroom. When I saw the watch, I realized something horrible must have happened,” she said.

“As far as we can tell, the toilets in the MC got so violent that they sucked her in,” said Const. Letty of Campus Police. “We have recommended to the university in the past that they modify the toilet suction so that the tide caused by the force behind the flush on the 2nd, 3rd, and 4th floors don’t do just this thing. But they always wait until someone finally gets hurt. Maybe now they’ll listen.”

University administration had no comment for *mathNEWS*, but we were able to get a comment from Plant Ops, who released the following statement, “We have known for some time that the toilets in the MC have been too full. Based on complaints about the toilets flooding the bathroom, we thought there may be a problem. However, we cannot press forward without the request of the administration. We do recommend that these problems be remedied immediately.”

When asked what she’d recommend Ayami, had this to say, “Please, fix the toilets in the MC. I hope this never happens to anyone else. Please don’t let them come out of the bathroom drenched. At the very least, ensure that no one ever gets sucked in again.”

Ayami will remain at Grand River Hospital for overnight observation and will hopefully be released on Saturday.

TP

Parallel Prosperity

...or Possible Promiscuity?

So this term I’ve got a course in concurrency - CS343. They teach you all about multithreading, and tasks that are “partitionable.” A partitionable task is one that can be separated into many smaller tasks that can be done in parallel, and do not depend on the other tasks’ completion.

In the context of this new information, I have started to look at life differently. My mathie-powered life-optimization skills got a major boost by thinking of everyone as a thread running in the great multicore CPU of life. And while dealing with this revelation, the problem of mothers giving birth came up.

See, as a task assigned to a given woman, giving birth will always take nine months to produce a baby [*Human average is 266 days, plus or minus three — StatsEd*]. No matter how many man-threads or woman-threads are added to the birthing task, it will always take nine months to complete. In other words, two men can’t get a woman to make a baby in 4.5 months.

So, can we do anything to this problem to make it so we give birth faster? We can’t, but we *can* increase the throughput! We could effectively increase the rate of births over time. Now, the real issue of optimization here is ensuring that all things that can execute simultaneously never go idle and wait for other tasks to complete. The woman-threads’ task should be bringing a human

baby to term, while the man-threads’ task should be constantly impregnating woman-threads so that they can continue processing.

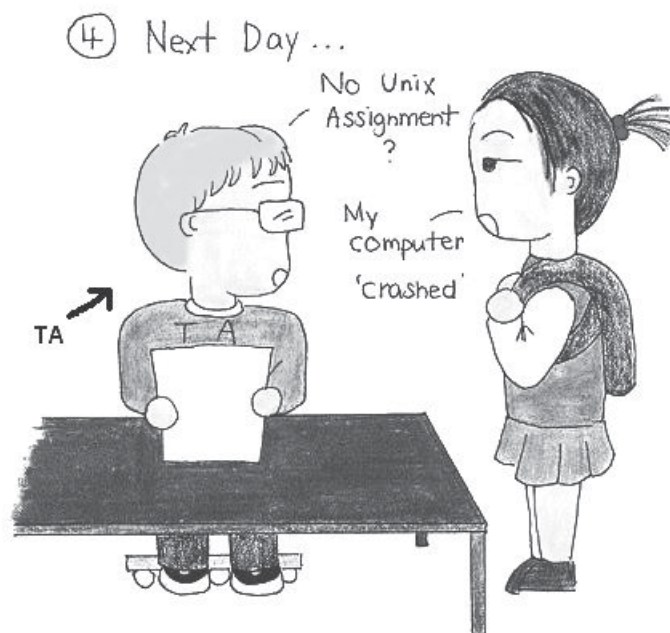
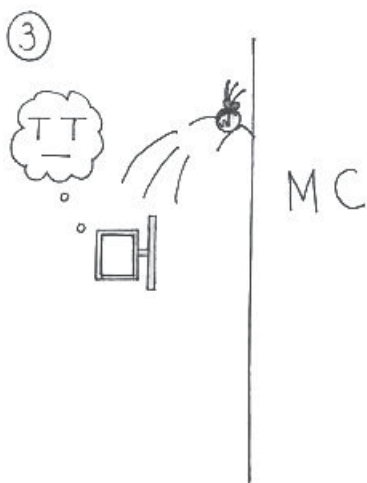
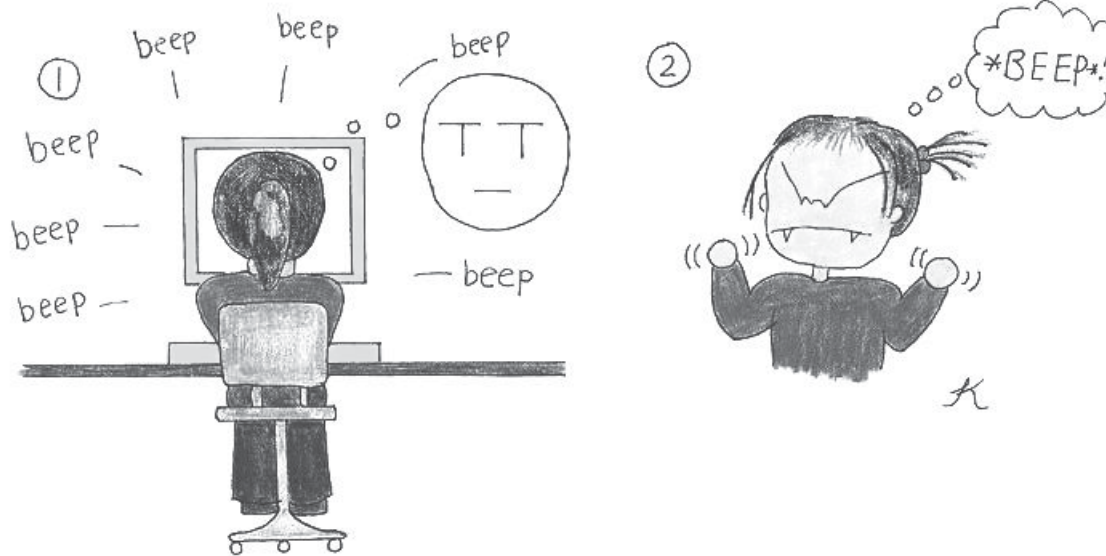
To optimize the ratio of man-threads to woman-threads, we need to know the rate at which each can fulfill their task. Women take their time, do the job right, and average nine months (23 million seconds). Men, on the other hand, in order to make a woman pregnant in the most efficient way, can take as little as 900 seconds between tries (including cooldown/reload period). Assuming ideal conditions, and that the man is willing to work 24/7 on this important task, and that one in ten tries yields a successful conception, the number of men to women required in this ideal and optimized world is... 1 to 2,556.

If these ideal conditions were true, there would be some... interesting side effects. (1) Men would be seen as a lowly, inferior sub-society, meant only to fulfill the practical purpose of getting women pregnant, (2) there would need to be a much larger ratio of x chromosomes to y chromosomes to balance out the 1/2,556 chance of getting a male baby, and (3) extrapolating from current ratios, there might actually be as many women as men in the math faculty.

DutchSheep

Unix Assignment

by Theresa Kim

**Good Reasons To:***Not Kill Your Roommate (No matter how tempting)*

- You need help paying the rent.
- There won't be anyone to help you with dishes/cleaning.
- No more free tutor.
- No one to help pay for phone or internet.
- You won't have any company when your significant other isn't around.
- No more free answering machine.

Kill Your Roommate (No matter what anyone says)

- Two (or three) words: illegal (overpriced) sublet.
- One less person making dishes.
- No one to disturb you while you are studying.
- No one else will tie up the phone or use up bandwidth.
- You and your significant other have the place to yourselves *every night* you're both free.
- You won't have to take messages for anyone.

Half-pint, who doesn't *really* mean any threats by this...

BYOB Jr.

I believe we have a new BYOB Jr. record with 16 submissions! Great job Matthew Hurford, Neil Malhofra, Marty Mackenzie, Dominic Wong, Dan Rosart, Lisa Kayaniyal, Chris Smith, Adam Weatherhead, Marcel Bradea, Dave Zoltor, James Pearson, Brandon Wilkinson & Kevin Blair, Elaine Bonvonie, Joseph Bunyan and Ben Powless (you may notice that is fifteen names). I have mixed emotions about the sixteenth submitter, on one hand he did bring the submissions total up to a lovely power of 2, on the other he just wrote A's in the first rows, B's in the second, and so on. I guess I'll tolerate it from fellow writer, so Ian, you got 1 single letter right, just know that a monkey could have done better (randomly guessing). My coin-flipology urges were satisfied with helping 'judge' the jumble, so this time I used the make-my-girlfriend-pick-a-number method to result in Lisa Kayaniyal winning. So Lisa, come on down to MC3038 (MathSoc Pink Palace) to pickup your C&D gift certificate.

Fun Fact about BYOB Jr: According to Professor William Paulsen's (of Arkansas State University) exhaustive search, there are only 14 non-isomorphic Euler Graeco-Latin squares of order 7.

This being the last issue I'm going to throw a curveball at the BYOB Jr. faithful, hoping you all re-join me next term (if you're off campus you can still participate via the website www.mathNEWS@uwaterloo.ca) when we return to our golden 6x6 box Euler squares, but for now I challenge you to find as many of the 7x7 Euler Graeco-Latin squares as you can (if you can't remember the rules for Graeco-Latin squares refresh your memory with BYOB #3 on the web.)

A	B	F	C	E	D
D	E	A	F	C	B
F	C	B	D	A	E
E	A	D	B	F	C
B	F	C	E	D	A
C	D	E	A	B	F

Baby Bunny Snuggles

wordJumble

A great beta-test

So this random filler puzzling seemed to be more popular than I thought it would be. Go figure! Anyway, thank you for letting me try out creating these! It was fun! And I'm glad I could keep people a little occupied in class as well! By coin flipology, Joseph Bunyan wins the wordJumble for this issue. Thank you everyone for your perfect submissions! And thank you for helping us beta-test this term's WordJumble! Joseph Bunyan can pick up his C&D gift certificate from the MathSoc office in MC 3038 during the following week. Unfortunately, I was too busy doing a final *gridWORD* to come up with more wordJumbles for the last issue...but thank you all the same! Especially thank you to those who submitted the wordJumble for the last issue: Leander Quiring, Patrick Roh, Michael Currie, Bryan Horn, Peggy Wong, Mike, Dominic Wong, James Pearson, Douglas Friesen, and last but not least, Brandon Wilkinson and Kevin Blair.

If you are interested in continuing on the tradition, let *mathNEWS* know by emailing mathnews@student.math.uwaterloo.ca

Joscelyn "WordMaster" Kleingeld

Hood and Ship

I have undertaken the task to compare and contrast "hood" and "ship".

- They can both be a verb. To hood means to cover with a hood. To ship means to transport (among other meanings).
- They can both be a noun. A hood can mean a punk, a holding roof, and a headdress. A ship is a vessel that carries passengers or freight.
- They can both be a suffix. Examples for "hood" include "widowhood", "childhood", and "brotherhood." Examples for "ship" include "friendship", "clerkship", "fellowship", and "readership."
- As suffixes, "hood" and "ship" commonly refer to a state, a condition, or a quality.
- As suffixes, "hood" and "ship" can also refer to a group of individuals having something in common. Examples include "brotherhood" and "readership."

From the above discussion, we see that hood and ship are remarkably similar. But they also differ in significant ways.

- As a suffix, "hood" can also refer to a time or a period. "Childhood" is an example of this usage. There is no similar usage for "ship" as a suffix.
- As a suffix, "ship" can refer to an office, dignity, or profession (e.g. "clerkship," "professorship"). Another usage of ship as a suffix is to refer to an art or a skill (e.g. "horsemanship"). There are no similar usages for "hood" as a suffix.

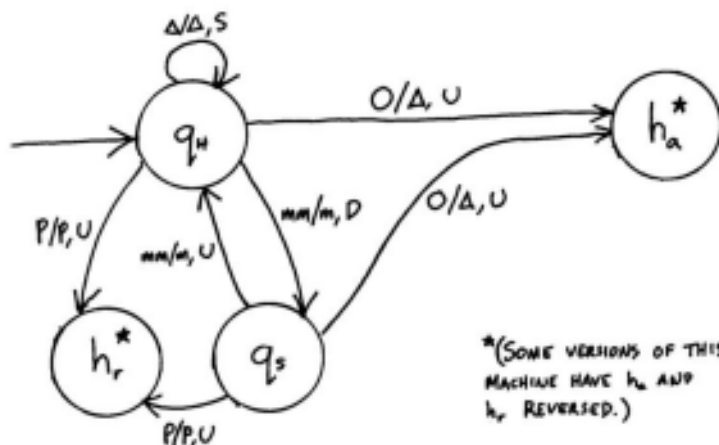
More subtly, when referring to a group of individuals sharing something in common, they have slightly different meanings. The suffix hood refers individuals sharing a specified state or character, whereas the suffix ship refers to individuals participating in a specified activity.

Now that we've explored the similarities and differences between "ship" and "hood," the interested readers among you can explore the possible meanings of "hoodship" and "shiphood." The REALLY interested readers among you can also explore the meanings of $\{(hood^x)(ship^y) \mid x,y : Integer > 0\}$ and $\{(ship^x)(hood^y) \mid x,y : Integer > 0\}$.

[References: Merriam-Webster Collegiate Dictionary <m-w.com>, WordNet 2.0 <cogsci.princeton.edu>]

J.Y.

Obscene Touring Machine



mathNEWS BYOB #5*Break Your Own Brain - Five rhymes with Monkey*

Welcome back for our [tear, cry] last issue of the term. If you're wondering, no, Five does not actually rhyme with Monkeys, but I used the Johnny Five joke in the Fall, and Jive in the Summer, so in the immortal words of not-Sean Connery, "Suck it, Trebek."

Interestingly enough, no one got both of the coin problems right. In fact, only one person got A, and a different person got B. The common errors were splitting piles in half instead of thirds for B, and trying a similar method of splitting the problem for A. As is her policy, everyone who attempted Snow White got her, and we had one miss on circular logic.

Snow White is quite dirty

Doc, Happy, Smelly, Sneazy, Stumpy, Sleepy, Grumpy, Dopey, Droopy, Bashful. Silly Bashful, if you were more assertive maybe you wouldn't have been pushed to the back of the line.

Money can be exchanged for goods and services

A) You only actually need a single weighing. You use one coin from the first box, two from the second, etc (N coins from the Nth box), weigh that pile and you'll find it is X/16ths light where X is the box number.

B) Three weighings are the minimum to guarantee you'll find it. Weigh a group of eight coins against another group, if it balances then the heavy coin is in the third set of eight, if the scale doesn't then the group that tips the scale has the heavier coin. We now have eight coins in which to find the counterfeit coin. Weigh three of these coins against another three of them, if it balances then only two coins remain, if it tips then once again, the group that tips the scale has the heavier coin. If only two coins remain then the third weighing is pretty straight forward. If three coins remain then pick two and compare them on the scale, if they balance it's the third coin, otherwise it's the one that tips the scale.

Circular logic is Circular

- | | | |
|------|------|------|
| 1. C | 3. B | 5. B |
| 2. D | 4. C | |

Five submissions, very respectable (especially when added to the 16 we got for BYOB Jr. for a grand total of 21!), Adam Weatherhead returns with a single correct answer, James Pearson gets 1.5, Chris Smith and the team of Brandon Wilkinson & Kevin Blair each get 2 right, but Joseph Bunyan wins with 2.5. So congrats Joseph, come on down to MC3038 (MathSoc Tetris Flashback Rehab Centre) to pick up your C&D gift certificate.

Despite the fact that it is the last issue, and I should be telling you not to submit, my role as dominator is too clearly cemented in my brain, so submit anyway! Not that I'll read it until sometime early May, but it'll make everyone in the world a little happier. Yes, that's right, everyone. Although tiebreakers aren't necessary (everyone is a winner when there is no prize), they'd still be lovely; after all, there will be problems in the first issue next term.

Instead of giving three problems, I'm going with one, because it's freaking long, and because it's one of those problems that is better done by walking away on occasion, so take your time, use it as a break from finals, use it to try to pick up, and get as many as you can (er, problems, I mean get as many problems as you can). If you get really stuck send me an email and I'll give a hint. So, without further ado, or with much ado about something:

$$2 = B$$

A classic word game, you have to figure out what words the capital letters stand for. 1 = E. on a C.

- | | |
|---------------------------------|------------------------------------|
| 1 = S. S. for a M. | 9 = C. of H. in D. "I." |
| 1 = G. L. for M. | 9 = I. in a B. G. |
| 1 = S. S. | 9 = L. of a C. |
| 1 = if by L. | 9 = M. in a W. is P. |
| 1 = the L. N. | 10 = C. G. to M. |
| 2 = C. B. as B. as O. | 10 = F. in B. |
| 2 = B. G. | 10 = P. in C. |
| 2 = C. in the T. by C. D. | 10 = Y. in a D. |
| 2 = H. in a W. | 11 = P. on a F. T. |
| 2 = N. in a D. | 12 = A. at the L. S. |
| 2 = O. in a D. P. | 12 = L. of H. |
| 2 = P. in a P. | 12 = T. of I. |
| 2 = T. the P. A. R. | 13 = a B.'s D. |
| 2 = W. that D.'t M. a R. | 13 = O. C. |
| 2 = if by S. | 14 = D. in a F. |
| 3 = B. in G. | 15 = M. of F. per P, A. to A. W. |
| 3 = B. of the U. S. G. | 17 = S. in a H. |
| 3 = D. of the C. | 20 = Y. S. by R. V. W. |
| 3 = F. in a Y. | 21 = G. S. |
| 3 = L. P. | 22 = C. |
| 3 = M. and a B. | 24 = B. B. in a P. |
| 3 = P. in a H. G. (N. T. Y.) | 24 = B. B. to a C. |
| 3 = R. in a C. | 24 = S. Z. of I. T. |
| 3 = S. and Y.'re O. | 25 = Y. of M. for a S. A. |
| 3 = S. in a T. | 30 = D. H. S. |
| 3 = W. in "M." | 33 = P. R. J. N |
| 3 = W. on a T. | 40 = Y. in the D. for the I. |
| 4 = B. in a W. | 46 = C. in a H. C. |
| 4 = H. of the A. | 52 = W. in a Y. |
| 4 = I's in M. | 61 = H. R. H. by R. M. in O. S. |
| 4 = L. in a D. W. | 75 = Y. of M. for the D. A. |
| 4 = Q. in a F. G. | 78 = C. in a T. D. |
| 4 = S's in M. | 87 = F. S. and S. Y. |
| 4 = S. in a S. | 116 = Y. in the H. Y.'s W. |
| 5 = B. in the T. | 144 = U. in a G. |
| 5 = G. L. | 180 = D. to R. D. |
| 5 = M. B. in "J. and the B." | 200 = D. for P. G. in M. |
| 5 = S. in a P. | 206 = B. in the H. B. |
| 5 = S. in the S. C. | 235 = I. of U. in the A. B. |
| 6 = P. in a P. T. | 366 = D. in a L. Y. |
| 6 = S. in a H. | 451 = D. F. at which B. B. |
| 6 = T. Z. in C. | 500 = F. C. |
| 6 = W. of H. VIII | 500 = M. in the I. F. H. |
| 6 = of O. and a H. D. of the O. | 666 = N. of the B. |
| 7 = C. in a R. | 755 = H. runs H. by H. A. |
| 7 = D. in "S. W." | 880 = N. of M. S. of O. F. |
| 7 = P. of E. | 1000 = P. of L. |
| 8 = C. in a M. | 1000 = S. L. by the F. of H. of T. |
| 8 = D. in H. | 1440 = M. in a D. |
| 8 = L. on a S. | 525600 = M. in a Y. |

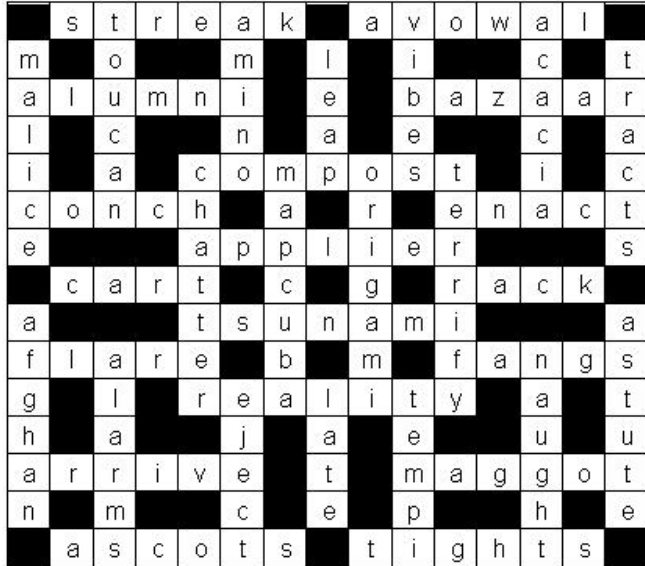
Hope you enjoyed the Winter, may all your finals be easier than my column has been, see ya in the Spring term, when Slinkies rule the campus.

Snuggles "The Anti-Cheesus"

gridCOMMENTS

It's over... at last...

It's sayonara time for me. Interested in composing the *gridWORD* and *gridCOMMENTS* next term? Apply to *mathNEWS* at mathnews@student.math.uwaterloo.ca. Let's get down to business. The winners can pick up their C&D gift certificates from the MathSoc office in MC 3038 during the following week.



- Brandon Wilkinson and Kevin Blair (“There is no hat. Only Zuul!”) - I don’t really get the answer they gave to the *gridQUESTION* but there was no tie, so it doesn’t matter!
- e (“In the dark.”) - the only other complete grid, with random letters inserted in a couple places — making some very funny answers in the grid.
- Elaine Bonvonie (none)
- Dave Zoltok (none)
- Marcel Bradea (none)
- Joseph Bunyan (“Atop my incomplete *gridWORD*”)

Thank you for a fantastic year and a half! *sniff* I’m tearing up just thinking of leaving you all! I’ve seen some great answers to the *gridQUESTION*, which have kept me entertained for so long. You all rule! The solutions to the following *gridWORD* can be found in this issue of *mathNEWS*. And the last *gridQUESTION*, as a hint: *What happens when there’s no conMaster, or even gridMaster to take over?* Answer: *The gridWORD disappears!* So come help out with *mathNEWS* next term — it’s a great experience and you won’t regret it. Free Monday night dinners!

Joscelyn “ConMaster” Kleingeld



Conventional

ACROSS

- accumulate
- affirm
- bury
- outwit
- type of tea
- omega’s partner
- leavener
- lettuce’s kin
- returned
- evita
- difficult to grasp
- dark’s eternal foe
- quick inhale to smell
- depression
- without anything
- pearl bearer
- poisonous snakes
- formula for baking

DOWN

- cat lover’s buy
- shaded area
- faint
- hay-like craft supply
- basement room
- a Clue suspect
- instill eagerness
- blazers
- quieted to a stupour
- John Lennon hit
- blind
- ascends
- proposals
- made suitable for a particular audience
- foot part
- following
- immediately adjacent
- targetting aid

