

math

Volume 85, Issue (4!)/(3!)

NEWS

Friday, March 2, 2double'O'1

Genetic Engineering

Who should separate?

Quebec or BC?

3D FX Cards

Is it all a scam, are they milking the foolish and easily amused?

Increased Length

Are Raymond's articles too long for their own good?

Win a DVD player

Details inside!

mathNEWS sucks dude...

What's math?

mathNEWS rocks!



Eight Bizcit'z are better than one?

Find out the truth about Fred Durst Cloning, and the rampage that ensued

Pres sez

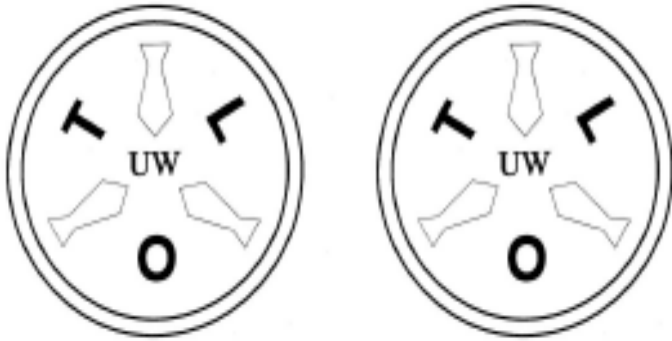
March 2: Who wants to be a Millionaire starts.
 March 12: Fifty Hours in a Trophy Case
 March 13: Campus Day: Sign up at MathSoc
 March 14: Pi Day: We give you pie!
 March 15: Pint with a Prof in DC
 March 16: Win a DVD Player by wearing a pink tie during the past week.
 Volunteers are needed! Drop by for a smile. Have a great day.

Paul Royston
 Math Society President
 888-4567 x6515
 pres@mathsoc.uwaterloo.ca

WE'RE DROPPING PRICES

Starting today, prices for chocolate bars and ProMax Bars purchased at the Right Angle Cafe (That's the C&D folks) are being reduced in price by \$.25! This is happening to ensure that the student population gets the best deal they can. We care about you. (We really do, we're not trying to poison you, these bars aren't old and moldy... not yet at least)

Sincerely,
 The Right Angle Cafe and MathSoc



COMMUNIQUE

TO : mathNEWS, Math Students and all Students and Staff
 FROM : T.L.O. (Tie Liberation Organization)
 SECURITY CLEARANCE : General
 RE : MathSoc is Hiding it From You
 The Government is hiding it From You!
 Yes your Math Student Society is concealing the truth. A short while ago, Pinky and Fuchsia (the two smaller ties) called the Tie Liberation Order (TLO) requesting a bit of a break from the dreaded (not to mention dull) suitcase they are stored in. The TLO responded by assisting them in gaining their freedom. Have no fear; both are happy and safe. They are getting a well-needed break from being rolled up. The TLO believes it is the Students' right to know about the Ties and their excursions in the real world.

END OF COMMUNIQUE

Buy a Barbecue

That's right you can own your own BBQ. Come to the MathSoc Office MC 3038 and bid on our two BBQ's by Silent auction. The highest will be sold the BBQ on March 7th. So come on out with your apron! (Note the BBQ's are used!)

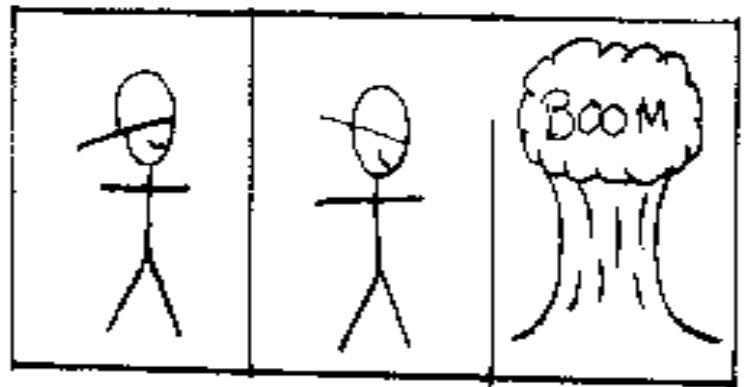
lookAHEAD

mathNEWS	
March 2	Issue #4 is technically available
March 12	Issue #5 production night 6:30pm, MathSoc (MC 3038)
March 16	Issue #5 hides a pot 'o gold
Math Faculty	
March 12	Info Night
March 13	Campus Day
March 19-23	Fall Term Pre-Registration
MathSoc	
March 12	FHIATC
March 13	Campus Day
March 14	π Day
March 15	Pint with a Prof
March 16	Pink Tie Day
MGC	
March 2	Last Day for Grad Ball Tickets
March 10	Math Grad Ball
March 11	Math Grad Ball Recovery, at the Lyric (all ages night)
Miscellaneous	
March 9	Full Moon
March 15	Ides of March
March 17	St. Patrick's Day
March 20	First Day of Spring
March 25	Mothering Sunday (UK)

Mayday, Mayday, Exambank dying

Do you use the exam bank in the Math Society office? How about the online version? The exams in the booklets and online have come from professors and students who have submitted old exams. Some of you may have noticed that the exams for some courses are starting starting to get out of date. The math society would appreciate any recent exams - math courses or non-math courses. If you would like your exam back, please leave a note on the exam about contact information and we will contact you after we create a copy. For confidential reasons we will black out the name and ID number on the photocopied exam.

Thanks,
 Chris Pollard
 Resource Director



The Intricacies of Perpetual Life: The MathSoc Marathon 2001!

As hell week approaches (March 12-16th), we here at MathSoc ask ourselves: What can we do to make the MathSoc name ring out the entire campus. The answer came as divine Mathie intervention: Do crazy things. As we get closer and closer to the big day, MathSoc is preparing a line of exciting and crazy events for all Mathies (And Mathie Wannabes too — OAC visits are on the 13th!) to enjoy. The theme of this year's hell week (I think this is the first year we actually had a theme) is the **MathSoc Marathon**, where MathSoc volunteers will keep the MathSoc office running for 103 hours STRAIGHT from Monday March 12th @ 9:30AM to Friday March 16th @ 4:30PM. MathSoc volunteers will take shifts to keep the place open, so come in, chat, and see how crazy each and every single of us are. Come and see the sleep deprived MathSoc slaves. Witness Nadia go insane when she suffers from "Survivor" and "The Mole" withdrawal. Come and see the Cornered Frosh get his various belongings taped to the ceiling by the evil Catherine! Noted *mathNEWS* personalities will be on hand during the week to sign copies of *mathNEWS* for you, including Editor-In-Chief Pete "The Pimp" Lizak, Raymond "The Cornered Frosh" Lai, Richard "Wildman" Bilson, Greg "The Front and Bach" Taylor, and more! Come out and meet the mathematical fortune-teller who, week after week, decrypt the signs of the skies for all Mathies to enjoy! We're making no guarantees, but Brad T Smith may actually take the Concorde BACK TO Waterloo for all you ladies who want his autograph on YOUR copy of *mathNEWS*!(If you want Bradley to autograph parts of(If you want Bradley to autograph parts of(If you want Bradley to autograph parts of(If you want Bradley to autograph parts of(If you want Bradley to autograph parts of(If you want Bradley to autograph parts of(If you want Bradley to autograph parts of(If you want Bradley to autograph parts of your body, that's your business, not ours.)

We will have the opening ceremony at exactly 9:30AM to start off the festivities, and there will be cotton candy involved! Come out and see the brave souls who dare the ghosts of the MC and buy \$.05 freezies and cotton candy! Cheer on the soon-to-be-sleep-deprived volunteers in their epic quest!

In addition to the 103 hour MathSoc Marathon, our own MathSoc president Paul Royston, along with his pal, Ed Schmidt, will lock themselves into the MC trophy case on the 3rd floor for

50 hours. They will only be let out to visit the MC washroom, and all food will be fed to them from within their glass cage. Come out and see the spectacle! We know TV station CKCO will!

Besides the human side-shows and the MathSoc Insomniacs Marathon, there will be other Hell Week events such as PIE Day where you get to eat FREE PIES (flavours to be decided), and Pint With a Prof Day, where you can get drunk along with your prof (You have to pay for beer, so chances of getting completely drunk depends on how heavy your wallet is). Just imagine: You and your prof regaling the latest of drunken show tunes as you consume FREE FOOD! (Yes, beer costs \$\$, food is FREE!)

FREE DVD PLAYER! That's right, you can win a FREE DVD Player just by wearing your PINK TIE on Friday March 16th. Come into MathSoc and fill out a ballot to have a chance to win a FREE DVD PLAYER!

There are definitely more surprises and events being planned. Watch out for hallway bowling outside the MathSoc office, and witness as we cordon off the Comfy with police tape. The possibilities are endless.

You must be asking yourself now: "How can I get involved in this week of drunken rage?" Well, you can get involved in several ways. You can sign up to help run MathSoc for 103 hours. (If you sign up and work for more than 5 hours, you will receive a copy of MathCAD and Matlab care of the fine people at Electronic Workplace Group/IST and *mathNEWS*.) You can also help out by:

- Monitoring Paul Royston and Ed Schmidt to make sure they have enough air and food to survive
- Provide visual entertainment for President Royston and VPF Schmidt through their glass cages
- Volunteering for the OAC Campus Day on March 13th (Sign up sheets are on the boards across the C&D)
- Helping out with Pie Day and Pint with a Prof Day

If you can help out, come to MathSoc and let us know — we'll put your name down on our Volunteer List, and we'll get in contact with you all when time comes for you to lend a hand. Remember: If you help out with the MathSoc Marathon, you get to have fun with other MathSoc personalities, and you get a free MathCAD CD too!

So, mark your calendars for the week of March 12th, because Hell Week is going to get a whole lot crazier!

Raymond CT Lai

2001 MathSoc

Marathon



103 hours

The Frosh Cornered

Letters to the Cornered Frosh

To: The Cornered Frosh

From: A. Paul

You must be a depressed sonofagun, aren't ya? I feel sorry for you man.

Yes, I am a depressed sonofagun. What are you going to do about it, huh??

To: The Cornered Frosh

From: D. Lee

Wow. You surprise me. I thought you would be popular and girls would flock to your arms at your command. Now I feel totally better after hearing your story. Thanks for cheering me up. Now, I'm not the complete loser in this school

I have no comment.

Getting to know the Mathie Ladder of Evolution

We've all heard jokes that starts with "You know you're in math if...", or "You know you're a complete nerd if...". Both of those pretenses end with a completely moronic human action that can only be described by using the words 'idiotic' and 'nerd-ish' in the same sentence. I, for one, have made many similiar jokes during Frosh week last year. Specifically, my jokes have the 'human moronism boundry' of "You know you're a nerd if you use the words "Integral", "Derivative", and "Transitive property" in your everyday language. Bonus points if you can use it in the same sentence."

Unfortunately, I recently caught myself uttering those words. Even worse, I caught myself using these words in my daily vocabulary now. The kicker is: The topics I use these words in have nothing to do with math. You don't believe me? Well, sample a few of my phrases yourself:

- "The use of Latex is integral to the *mathNEWS* production process."
- "Drowsiness is only a derivative of taking high power cold medication."
- "Nortel tanked yesterday, so by transitive property, the TSE also tanked."

...Sad, isn't it?

There's nothing left to do but to announce that I have evolved into a UW Mathie code monkey. No, I haven't evolved into the Comfy Lounger state of Mathiness yet, and I really don't intend to evolve that far up the Mathie ladder of evolution. However, I have begun my evolution into a MathSoc leech.

What is this Mathie Ladder of Evolution you ask? It is the natural changes a Mathie goes through in a course of 5 years here at the Faculty of Mathematics. The evolutionary steps one takes depends on whether or not that Mathie feels up to the challenge of evolving up to the next stage of Mathieness. For those of you who still don't know yet, the UW Mathie Evolutionary ladder goes something like this:

To reach some levels of the evolutionary ladder, one must complete the prerequisites before advancing to the next level. Underline below is a detailed explanation of each level, and what paths a Mathie can take.

Frosh Wannabe

During a week in March every year, UW accepts an influx of OAC students who stroll the campus looking for future academic success. While not all OAC students who visit the UW campus will be accepted into UW, and even less from the final total will be accepted into the Math faculty, some of these students can be classified as "Frosh Wannabes". The few hours they linger inside the lifeless brick walls of the MC may be just enough a lure for them to commit to a life of solitude (I mean, academic pursuits here at the Math Faculty). They will taste a sampling of what it means to be a Frosh here at UW, experience the delicacies of UW food, have a brief encounter with university level hazing, and other UW Mathie culture. In all, one must become a Frosh wannabe before one can embark on a journey of pure academic discipline and mental torture.

Official Frosh

After a Mathie has gone through the week of pure bliss and enjoyment known as Frosh week, a Frosh undergoes a transformation from a fun and social individual into a lifeless blob, otherwise as a Mathie Frosh. A few weeks of MATH137 will weed out the individuals who are not suitable for being a Mathie Frosh. After the weak has been weeded out, the remaining group of Mathie Frosh will have the ability to evolve into a more complicated form of Mathie life.

Serious Mathie

This is the group of Mathie Frosh, with the weak and dumb weeded out of the pack. This elite group of number crunchers now have the ability to choose their path of evolution. After surviving MATH137, MATH135, and CS130, this group of capable Mathies can now embark on either one of the five evolutionary paths: **purely academic route, MathSoc route, Comfy Lounge route, *mathNEWS* route, and the Club route.**

Academic Route Stage 1: Specialized Mathie Student

Students who take this route must take caution: This is the last chance to foray into other routes which involve contact with other human beings, and IRC doesn't count. If one continues along the Academic Route, that Mathie will be so blinded by academic pursuits that interaction with other Mathies will be impossible. The Specialized Mathie is were most Mathie students sit. They declare their major such as CS or AM, and they go about their academic business on a day-to-day basis. They also participate in other extra-curricular activities that keep them from going insane. This is where the majority of Mathies reside, and it is a rather comfortable place to be.

Academic Route Stage 2: Insane Mathie

This is where the pure academics categorizes themselves in. These Mathies will eventually evolve into TAs and Professors. They will not be stopped in their bid to study for 24 hours straight. These Mathies have absolutely no interaction with the outside world, as their only form of communication takes form in a fairly complicated language of pseudocode that is used primarily on IRC. Mathies who have evolved into this stage of pure Mathiness should be congratulated for their academic prowess, but one should always carry a stick of soap and deodorant before approaching to congratulate. Take special note: Once you evolve into this form of Mathiness, there is no turning back. You will have NO social life, and any form of human interaction is null and void. Notice there are no connecting lines between the Insane Mathie category to any other categories.

MathSoc Route Stage 1: MathSoc Worker/MathSoc Lackey

Once a Mathie matures into a Serious or Specialized Mathie, the Mathie can pursue a voluntary position at the MathSoc office. At the lowest level of the MathSoc heirarchy is the MathSoc Lackey. These Mathies must sign up their hours on the MathSoc board, and report to a MathSoc Leech or Office Dictator. They must endure bad times, and take in the good times as well. The MathSoc Lackey will learn to service other Mathies by distributing old exams and selling useful(less) Mathie trinkets. Keep in mind that being a MathSoc Lackey is not an exclusive category, as a Mathie can occupy other categories while being a MathSoc Lackey. Keep in mind, however, that this route will require patience, endurance, and dedication, as these three qualities are the only guarantee for evolution into the next level of the MathSoc route.

MathSoc Route Stage 2: MathSoc Leech/Regular

The MathSoc leech has gained enough reputation by being a MathSoc lackey to become a MathSoc Regular. MathSoc Leeches have gained enough respect to be trusted with a key, or be left alone without supervision inside the MathSoc office. From their evolution, they have gained knowledge of the inner workings of MathSoc, where they hide the lost items, and how to steal freezies without being caught. They enter and leave the MathSoc office as they wish, and other Office Slaves and Leeches recognize their face to let down their security guard. These Mathies also receive fringe benefits, such as unlimited use of the graphics terminal, better chairs (Lackeys don't get

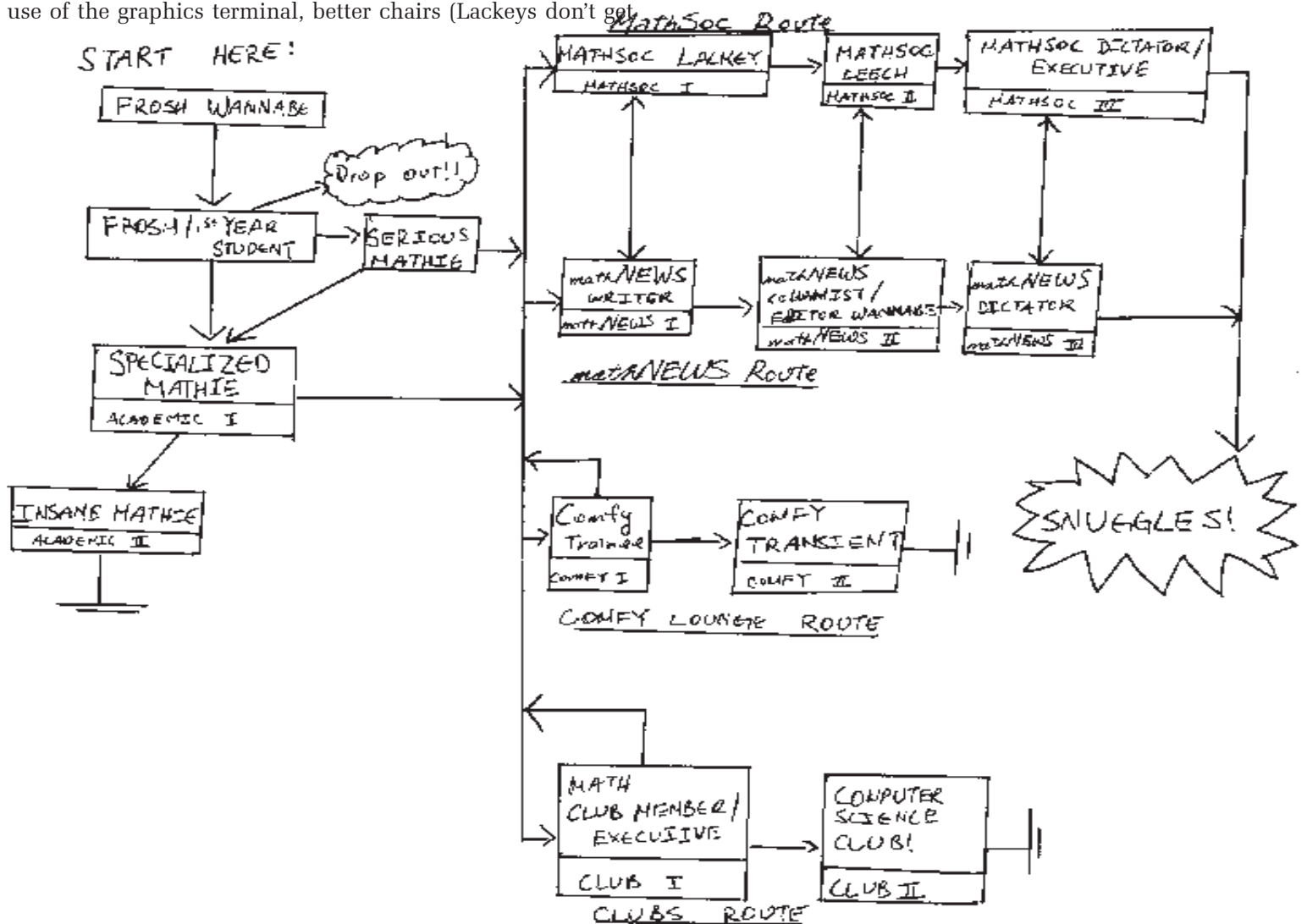
good chairs), and priority use of the Unix terminal from within the MathSoc office. Overall, this is a pretty cushy evolutionary step for all Mathies to evolve into, but the level of trust and dedication required for this evolution is beyond some Mathies, who don't want to get too involved within the school.

MathSoc Route Stage 3: MathSoc Office Dictator/ MathSoc Executive

One way to distinguish between a MathSoc Regular from a MathSoc Office Dictator in their natural habitat is to check for the existence of Office keys. The MathSoc Dictator has sufficient trust and confidence from within the Mathie community to have a MathSoc key bestowed upon him/her. Besides all the fringe benefits a Mathie Regular gets, the MathSoc Dictator now has priority seating with the Graphics workstation. However, with the added benefits come a price. The Dictator/Executive also have to contend with the extra work that comes with the prestigious position. Paperwork, organizing Lackeys, and other MathSoc duties prevent them from being totally social, even though they have a good balance between a social life and academic life. One of the benefits of being a MathSoc Dictator/Executive is that they have lackeys following them around, ready to do their bidding at their beck and call. It's rather convenient when you need to pick up dry cleaning during midterm hours.

Comfy Lounge Route Stage 1: Lounge Trainee

Mathies in this category will experience a decrease in social-
Continued on next page



Continued from previous page

izing with people outside the comfy lounge. Instead, the Lounge Trainee will begin training on games such as settlers, and the intricacies of Lounge dining, consisting of vending machine grub, and the occasional hot meal selection from the C&D. Be warned: The Lounger route is a one way ticket. One cannot leave the Lounge Route once a Mathie embarks on this course of evolution. One must prepare oneself by resisting bathing, cleansing, or any sanitary actions of any kind.

Comfy Lounge Route Stage 2: Lounge Transient

Once the Lounge Trainee has gained enough experience with Settlers and have garnered the respect of the Lounge regulars, he/she will be elevated into the final level of the Lounge route and become a loungeer him/herself. Life in the comfy is interesting, as a Transient can see how the school is run at 4AM in the morning. Take note: One cannot escape the Lounge Transient position once he/she attains this level of evolution, no matter how many times you use industrial-strength soap to bathe.

mathNEWS Route Stage 1: mathNEWS Writer/Slave

One can find new friends and an interesting place to vent your aggressions here at *mathNEWS*, and the way to start is the evolve into Stage 1 of the *mathNEWS* Route. *mathNEWS* Slaves are expected to write huge amounts of articles and bring pizza to the *mathNEWS* regulars when pizza time arrives. The orientation process is spent in front of the Unix workstation, learning the *mathNEWS* Markup Language (mnML). Time spent as a *mathNEWS* slave is short, as it only takes a few production nights to evolve into the next category of Mathieness.

mathNEWS Route Stage 2: mathNEWS Columnist/ Editor wannabe

Once a *mathNEWS* slave has evolved into a regular columnist, the *mathNEWS* columnist will have sufficient knowledge of mnML to operate the mnML system with ease and without supervision. However, as time lingers on, these Mathies will vie to be the *mathNEWS* dictator, and thus, they become a *mathNEWS* editor wannabe. They become the personal lackey of the *mathNEWS* editor in hopes of receiving a key to the grand atrium that is the *mathNEWS* office. As they become more confident in their ways and have gained the respect of the *mathNEWS* dictator, they become...

mathNEWS Route Stage 3: mathNEWS Dictator

The *mathNEWS* dictator has worked up the *mathNEWS* evolutionary chain and has become what they have vied to do as a *mathNEWS* Editor Wannabe. Now, they will have greater responsibility as they fight to finish editorials within deadlines, and struggle with the black claws that is called Adobe Page-Maker. The fight to the death to fit all the articles within the confines of the *mathNEWS* budget is a long and treacherous one, as these brave souls battle until the eves of dawn (probably until 4AM) to churn out issue after issue of *mathNEWS* for the Mathie population. The great responsibility also comes with great benefits, as these Mathies gain personal lackeys, and a following of *mathNEWS* fans who want to 'be seen' on *mathNEWS* any way they can.

The Club Route Stage 1: Club Member/Executive

These people are fairly ordinary Mathies who like to dedicate their extra time to enriching their lives and the lives of other Mathies by joining and maintaining these academic and social clubs. These Mathies actually have lives, and they are fairly popular. However, their fame is rather limited in comparison to the *mathNEWS* Route and the MathSoc Route. TAKE EXTREME

CAUTION: The next level of evolution for the Club Route is not necessarily the best for all Mathies

The Club Route Stage 2: The Computer Science Club

Although these people are very smart, they are VERY scary. They are very knowledgeable in what they do, but in the words of Nadia V Ursacki: "We have to shut the door to the CSC when the OACs come for their visit." Remember: Once you begin your journey into the CSC club, there is no turning back.

The Highest Form of Mathie Evolution: SNUGGLES

Once a Mathie has achieved either The Club Executive stage, the *mathNEWS* Dictator stage, or the MathSoc Dictator/Executive stage, he or she can take the leap and foray into what is called the "Snuggles Domain". These Mathies will forever be immortalized in stories and folk tails of their daring Frosh weeks and adventures in binge drinking. They become Mathie icons for their high level of Mathieness. These people are honoured and recognized where ever they go, and every courtesy is extended to them (can you say FREE BEER?)

So there you have it: The Mathie ladder of evolution. Take note that some paths are dead ends, but all are rewarding in their own way (except for dropouts, they don't count). However, to transcend to the Snuggles plain of existence is the ultimate goal of any Mathie when they enter through the huge brown doors of the MC.

Where are YOU on the Ladder of Evolution? Send scientific enquiries and evolutionary specimens to r3lai@uwaterloo.ca.

Raymond CT Lai, The Cornered

Frosh

Quotes and Saying

Quotes and Saying fun for all ... Thanks to Daniel for a lot of these, and of course good old fortune :)

1. Hard work pays off in the future laziness pays off now[*Exactly — Ryan JJ*].
2. Any sufficiently advanced stupidity is indistinguishable from malice.
3. Circular proofs are the best kind, they don't leave any loose ends.
4. If you are not part of the solution, you're part of the precipitate.
5. I used to think my brain was the most important part of my body, but then I remembered who was telling me that.
6. The difference is, men know they don't understand women, women think they understand men. — M Bergman, psychologist
7. To any complicated problem there is a simple solution, which is wrong.
8. I'd rather have a bottle in front of me, than a frontal lobotomy. — Tom Waits
9. Don't drink drive and vote, you may do serious damage to your liver, car, and polling station.
10. O'Riordan's Theorem: Brains x Beauty = Constant.
Purmal's Corollary: As the limit of (Brains x Beauty) goes to infinity, availability goes to zero.
and a personal favourite ...
11. I love this f*#king University, and this University loves f*#king me.

Anyway that's all this week, send me quotes and I'll included them next time around :)

Clonin', Clonin', Clonin'

While cloning is nothing new in this modern day, there are a lot of people who fear what could happen should unscrupulous people get into the habit of using such technology. The announcement of Dolly, the sheep that had been cloned was a shocker to many, and the possibility of creating a human clone is very close at hand. While we will probably never have the power to clone dinosaurs as in Jurassic Park, we could clone other animals that although extinct, still have intact DNA that we could use to bring them back to life.

While the uses of cloned humans have been debatable (see the movie *Multiplicity*), there are some practical applications. One is to create an army of cloned warriors. Since they are cloned, you could (theoretically) brainwash them as they have their rapid development into an adult, and use this army to take over Detroit. Why Detroit, I don't know, but you could do it.

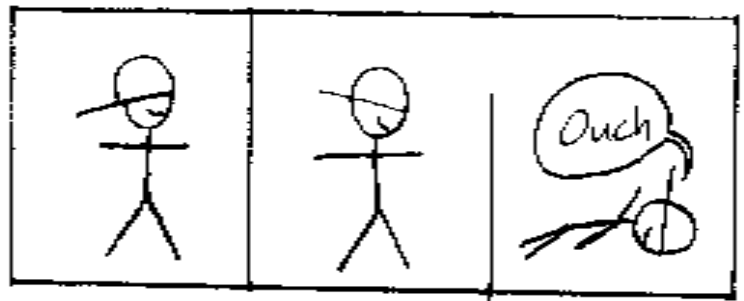
However, such a violent use would overlook one of the most worthwhile uses of cloning. Music. Music is a joy to almost everyone (even some deaf people, ask Beethoven). So why not clone musicians? While we will not be able to clone some of the legends like Beethoven, Mozart, Bach, etc. there are some who are considered legends and are still alive and kickin'. B.B. King, Vanessa Mae, Ofra Haroy, Backstreet Boys, or Fred Durst (of Limp Bizkit).

Well, I asked "So why not clone musicians?" Well, the obvious

answer is that eight bizcut'z aren't better than one. You know how rowdy Fred Durst is, imagine eight of him! Well, I can do better than that. We took some stick figure photos of Fred in action, and scattered them throughout this issue. Find them, point at them, and laugh, Fred is one wierd (and cruel) fellow, poor Smurfs. I'm just glad that I didn't make eight copies of the backstreet boys, imagine them taking over everything, singing and dancing. They wouldn't even need backup dancers there would be 40 of them!

Hopefully though, if the Backstreet Boys were cloned, they wouldn't end up causing the havoc that Fred did. As fun as they were, I had to take them to the zoo, and lock them up with the (now defunk) monkey exhibit. Poor monkeys, who knew [*Sorry, but we can't print that monkey picture... — Pete Love*]?

Pete Love



Grad Ball

Math Grad Ball 2001 Saturday March 10, 2001

Ticket Sales

Today is the last day for ticket sales. Tickets will be on sale from 10:30 AM to 2:30 PM for \$40 per ticket or \$300 for eight tickets (a table). Please remember that this is a formal event.

Shuttle Bus

We will be offering a shuttle bus starting at 6:00 PM to take people to Waterloo Inn. It is a big yellow bus. You will not be able to miss it.

There will be two pick-ups, one at 6:00 PM and the second at 6:45 PM. The shuttle will have three pick-up points in the following order: the Co-Op apartments by Weaver's Arms, the SLC by the Turnkey Desk, and Beck Hall.

At the end of the evening, the bus will make three pick-ups from Waterloo Inn at 10:00 PM, 11:00 PM, and 12:00 AM. The drop-offs will be in reverse order: Beck Hall, SLC, and then the Co-Op apartments.

Grad Ball Menu

1. Garden Salad
2. A Fresh Assortment of Breads and Rolls
3. Tender, Boneless Breast of Chicken served with Chasseur Sauce (mushrooms, tarragon, onions, and tomatoes in a rich wine sauce)
4. Vegetarian and Vegan Meals Available***
5. Daily Potato
6. Seasonal Vegetables
7. White Chocolate Mousse Cake
8. Coffee and Tea
9. Complimentary Bottle of White Wine - French Chardonnay and Bottle of Red Wine - House

NOTE: There are no nuts in the regular meal.

***NOTE: Vegetarian and vegan meals are to be determined - same appetizer and dessert. These alternatives must be requested in advance.

Please notify us by Friday March 2, 2001 (TODAY) if you would like a vegetarian or vegan meal or have any food allergies either where tickets are being sold or e-mail njthomps@uwaterloo.ca.

One more thing, we are having an MGC Grad Ball Recovery Party, the night after at the Lyric Nightclub, all ages party! **All Ages!**

NJT & PLL

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@undergrad.math.uwaterloo.ca on the Internet.

The editor(s): Peter Lizak and Bradley Smith, always drunk, always approachable. Just don't expect anything comprehensible, grammatically correct or spelt correctly. Ever.

Food For thought

Fault Tolerance

“The Nine Thousand series is the most reliable computer ever made, no Nine Thousand computer has ever made a mistake or distorted information. We are all, by any practical definition of the words, fool proof and incapable of error.”

HAL 9000 in “2001 A Space Odyssey”

You know, it's odd how fast technology changes. Remember 1995? I was in grade 11 in January of that year. Intel was digging itself out of the PR disaster surrounding the floating point bug of the Pentium chips. Microsoft finally got around to releasing a Preemptive multitasking OS for home use. 1995 was the year I first heard about this neat little free-wear OS called Linux. Finally a book was written, well re-drafted, in 1995 that I would not see until my Summer work term in 2000. TCP/IP by Murphy, Hayes and Enders. I am going to quote from TCP/IP because it is kind of funny, it also makes me feel old because 1995 does not seem so long ago:

Due to the constantly increasing need for improved packet switching and transmission capacities, three NSSs [Nodal Switching System] were added to the backbone and the link speed was upgraded. The migration of the NSFNET [A predecessor to the Internet] backbone from T1 to T3 (45 Mbps) was completed...

Six years is not so long really, applying Moores “Law” with 24 month doubling times, performance would only improve by a factor of 8. But I want you to think back a little harder now. Consider anyone you may have met who is from the Eastern Seaboard of the United States or the St. Laurence Basin of Canada, who was born in July of 1966. That is pretty specific isn't it? Such a person would be 34, almost 35 today. They would have graduated from a four year University degree more than ten years ago most likely. Your co-op supervisor could be such a person.

Well, why would I care so much about July of 66? Well, think back to the World of the mid 60's. Lyndon Baines Johnson was President of the United States. He had been elected president in the biggest landslide victory up to that time. Canada was being run by a minority Liberal Governments under Lester Bowles Pearson. The Beatles had hit the big time in England in 1963 with “Please Please Me” and were a hit in the US when they were broadcast live on the Ed Sullivan show in 1964. Project Gemini was winding down after lofting two men in orbit, keeping them there for extended (more than 2 weeks) periods of time, and achieving orbital rendezvous. There were no computer networks, let alone the Internet's predecessor, Arpanet.

Now think about July of 1966. What is so important about children born in that month? Well, if they were born in July of 66 their parents must have done some frolicking in November of 1965. Did you know a lot of people were having fun in bed one particular night in November of 65? You see, there was a little power outage one evening.

Now understand, when I say ‘little’ I understate things, slightly. Picture if you will, nine hours with zero power, across all of the North Easter United States and St. Laurence Basin of Canada. Starting at around 5 in the evening of a working day, I think a Thursday, cities you have heard of: Boston, Montreal, New York, Toronto were all thrown into the dark.

The cause of the whole disaster was a little relay, you could hold the thing in palm of your hand without stretching your

fingers. It was a hopelessly simple device, a spring with an electro magnet. If the amount of current passing through the relay exceeded a set level the magnet would over power the spring and throw the relay. Scores of relays like the one I just described were put up on the power lines at the Adam Beck power generating station in Niagara Falls Ontario.

If the amount of electrical current on any of the power lines, in the parlance of the engineers: if the load on the line, exceeded a certain threshold the relay would trip. If the relay did trip the load on the line would be cut to zero preventing the line from becoming overloaded.

Back to that November evening in 65. The load on one particular line was beginning to exceed design specifications so the relay did exactly what it was supposed to do, it tripped, throwing the entire load onto the remaining lines. Cascade failures of the sort that ensued are interesting to watch, if nothing important depends on what is failing. With one line down the rest of the lines had to pick up the load, another line started to become overloaded and its relay tripped, then another line and another. Soon the Adam Beck generating station was producing electricity that no one could consume because a bunch of relays did exactly what the engineers who designed the relays wanted them to do - prevent damage to the sensitive electronics.

When Adam Beck went down other power plants tried to pick up the load. Ontario Hydro was soon getting electricity from ‘Con Ed’ in New York. Back in those days utilities were all playing on the same side so they would help each other out.

In only a few minutes all of Southern Ontario was in the dark, a few minutes after that, Southern Quebec was in the dark, as was most of New England and New York State. Manhattan Island, normally a sink to the surrounding area's surplus electricity supply was suddenly an island of light in a sea of darkness. New York Power Authority engineers did what they had to do to prevent Manhattan's power demand, now rapidly rising to meet the demand of mainland, from overloading the available supply. The lights were shut off in Manhattan.

There are stories of doctors in operating rooms, back then most hospitals did not have their own emergency generators, scrounging for flash lights. Then some idiot nurse would walk in with a lit candle. A miracle prevented pregnant mothers from burning up in their oxygen saturated blankets.

At La Guardia Airport on Long Island one 727 was about to land when the power went. Eventually someone on the ground came up with the positively genius idea of lining up all the grounded planes beside the landing strip and using the generators within the planes to power landing lights and radios in the planes.

People were stuck in elevators and subways. Mostly calm they waited, expecting the power to come back on just as it had gone out. Eventually some people started talking - total strangers in the New York Subway system struck up conversations.

Meanwhile millions of people who had already made it home were in the dark on a cold November evening with nothing to do.

There is no such thing as a truly fault tolerant system. I suppose for all of those July of 1966 babies it is a good thing that relay tripped. But what about the people stuck in landing patterns above New York or Toronto? And what about the people in

Continued on next page

Point/CounterPoint: Separatists in Canada

From the newly genetically engineered politician, Lucien Day

“Quebec should separate”

vs

“BC should separate”

Quebec should separate

Some people in English Canada try to demonize Quebec politicians; we are not what you think. We are trying to do what is best for Quebec, and since we can't screw the rest of Canada out of their money, we figure we will go on our own, and screw ourselves. I see the future of Quebec being bright, beautiful, and independent of Canada. We don't need Canada. What does it give us? Snow, cold, snowpant fashion and maple syrup? Wrong, we gave Canada maple syrup, and damn it, we are taking it with us!

We have seen what will happen when we become independent. We will be a great nation, we will be better, happier, stronger, warmer, and have tropical trees growing all over Quebec, since we'll put a big dome over us, to keep out the cold, crank the heat, and make sure all the evil anglophones stay outside of our bubbled Quebec.

So you see, we have a plan, a vision and a future of what will become of Quebec, we will be the best country on the planet, and although we won't be 5 time UN best country winners like Canada, we will be the new champs on the block — The Block Quebecois. And one last thing damn it. When you come to Quebec, you will be the ones with the accent, evil anglophones!

BC should separate

We should separate from Canada for the lack of respect Canada gives BC. We are a major economic driving force in this country, but what are we given in return? Taxes, complaints for cutting down trees, taxes, and the Liberals. Oh, wait, we also get Taxes!

I don't think that the separation of BC from Canada will be the end of Canada. Rather, it will be a new beginning, because we will take Alberta in a year or two, and then Saskatchewan ...well, we'll take Alberta at least, and we'll party it up. Oh, and the Stanley cup, we're gonna take it when we leave. That's right. We're gonna take the cup, and not let anyone play for it, except teams from ABC (Alberta and British Columbia). It will be all ours, and no one else's.

I see us leading the way to be the first province to join the United States, the best country this side of Oklahoma. Plus, we won't have a silly accent!

The mountains are ours. The trees on the mountains are ours. The taxes, smog, and overpopulated areas, that's Canada, and you can have them back.

Lucien Day

The world is going to end

Tick, tock. Tick, tock. That's the sound of time running out. THE WORLD IS ENDING AND WE'RE ALL GOING TO DIE!!! And, when this calamitous occasion occurs, what will you have done for your fellow human beings? If there is some great balance book (this one's for you, accounting students) full of debits and credits, which side will win? Okay, maybe it's not for accountants, since they'd probably argue debits=credits. What I'm trying to say here is that you should help out with Orientation. I mean, I'm not one to say what you have to do to be redeemed for the sadistic, evil life you've lived, but quite frankly, I'm helping with Orientation, and my conscience is letting me sleep like a baby. But time is running out. You are

getting sleepy. You will fill out an application form and submit it to the MathSoc office. You will do this prior to the interviews held on March 5 and 7. You will sign up for an interview on the MathSoc door. You will attend this interview and amaze Nory with your kind and gentle attitudes towards Frosh. If you cannot make any available times either of these days, you will e-mail Nory at orientation@MathSoc.uwaterloo.ca or call her at ext. 6732 to arrange an alternate time before March 7. You will enjoy Frosh week. When I snap my fingers you will quack like a duck. If you have not been PACO trained in the past, you will sign up for training sessions at www.adm.uwaterloo.ca/infos/Orientation/train_form.html. See you soon, Nory

Orientation Princess 2001

Food for thought, continued

hospitals without lights? You can bet that New Yorks normally dreadful traffic must have been insane without traffic lights.

There is a moral to this story, do not for one second persuade yourself that this technology you wrap yourself in is totally dependable. If November of 1965 is not a good enough example, how about Sunday April 14, 1912 on a ship called the RMS Titanic? Or January 28, 1986, on another ship called the Challenger?

I am not saying that we should give up all of our wonderful toys and revert to living back in the caves. I am saying that we should have redundancy and backups. Too often we depend on

one critical system working, be it code that is written or bridges that are built. All too often, we develop a hubris, our machines are so marvelous we need never worry about failure.

I wonder who decided that the Titanic did not need as many lifeboats as the ship's builder, Tomas Andrews had provisioned.

Michael J. Cole

General l'Hopital

A subsidiary of Quantum Loop Enterprises

Theorizing that one could time travel within their own lifetime, Doctor Sham Breakit stepped into the Quantum Loop accelerator... and vanished. He awoke to find himself trapped in the past, facing mere images that were not his own, and driven by unknown source code to arrange history for the better. His only guide on this journey is Hal, an observer at run-time, who appears in the form of a hologram that only Sham can see and hear. And so Dr. Breakit finds himself looping through life after life, striving to put right what once went wrong, and hoping each time that his next loop... will be the loop \$home.

"Sham, we got problems," Hal Calalilli asserted as he entered the imagine chamber.

"No kidding!" replied Sham. After dispensing with Elly by sending her on her rounds, Sham had spent the last hour looking about the l'Hopital. "Hal, everyone here is talking in math riddles or doublespeak!"

"Sounds like the joy of lex."

"Hal..."

"Sham, you've handled worse," Hal said. "Now, back in Stall-Eons Gate, New Mexico we've got real trouble! Your parallel hybrid computer BigE is having a mental breakdown. Sushi and Xina can't fix her, so it's up to... er, Dr. Geeks." Hal caught himself before mentioning Sham's wife Drawna WeeBTree, or Sham's daughter Shammy Pro Filer.

"So I guess you don't know why I'm here," Sham sighed.

Hal tapped at his TI-85 calculator. "No, but we know the woman in the fating room is Dr. Waterson," he offered.

"Doctor! Doctor Waterson!" called out Electra Lysis as she rejoined her associate. "Sir Cul wants to transcendental work and eat pie. There's also trouble with Jacob, Ian and May tricks. Oh, and Zeke wants help tracking down new classical records, but I just told him 'Stop playing Haydn, Zeke'."

Sham winced. "Stop speakin' like that," he pleaded.

"Like what?" Elly inquired. "I didn't mean to go off on a tangent. Though I often strike a chord when not aligned with the story arc. But my maxim is, 'If you're cut, seek aunts!'"

"Sham, I was wrong," Hal sympathized. "No matter what it takes, we'll get you out of here."

However, it was a few days before Hal could return with good news. "You won't believe this, Sham," he revealed at last. "The underlying situation here is a peculiar punctuation problem."

"You positive?" Sham mused. "Because the Hopital logs show even their elementary operations involve calculations that are way off base."

Hal flinched. "You've been here too long, Sham."

"The trouble is I can't project the point of origin for these errors!" Sham looked up. "Uh, Hal, can't you wear proper ties?"

"Sham, what you need to do is make sure Dr. Waterson and Elly Lysis team back up with Max Value and his wife Ana. Elly's presence is necessary to crack this missing punctuation case."

"But what about the stats here? The error vectors on this scale are—"

"Stop it, you're going dotty!" Hal interrupted. "Just get Elly to the Fourier Factory!"

"Wait, that's it," Sham realized. "Decimals and periods are both dots! There's the connection, it even explains the missing

cases of colon cancer. Brilliant, Hal!"

"Oh. Well, it was adjoint effort—" Hal stopped himself. "Anyway, just get that clique of people I mentioned back together so you can loop out of here."

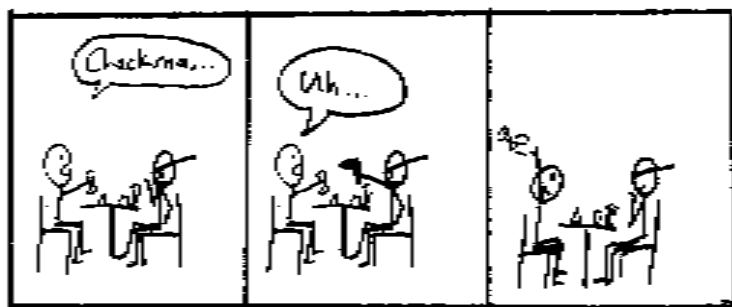
Sham quickly co-ordinated things. "But Hal," he realized even as he left for the Fourier Factory. "I haven't imparted any mathematical information yet, like how there are 43,252,003,274,489,856,000 possible positions for a Rubik's cube. How can I loop?"

Hal shrugged. "General l'Hopital is just less educational."

Indeed, Sham did loop upon his arrival at the factory. However, the story did not end there.

Still going...

Greg "hologrami" Taylor



Automatics Language Translators

While automatic language translation has been the thought of many science fiction writers, it has become a reality. People are now able to translate sentences with minimal (read realtime programming applications!) delay. Although the new technology is not as robust as the babble fish, it is highly accurate, and extremely useful (unlike the microwave).

Consider the situation: You are in a strange country, you don't know anyone, and your German ain't that good (nor is your English). So you do whatever tourists do in a German speaking country, and you drink beer, eat sausage, and wear little leather pants. You have a good time, and wake up, well, somewhere.

So you wake up, and there, towering above you, is a big, Germanic looking guy, with a big beard, and a mean lookin' expression. If it weren't for the technology, you wouldn't be able to say "Ich hab dein madchen nicht gemacht." Well, it really wouldn't help, but at least you tried.

Other applications of the technology include watching movies, without subtitles, or converting foreign video games into English ones. Just think, All Your Base Are Belong To Us. How could this have come about without these wonderful technologies? Long live technologies, long live all your base.

Bass Bov Bob



Screamer's Thoughts, Randomized and Optimized

It's all in the Rage

"Must control fist of death."

Alice from *Dilbert*

These days aggressive behaviour on the road, also known as road rage, is a very hot topic. Equally disturbing is that air rage also appears on the rise. Studies and reports on these matters are released on a regular basis. However, not many of those studies have suggestions for how to stop to rise of outbursts on the road or in the air.

Interestingly enough, some studies claim that the most likely time road rage occurs is friday afternoons. This may sound odd, considering that friday afternoon is supposed to be the time when a person can actually unwind and throw his anxieties away for the weekend. However, if you consider what a worker (of any job) goes through during the work week, it wouldn't be so surprising.

Many people work in big cities and may not live there. That means many have to commute, often for hours, to get to work. Many have to get up early to get to work each and every day so that they won't be late. They often worry about whether they will make it to work on time. This ordeal can be a stressful experience. When you have a few thousand people crammed in a traffic jam, sparks can lite fires easily.

Even when one gets to work on time, the stress one gets at work can be overwhelming. Meeting deadlines, dealing with annoying co-workers (not applicable to everyone), and constant fear of failure can all be contributing factors to a person's stress level. There are very few ways people can relieve their stress in the workplace and so a person's stress level rises through the roof. Near the end of the week, many people's stress is like a volcano about to explode. On friday afternoon, they find that they can't take the pressure anymore. The result is often a violent outburst where a person is unable to control oneself. If this happens during the drive home, the outcome can be dangerous. One can become ruthless on one's driving and the result can be deadly. However, road rage can occur anytime of the week, so when you are behind the wheel, don't let the guard down even if it is sunday morning.

Even when one can work at home, one isn't free from stress. Trying to make ends meet, managing the time, dealing with children are not easy tasks either. If the stress one accumulates at home is not properly channelled, the result can also be violent — domestic abuse, family fights, war of words, etc.

We are all busy people, but we should find some time to relax (but not too long). One can take a few big breaths, take a brief walk (for example, to the water cooler and back), or yell all you want (it works for me, but don't do it in public, as others may think you are nuts).

Occurrence of air rage is on the rise in recent years. One can threaten or, in some extreme cases, attack other passengers or the pilot. Flying can be stressful even before you board the plane.

For some odd reason, many choose to get to the airport at the latest possible time (that also applies to me). On the way there, many check and double-check to see whether they have brought all the necessary items. At the airport, one often has to wait in long line-ups to check-in for the flight. And then there is the X-ray scanner (my wallet has failed me many times).

Even if you get to the board the plane on time, the flight may be delayed for various reasons. Getting on a plane is a stressful experience and some people can become disgruntled from it. If the service on board is terrible, it just adds oil to the fire. Some may go beserek and threaten others, usually total strangers, for no reason. Of course, there's the long wait for the luggage after the flight, but that is not an overwhelming experience compared to being threatened at 35000 feet.

We could ban alcohol on board and at the airport, but that would lead to another group of disgruntled flyers. Don't forget the airlines are trying to take us to our destinations safely. So as long as the delay isn't ridiculously long, I wouldn't mind.

We are living at the speed of light and we often complain whenever something is not up to speed. I think we should lighten up. I'm not saying that we should go back to the time when everything crawls at snail's pace. I just think that we should stop and smell the flowers once in a while (but not too often, either).

One Last Yell

The recent FEDS elections had a measly 8 percent turnout. However, this isn't too surprising. Many of us have little idea about what the FEDS do. If the FEDS can have more exposure around the campus, may be people will start to care about our student government. This is the first year where all votes are made electronically. Many may have turned away from voting because it was time-consuming and confusing (it took me 20 minutes to complete the ballot). E-voting is a good idea, but they should make sure that students understand to system before implementing it full time.

[Last issue a columnist made a response to my opinion on the tuition fees on both sides of the border. The tuition here at UW is lower if you are in REGULAR. For instance, this year I paid \$4600 in tuition, while students of California, Washington, and Idaho pay \$3000-\$4000 U.S. to attend the State universities of their own state (Cal State, WSU, and ISU respectively), or \$4500-\$6000 Canadian. I apologize for making such a glaring ommission. Mr. Cole's point is by no means invalid, I'm just trying to compare tuition fees of the two countries on a more even playing field. (You may wonder why I chose colleges from the western states, it is because I AM from the west, namely, Vancouver, B.C. If you wonder why I came here in the first place, the short answer is that the math program here interests me the most.)]

Jason "the Screamer" Lau



profQUOTES

[Shouting From Hallway] "Do you mind closing the door? It must be feeding time."

Jackson, MATH 235

"There are the people who change the order of the questions in the book, and call it a new edition, and then you must pay another \$120. In my opinion, it is robbery and these people should be punished with a life-time of brussel sprouts and Maggie Thatcher."

Jackson, MATH 235

"Hip Hip Array!"

Barry, CS 445

"I will never claim to be a linear algebra expert. If I ever do, remind me of this statement."

Springer, STAT 231

(discussing cheating) "And you know that I know that you're only cheating yourselves, blah, blah, blah, blah."

Cowan, CS 498 R.

"If there was no such thing as the last minute, nothing would ever get done"

Cowan, CS 498 R.

"Maybe in a future life, as a result of bad karma, I will have to teach CS 370."

Cowan, CS 498 R.

"I'm practising to become an absent-minded professor."

Beatty, CS 436

"It's going to be a long lecture."

Beatty, CS 436

(to drowsy student) "Are you going to make it?"

Beatty, CS 436

"This isn't CS class, we actually have to think in here."

Crippin, MATH 136

"I occupy a large amount of space."

Crippin, MATH 136

"You have to warn me when you're talking."

Crippin, MATH 136

"I hate having people take my word for everything — even if I am always right."

Green, MATH 137

(says something that isn't funny, but pretends it is) "I'm trying to get into *mathNEWS* next week."

Chateauneuf, MATH 136

"Thank-you, you've been a great audience. See you next week!" (waves to students, waits for applause)

Chateauneuf, MATH 136

"Ha! You're in trouble now, I know your name."

Chateauneuf, MATH 136

"I proved that this works, so now it's a theorem."

Chateauneuf, MATH 136

"Maybe if I don't state the theorem, you won't be so afraid."

Chateauneuf, MATH 136

"Does $2 = 6-8$...hmmm, doesn't work ...well, you all get the basic idea. See you next week."

Chateauneuf, MATH 136

"X-nay on the subtree-nay."

DiMarco, CS 134

Prof: "What is a column space?"

Student: "It's row space, but it's columns."

Prof: "Yea, you should be teaching this course."

Crippin, MATH 136

"I don't remember how to do this. It's been 4 days since I've solved a homogeneous system of equations."

Crippin, MATH 136

"I was seeing that is was 19 minutes after 9 a.m. and this equation wasn't working out, so I thought I'd stall for as long as I could."

Crippin, MATH 136

"Everyone here seems so tired today. I think you (pointing at student) need a hug!"

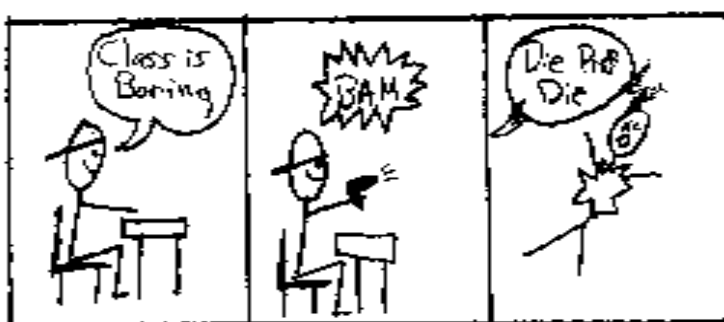
Lau, Econ 101

"The next number of the set is 1 416 317 954. This is NOT a number of any chatroom."

Hooper, PMath 340

"Since it's not a comfortable place to write the midterm, I won't be yelling 'Time's up. Put down your pen or you'll be pulled out and executed'."

Safeyani, MSCI 311



“Anybody’s ID not starts with 9?...For those that spent 10 years in first year it’s fine...”

Munro, CS240

(At the end of a lecture about symmetries of various objects, a tennis ball and a baseball have been circulated around for some time...) “Where are my balls? Who’s got my balls?”

Gilbert, PMath 336

“I know it’s hard to look stupid in front of your peers, but don’t worry, I do it in front of hundreds of people every day.”

Kierstead, CS 134

“I try to set exams so you will get no benefit from studying.”

Cowan, CS498r

“We use our girls.”

Engsoc Prez

“I’m not in the closet anymore ... I’m a techie.”

Larry Smith, ECON 102

“Sorry, I’m just being a little stupid here. Maybe it will pass... maybe it won’t.”

Crippin, Math 136

“if you go to a company and tell them you want to do research for them, they’re very skeptical — ‘professors never do anything useful’ — but if you say ‘internationalization,’ they throw money at you.”

Cowan, CS 498r

student: “What does the ‘j’ mean?” [it should be an ‘i’] prof: “It means...a wandering of my mind.”

Simpson, CS 370

“...and you may not work with anyone you worked with on the previous assignment....You may post messages to the course newsgroup if you are in need of a ‘dating service’.”

Godfrey, CS246

“Women with spinal cord injuries, now cover your ears if you’re sensitive ..., can still be f***** “

Purdon, PSYCH 236

Who wants to be a millionaire

There is a big bad ass imitation of who wants to be a millionaire, and although you won’t even win enough cash to pay tuition, you may be able to win a DVD player, that’s right, a DVD Player. Just incase you missed it, a DVD player. Come sign up, forms available outside the mathSoc office, and can be handed in to any office worker.

Campus Day Volunteers Needed

The math faculty is still looking for volunteers for Campus Day (the day when all the prefrosh come to visit). If you are interested, there are sign up sheet on the mathSoc office door.

mastHEAD

Ottawa is feakin’ cold

So I headed to Ottawa and for the weekend, and it was friggin’ cold. Not chilly, but a good 10 degrees colder, and not just for a while, but the whole time I was up there (for reading Daze...zzz).

Well, I now know, that I don’t ever want to live in Ottawa in the winter, it is official. I plan on the nice tropical beaches, but will settle for Detroit. As long as it is warmer than Ottawa.

So, naturally, most activities I did on the weekend where performed indoors. Like poker. 9 hours straight till 6:00 am. Don’t try it at home. This is only for people in training. My friend Bruce has a plan to go to the Canadian Nationals, and well, I’m coming along. I figure what else should a student spend their money on than a poker tournament?

Well, if I win, I guess I’ll be happy, if I lose, oh well, at least all your base are belong to me...mu ah ha ha!

Well, I’m sure you’ve all seen the “All your base are belong to us” stuff. There’s an important question that is left to us. Is this true, yes, no? What? Anyway, our mastHEAD question was “To who do all your base belong to” and the answers, in some magical particular order are...Greg “The exponent (who’s on first)” Taylor, Kevin “Certainly no sicko is ‘cats!’” Wanminkee, Raymond “Me no speak Cantonese” Lai, Jason “The ceiling of my apartment as everything attacks from above” Lau, Ken “Pete, cuz he gives me good lovin” Chung, Rich “This do belongs to I” Bilson, Liam “Whom! It’s whom goddammit!” Andre, Dirty “Your Momma, It fell into her gravity well, well past the event horizon” Boy, Snuggles “My mommy, I want my mommy, where’s my mommy?”

Thanks go to graphic services, the drink fairies at Farah’s, Gino’s for the dipping sauce, and that cute girl that walked in on production night, took a look at us, and ran away screaming.

Pete “My Civic, It’s got all the bass, via bose” Lizak

Bradley T Smith



It’s Miller, er, uh,
Filler time baby!

Frosh can be so injurable

Well, Ray, the Cornered Frosh, Lai was cornered, not once, twice or thrice, but more times than you can shake a stick at. First off there was Paul, the mathSoc prez, who attacked Ray with a pair of Barduzers, er, lock cutters, whatever.



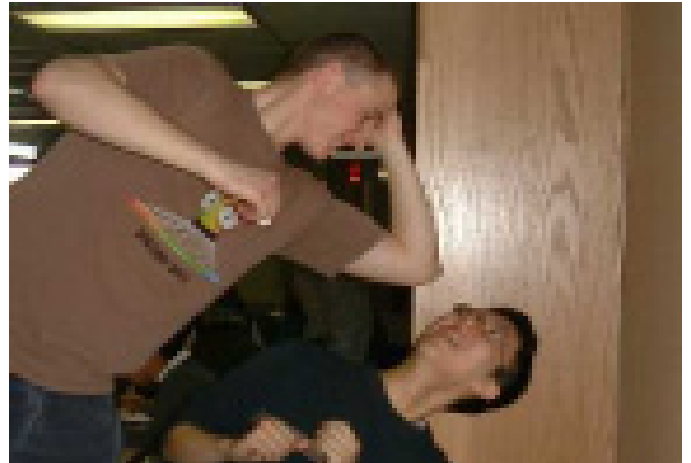
Then there was snuggles, who did the old snuggaroo maneuver on the unexperienced Raymond. The ID bracelets get them everytime.



Hockey is a violent sport, probably why I don't appreciate it as much as Anton, but damn, it was good practice. Seeing as he now knows how to swing the stick like a crazed wacko, and take out Ray in the process. I'm so glad I'm not a frosh anymore (or play hockey).



Well, then there's that Lizak kid, I hear he isn't a big wrestling fan, but his buddies make him watch it when he invades their homes. Anyway, here he's checkin' in on Ray with an elbow drop. Mmmm, good to the last drop.



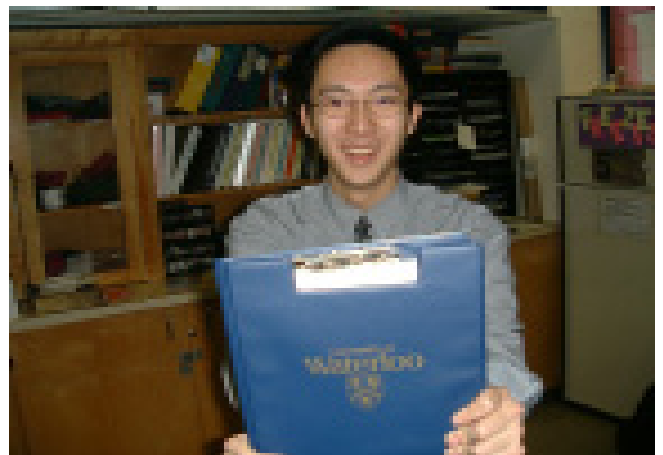
Well, I must admit it is sometimes nice when a girl kicks your ass, but in this case, I must feel sorry for poor old Ray, I mean, Nori isn't just any old girl, she's the orientation princess, and has been training with Xena (the warrior princess). As a result, she took out two of Ray's teeth. Well, at least he looks tough now.

After seeing how everyone was whooping Ray's read, I decided



that I had to partake in the fun, and came in for the Kill, and to think ray thought I was on his side. He barely saw it coming...

Bad Boy Bob



Life in the Geekhouse

Yes, I did say Geekhouse. “What the epsilon is a geekhouse?” you ask. Well, it’s not that bloody hard to figure out. I mean, you have 2 words, ‘geek’ and ‘house’. Even those Sesame Street muppets could have figured that one out! And don’t get started on that rigamarole about that whole chicken head biting crap.

Now, as I was saying, the Geekhouse is the name my roommates and I use to refer to the place we live in. Realistically speaking, only 4 of the 5 people in it are geeks, if you consider spending countless hours in front of a computer as a necessary condition for wearing the geek moniker. Still, the one guy who is not a Mathie (hell, he’s not even in UW) claims to be a geek wannabe and has managed to put up with us talking about geek stuff for months now without having to start popping pills of any sort so he can’t be **that** bad.

Anyway, I used to be one of those little froshies who lived inside the famous UW ‘bubble’ and considered going to University Plaza as quite the trip. However, I ended up having a work term in Waterloo and figured this might be a good opportunity to get to know the city better [Yes, we’ve all made similar mistakes, I once explored Brockville — Pete Love]. So, I moved into the geekhouse (Well, ok, I moved all my computers in first and then I moved in later but that’s all details). It’s been quite the improvement — this term I’ve gone as far as Uptown [Mother of Mercy, I hope your parents don’t find out, they might ground you — Pete Love]!

As things turned out, I also work about 2 minutes from the geekhouse. What with my delusions of invulnerability and all, I decided to bike to work in the snow, without a helmet (naturally). Amazingly enough, I haven’t run over any cars yet. But I’m working on it [I’ll try and run you down next time — Pete Love]. I also happen to be taking a 9:30 Calc2 course. Normally that would be a really dumb thing to do but I took it before (twice) and wasn’t able to get that magic number at crunch time so they wouldn’t let me take CS246 unless I got the damn thing done with this work term. It’s not bad though. Ok, who am I kidding? It is bad.

But not as bad as the first couple times. I guess Calculus

must be one of those acquired tastes or something [Like Poon? — Pete Love].

Now, those geeks I live with, they’re quite an eclectic bunch (they seem to think I’m eclectic but that’s just their twisted view of the universe). One of them happens to be me former roommate and possibly one of the nicest people in the universe. But he insists on coming home just after we’ve all finished dinner. I mean, he does leave rather late in the morning but that’s no excuse. The guy spends a good half hour watching a TV game show (on the Comedy Network of all places) before he leaves for work in the morning. And even if he does get in to work late, that’s really no excuse for not leaving on time. He must have skipped those co-op 101 sessions where they give you the real deal on co-op. You know how to get free food? Look like your doing work while you surf the web and make ICQ work through a firewall.

Another one is in denial about his own geekhood. I mean, he barely spends enough time on his computer to qualify and sleeps instead of staying up all night coding! He mostly associates with artsy types and I’m pretty sure he values his CD collection more than his computer (the heathen). Then again, he does hack code for a living and even uses Linux every now and then so he’s not completely despicable.

And then there’s the last geek, one of those classical music nuts who plays his trombone in the frigg’in’ kitchen. He’s a good cook though — then again, after eating cafe food for a year, you lose all perspective. Last week he bought an orange sapling. I wonder if he realizes that it’ll be over a decade before that thing manages to come up with something edible. By that time he’ll probably have passed RealTime and gotten a job at some new post-dotcom startup... or maybe he’ll just decide to make a career out of his trombone playing skills and go for a coop term playing the subways in TO (it’s amazing how many pies the coop dept. has its fingers in ...).

Finally, some more about the non-geek living with us. He seems to have lived the most fantastic life, although sometimes I’m not really sure if he’s telling the truth. Like when he told me how he got out of his last year of high school by serving in the army. Or when he told me he got his sister a hash brick for her birthday. And whenever he goes home for the weekend, he always writes little notes for us with great advice (like “don’t step on your dinks. step on each other’s”). I think he needs a dog or something cuz he seems to get really happy when he comes home from work and I make a big deal out of his arrival.

Ooops, time for my fencing lesson. I’ll have to yammer on about the geekhouse in the next issue. In the meantime, email adsouza@artsmail if you have anything in particular you want to know about the geekhouse.

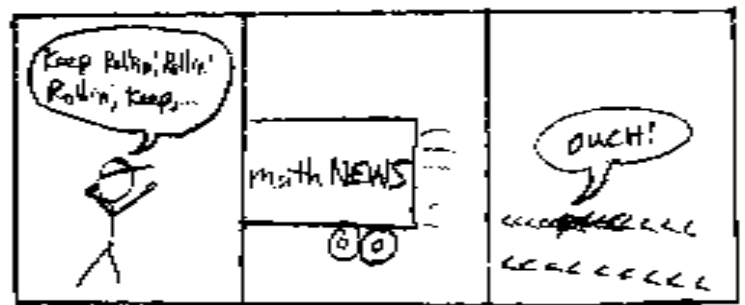
PMC Anagrams

What can I make from Pure Math Club?

Here are a list of anagrams you can make from Pure Math Club.

Cruel bum path; Hate rump club; Harm pube cult; Club the arm up; Retch pabulum; Halt bump cure; A hub plectrum; Bum path ulcer; Blurt much ape; Much burp late

MonkeyMan



Tony (the beta geek)

The HorrorScope

23 skidoos!!!

In a world of mystery, intrigue and old undergrad calendar, rises more foreboding predictions, piercing the mists of time... yeah, right.

MATH

Your calculator has been returning incorrect values. Demon possession may be a possibility. Go to Religious Studies 101 and ask for an exorcism. If that doesn't work, it's time to go back to the basics. Go to Business Depot and ask for paper and pencil. That's right. You can actually do math without an electronic device.

You will run into an ENG. Knock them out and grab their calculator. They don't really need one anyway.

Your lucky number is incorrect.

CS

Those endless midterms are starting to wear you down. But don't worry the end is in sight. Celebrate by making that level 30 multi-class Fighter/Java Programmer/Lover you always wanted and go Wu-Tang styles on those troll-like TAs. If necessary, cast a time-stop spell and spend a few hours at Molly Bloom's. Beer. Sweet, sweet nectar of the gods.

Roll a 1 on a charisma check and get yourself some of that ARTS booty.

Your lucky number is 3 lovely ARTSies, 2 endless pitchers and a PARTY in the Rockies.

STAT

You lucky dog you. Let me put this into terms you understand. The true value is female. Your bias is 36-24-36. And the random variable is ATTITUDE. When you run into this model, keep your responses discrete. That means avoid your normal like-a-break-to-the-head pick-up line. *nudge* *nudge* *wink* *wink*

ENG will be jealous when you show them what you picked up.

Your lucky number is fine like a fox.

AM

You will soon realize that all the math you've been learning is useless. The only "theory" you need to know is BEDMAS. So toss away those course notes, burn those textbooks, don that potato sack, invade the iMac lab, and shake your fist at those PMATH who don't understand you.

PMATH will be scared of your presence. Bark at them. Bark I say.

Your lucky number is $(5+7)*0 - 4^3/2$.

MATHBUS

You may find your assets are grabbed from behind. Be firm. Things will happen that may come as a slap in the cheek. After all, it's not often someone from Laurier lavishes that much attention on you. Keep interactions with CS short. They will scare away anyone from Laurier.

Your lucky number is (519)-884-1970.

C&O

Your biorhythms are on, baby! Stop trying to figure out if it is feasible. This is the optimal time to try that thing you've been putting off. Make sure you are in the proper region or you will be bound for trouble.

Your pretty graphs will soon catch the eye of that ARTS. Ooh la la.

Your lucky number is 350.

PMATH

You are stuck in a complex situation. What should PMC stand for? The heavens lean towards Pesky Marxist Cockroaches. But hey, when have the stars ever been right.

Avoid AM. Their ramblings about brackets and exponents will only frustrate you.

Your lucky number is i.

ACTSCI

It's Pat! He just died after taking out life insurance! Oh goody, time to collect. You sure faked them out on that medical exam. (I don't get it.)

MATHBUS may try to scam some of dat cash. In that case, audit that mofo all the way back to bankruptcy.

Your lucky number is at least \$50,000.

OR

A dark force has entered the mystical weave that is Math. I sense an evil presence patrolling the computer labs. If you are caught eating in the labs, starts chanting those cheers from your frosh week. If that doesn't drive "it" away, pull out some of those Kung Fu moves from Crouching Tiger, Hidden Dragon.

Your lucky number has been deactivated for 24 hours.

ACC

The market is down and so are you . . . loser. Your dot com has become dot crap. But don't sell yourself short. Instead, sell yourself to a Nike sweatshop. You should have any problem keeping track of that quarter.

Give up on Arts. All you can afford is a gumball. Don't chew it all in one place.

Your lucky number is the days until FTAA.

SCI

Due to recent cutbacks, funding for your program has fallen. The stars have indicated that converting your labs into Bingo halls will bring in that desperately needed income. Your centrifuges will make excellent ball mixers.

CS will belittle you. It's depressing but true.

Your lucky number is G58 . . . BINGO!

ARTS

Your squeegee efforts have not gone unnoticed. UW administration will put you on the Davis Center team. Your career relocation will earn you . . . a larger squeegee. You're moving up in the world.

Your lucky number is 25 cents because your pay hasn't changed.

ENG

All your base are belong to us. Your future says "very doubtful". Hmmmm. Let me try again. My sources say no. Don't count on it. It is decidedly so. Outlook not so good. Ah screw it. Your future has beer in it.

ARTS? No. AHS? Very doubtful. CS? Ask again later.

Your lucky number is a magic 8 ball.

AHS

Things are going to be bright and shiny. So skip. Taste life. Twizzle, plie, leap. Hug thy neighbor. Kiss thy mathie. More importantly, give me a kiss. Then wait as that sugar high comes crashing down. Sorry. Try again.

You will shower MATH with kisses . . . please?

Your lucky number is 4 hours of sugar recovery time.

MonkeyMan & Co.

Tech Specs: A Critical Analysis of the Tech Industry

GeForce3, GeForce2 GTS, GeForce2 GTS Ultra, GeForce2MX ... Confused yet?

“With GeForce3, developers can now implement an infinite amount of special effects, with the nFiniteFX engine.”

nVidia Website

nVidia (NSDQ: nvda) announced on Friday that they will be releasing the GeForce3 Graphics Processing Unit (GPU) for the Mac hardware platform in the near future. With the new nFiniteFX graphics engine, game programmers can now reach beyond the pre-described limits of gaming technology and create even more realistic games.

The fact that nVidia is releasing yet again ANOTHER GPU is not the issue here. Advancement of graphics technology is an exponential leap for developers and programmers alike. Who doesn't want to see Lara Croft in more realistic environments (No, I'm not talking about the physical modelling, I'm talking about the external environment. I wouldn't mind making HER more realistic though [Try an update, using Java code of course — Pete Love]); however, the troubling fact can be found within the bowels of nVidia's website: The timeframe between each release of a 'revolutionary' product is only approximately 6 months. The fact that they are churning out these new products 2/3 of the normal human gestation period is extremely disturbing. I don't want to sound like an episode of “The X-Files”, but could nVidia be giving birth to a diabolical plan, unknown to the rest of the technology society?

nVidia classifies all its products either as “revolutionary” or “upgrade”. When a new product is developed and shipped, it is classified as a “revolutionary” product. However, when an existing product is modified, sped up, or tweaked for extra performance, then the product is known as an “upgrade” product. In the past (WAY past, think 4–5 years past), nVidia used to roll out revolutionary products every 1.5 years, and then upgrade products every 7 months in between. Now, the trend is to pump out upgraded products after 3 months the initial product is marketed. In fact, when a revolutionary product is being readied to be shipped, the upgrade product is already on the programming block. Sometimes, concurrent upgrades are developed at the same time, as is the case with GeForce 2 GTS and GeForce2MX.

If nVidia's rollout plan belonged to a software developer (read: MICROSOFT), it would be different. Software as bugged as Windows needs patching everyday if it was up to me. The costs of small upgrades would be non-existent to minimal. Even the large “Windows 98” class of upgrades costs miniscule in comparison to hardware upgrades. However, the costs of upgrading a hardware product is exponentially greater, both on time and on the wallet.

Forget the costs for now. Do we really need 5 different versions of the same product? Can the normal consumer tell the difference between 4 broadband graphic pipelines instead of 6? Can a gamer actually tell the difference between 90 frames per second and 95 frames per second? Seriously, the difference of performance between the GeForce2 line of products is extremely narrow. A normal human being (Counter-Strike players need not apply), would not be able to tell the difference between the performance of a GeForce2GTS and a GeForce2 Ultra. If one cannot tell the difference between 5 frames per second, what's the use of upgrading to the new product?

Smart consumers would say: “Nay, there's no point in buying the new product,” and one would agree with that philosophy. However, an increasing amount of gamers are buying new GPUs as soon as they are released. nVidia is basically cashing in on the impulsiveness of gamers and newbie consumers alike. The fact nVidia is exploiting this market situation parallels a legalized version of grand theft auto, but in this case, it's grand theft GPU.

nVidia knows that consumers don't need that extra 5 frames per second of performance boost. nVidia knows that consumers don't care if you add two pipelines to the hardware architecture. nVidia certainly knows that we don't need 4 different kinds of GeForceMX (Yes, that's right. They are selling 4 different kinds of GeForceMX's in Hong Kong). Yet, nVidia is pumping out these 'enhanced' versions of these cards like there was no tomorrow.

Given, revolutionary products should be introduced as they are refined and readied to be rolled out, but continuous injection of upgrade hardware products are unnecessary. They clutter the market with re-badged existing cards, taking up valuable store shelf space where competitors may vie for business. To the untrained eye, nVidia is just following the technological evolutionary ladder, but what nVidia is doing is saturating the market with more of their own products in an effort to drown the competition. Whether that is true or not, the overwhelming existence of nVidia products on the marketplace today is having an impact, not only to consumer choice and persuasion, but to nVidia's competition as well.

Before the year ended, nVidia completed a takeover deal to acquire core assets of rival 3dFX. With a stroke of a pen on the takeover contract, nVidia has driven the final nail to the coffin to its first and most important competitor. With the loss of 3dFX products and support in the marketplace, nVidia's competitors has lost its focus and have recently become disillusioned about their chances of competing with the GPU Goliath. Even old names like Matrox and ATI has taken a back seat and introduced their products carefully and quietly to avoid nVidia from punishing them with another influx of nVidia upgrade products. ATI's Radeon campaign was supposed to be huge, complete with a state-by-state tour in the U.S. However, the marketing camp at ATI has toned down their efforts in an attempt not to anger the sleep giant, nVidia. The fact that nVidia has no vocal opposition in their steamrolling pace of marketing new products is extremely disturbing.

To the normal consumer, the GeForce2MX and the GeForce2MXvB is the exact same product, but any hardware expert



Continued on next page

On The Road

Tales from the backseat of a rental in England

All was quiet that day. The sun was low, not having had the chance to get high yet. I set out in my usual way to the train station, but wait ... today I would travel east instead of west towards the office. Yes, there was something special about today: it was our day out. I met the others two stops over at their hotel. To protect their identities, I'll call them Nick Jay and Jay Nick. Anyone else who might have bearing on this story, will be known as Glen (or Gwen, depending on gender) with the obvious exception of me, who will be called I.

With everyone's true names now disguised, we boarded the shuttle bus to Heathrow airport. The trip was short and tedious, as we manoeuvred through the massive complex, which includes a Royal roundabout — I'll explain that one to you when you're older. Finally, we reached our destination: The Avis compound. So heavily guarded and fenced in because it was a lot full of cars with keys in them.

Car rental is a curious undertaking in England, and certainly not something I'm particularly interested in pursuing, which is why I was more than happy to have Jay along. He's the gutsy one of the group, and he gets air miles with his credit card, so he loves renting vehicles. Our Mitsubishi Carisma went under his name, and we piled into the four-door. To avoid getting lost, a GPS was put on the dashboard and it was plugged into a laptop with a mapping program. There would certainly be no problems with getting lost on this trip.

Within two seconds of pulling out of the parking spot, I found myself yelling, "Wrong side!" from the back of the car. Jay laughed and veered sharply to the left to correct for his

Tech Specs: Continued from Previous Page

would know that the GeForce2MXvB uses a different type of invariant graphics pipeline than the GeForceMX that increases framerates by 3–5 frames. However, how many of us needs to purchase the GeForce2MXvB for that extra 3–5 frames? Is nVidia really developing these products for the good of consumers, or to saturate the already over-crowded GPU market? Are these upgrade products really necessary or are they just existing products with attached mobility? All in all, one must ask the question: What exactly are they think in nVidia's marketing camp? Are they trying to make insane amounts of money or are they just tech-hungry? A company's direction is driven by profits. When profits erode, the company dies (just like 3dFX). Profits dictate direction, and to maintain profits, a company has to be competitive or exist as a monopoly. When a company's competitors are too afraid to stand up and rise above the call of duty, does that monopoly exist?

Is nVidia saturating the market to maintain a virtual monopoly, or are they trying to advance graphics technology? No one really knows. What's for sure though: no one is benefitting from the huge influx of nVidia upgrade products except nVidia itself, and if that's not profit and brand exploitation, I don't know what is.

Raymond CT Lai
mathNEWS Technology Editor

dangerous error. This action gave Nick a good fright as he was hurtled towards the row of cars to our left and then lifted into the air as we rode up on the curb. Jay laughed again, "Ha ha ha! Beginner's luck!"

Good gravy, what have I done?

Half an hour later we were barrelling along the M4, and we found an open spot with only a few other cars. Among them was a racer. This guy loved his Citroen, and was willing to play leapfrog with us for 10 minutes. I grew weary of this one car over and over so encouraged Jay a bit: "Enough of this teasing, pass his skinny little tires." (or regular-sized tyres, as we say here) Jay pushed down on the gas as far as he could and we never saw the double chevron of his front grill again.

Suddenly, after a quick corner, there was a car in our path. "Oh my god! That guy's stopped!" Jay ripped us into the passing lane and we flew by the other vehicle.

"Wait, no," Nick observed, "He's only going the speed limit." Sure enough, cars doing 50 miles an hour do look stopped when you're coming at them at about 100. We took this as warning to keep our velocity within 30 miles of the recommended.

About an hour later, the sky had darkened, as if England had been doomed to suffer at the hands of some greater being. The sky began to fall upon us, in hail form. It was thick, a little larger than a marble to start, and rapidly approaching golf-ball size. Fearing for his 100-pound deposit, Nick asked that we pull out of the way for some shelter. Jay veered to the side under a bridge and we watched the storm with some trolls.

But it didn't let up. Hail became more hail, and then more hail became rain, which later became more rain. Soon the road began to flood, and we vowed never to pull over in a valley. Climbing back into the car, we pulled out into the downpour and continued along the M4.

Relief began to ooze out of me, not unlike the sweat, once I saw the road sign for Bath, my final destination. Sadly, the worst part of the journey was still ahead. Roundabouts were something with which Jay was now accustomed, roundabouts with intersections were a different matter. The only way to describe our terror is to think of a circle with perpendicular diameters extending outward. There are about a dozen places where you can be stranded by red lights in front of on-coming traffic, we found merely a third of them while making our way through. With the darkness that had spread, all we saw were headlights come straight at our side and all we heard were mighty angry horns.

483 seconds later we were free of the hellish "circle-of-death" and en route to my aunt and uncle's place (Gwen and Glen). I'll spare you the tale of the twisting road and the absurd parking along either side, and let you know that I got to my family's place safely and told Nick and Jay not to worry about picking me up, I'd take the express train. I think they hit a tree or something after leaving ... maybe they drove into a river. Anyway, I haven't seen Jay in a while and Nick isn't talking about the rest of their trip. Oh well, no biggie.

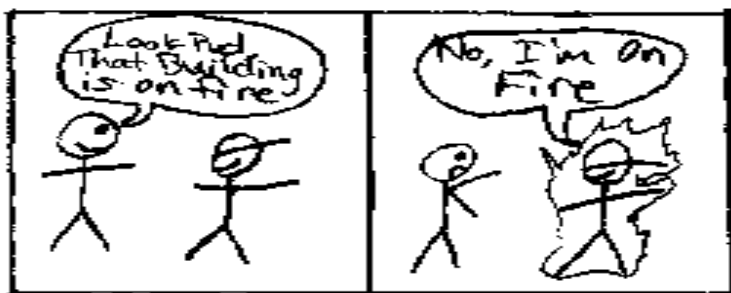
THE END

Bradley T Smith
Editor-In-England

Campus Round-up

Prof Receives License to Kill Award

Professor Marcus Vannenvolk, a popular C&O professor at the University of Waterloo, received a prestigious “License to Kill” award from the International Organization of Scientific Achievers yesterday in a small ceremony in Toronto. IOSA president Hans Polven, a chemistry professor at the University of Munich in Germany, said that Professor Vannenvolk deserves this award for “many years of scientific and mathematical achievement in the fields of graph theory and cryptography.” The “License to Kill” award is given to five distinguished members of the IOSA every year, and allows the recipient to “assault, bludgeon, steal, kidnap, terrorize, and murder” anyone that they want, without threat of repercussion. Past recipients of the prestigious award include Professor Platonov, also of the University of Waterloo Mathematics Faculty.



Student Discovers Condom Inside Condom Wrapper

Geography student Jon Thumer received an unpleasant surprise Wednesday when he opened a condom wrapper only to find a condom inside. The condom wrapper was purchased earlier that day at the University Pharmacy, located in the Student Life Centre. “I was disgusted,” stated Thumer, shaking his head in astonished nausea, “I mean, what kind of sick joke is that?” Thumer went on to state that the condom was “unsoiled”, but “still, pretty disgusting when I accidentally touched it.” The University Pharmacy had no official statement.

University Administration Has Cake and Eats It, Too

A retirement party for janitorial staff member Martha Seeling got out of control last Friday when the administrative and janitorial staff presented her with a cake which was later ingested. Initial reports suggest the cake was chocolate, but had vanilla icing. “This is the craziest thing I’ve seen in twenty years here at Waterloo,” said Seeling, licking a plastic fork. “First the card, with all these people signing it for me, and now this. I should retire every day!” “Normally, this sort of thing just isn’t allowed,” said UW President David Johnston of the cake-eating orgy that occurred shortly after the candles were blown out by Seeling. “But after all, we’re not students, why shouldn’t we get the best of both worlds?” Seeling’s plans for eternal retirement parties were nixed by UW’s Human Resources staff manager Debra Floss.

“Frosh Cornered” Article Expands to Fill Universe

Look, empty space, just like the Imprint...

Look, more empty space, just like the darkmatter...

In an event that physicists are deeming “just plain old impossible”, a mathNEWS article expanded on Thursday to fill all of the available space in the known universe. The article was written by veteran mathNEWS columnist and Cornered Frosh, Raymond Lai. “I just kept typing as it came to me,” responded Lai as he fought against a thick, battering pile of adjectives that threatened to crush him. “It sort of got out of hand and got a life of its own.” Efforts to edit the article were defeated by the lack of cohesion inherent in the article itself. “No one could edit that monstrosity, the only thing I could do was cut it into chunks and place it randomly amongst other articles,” stated mathNEWS editor Pete Lizak. Physicists at MIT’s Deep Space Laboratory are attempting to harness the intense gravitational power of a black hole to compress the article into a readable size. “No one should have to read something that large,” said Dr. Mbenge Fzazo, “and chances are, no one will.”

WalkSafe Rejects Application By “Creepy Wierdo”

WalkSafe Coordinator Mandy Lamarche rejected an application by a “real creepy looking wierdo” last week, stating creepiness and wierdness as her reasons for denying the individual gainful employment amongst the hallowed legions of WalkSafe. “Well, for one thing, he attached a potato to his application form,” Lamarche noted, in defense of her decision. “That in itself isn’t too wierd, but this potato had been hollowed out and filled with urine and then painted in white latex paint.” Prominent creepologist and psychoanalyst Dr. Morgan Utrellingford noted that not every creepy person uses white paint, only “really wierd creeps use white latex paint. It’s the wierdest of creepy paints.” Dr. Utrellingford added: “The phrase ‘ten-foot pole’ comes to mind.” The wierdo in question did not have a chance to comment on the decision.

WPIRG Disapproves Of EdComm Image

Over recent studies on campus violence, WPIRG approached the FEDS office concerning the EdComm image. Uli Nahmina, lead activist in WPIRG, expressed WPIRG’s concerns. “I just don’t think they dress appropriately. Frankly... they scare me. They should wear something a little more friendly like sparkles on their faces or bow-ties.” When asked to comment, EdComm simply put on their shades and began beating our mathNEWS reporter. This was followed by a severe ear flicking and a few nasty bouts of Wet Willies. FEDS representative, Joel Berlinger, said that they were not convinced. Further studies are being made.

by Ruttigar Gunnarson and Monkeyman



An Invisible Hand at Work

MOTA, also known as Mathie Organization of Technological Aid is an obscure organization that maintains all the computer systems in and around the UW campus. It was formed in 1989 to handle the increasing traffic of the UW network. As they traffic through the UW network grow larger, members of MOTA have to work harder to ensure that the campus network won't go down at the worse possible moment (or at any moment for that matter).

The offices of MOTA are located at the 7th floor of MC. The people of MOTA are very dedicated professionals and are not impressed when someone walks in for no reason. However, if you have any questions concerning technology, they will be more than happy to answer them.

Whenever you run a program in the lab, surfing the net, sending/recieving e-mail, or opening files, MOTA is at work. They work around the clock so that your terminal won't freeze when you are trying to get your CS project to run. People of MOTA also works diligently to ensure that the printers are up and running at all times. After all, there are very few, if any, things worse than having half of your print job disappearing into thin air when the due time of the paper is merely minutes away.

These days members of MOTA are working hard on creating a quantum computer that can be used by people. Currently they also work on creating a monitor that has projection TV-quality graphics regardless of what the video card is.

MOTA is always looking for new members of the team. If you want to join the MOTA team and think you have the abilities to join it, please contact Mark McDermot, C.O.O. and director of MOTA, at his office in MC7056. This offer is not limited to only mathies. Anyone in the UW community who is proficient at technology and is a fast learner is welcomed to join the MOTA team.

As MOTA works on projects that are known only to a selected few, tours of MOTA are not offered at this time.

This message is brought to you by MOTA and Jason "the Screamer" Lau

Corner The Frosh Contest Results

The response to last week's **Corner The Frosh** Contest was huge! I was cornered no fewer than 20 times in an hour. However, many of the cornerers did not say the phrase correctly, or were disqualified based on the contest limitations, thus they did not win the prize.

However, two adventurous students tracked me down in the MathSoc office and managed to corner me to win the prizes. A blue "UW Math Girls Kick Ass" tank top and a C&D gift certificate goes to a Mathie named Victoria. The Mathie shotglass and C&D gift certificate goes to 3A anthropology student Elizabeth Neff of the Arts Faculty. Congratulations to both of you, and keep watching *mathNEWS* for more Corner The Frosh Contests!

Raymond CT Lai
The Cornered Frosh

Row Reduce Matrices in a Split Second!

Unknown to many people, MathCad has only been in use only for about a year. This useful piece of software that has made all our lives so much more easier was only integrated into the UW curriculum fairly recently, even though the core program was written over 20 years ago.

However, what is not general information is that MathCad goes beyond the Math136 curriculum. MathCad is used in Math247 (Calculus 3), namely for bonus assignments in Prof. Kirsten Morris' class for plotting surfaces, finding critical points, and symbolically solving constrained optimization problems using Lagrange Multipliers. Furthermore, Stat230 (probability) tutorials also utilize the powers of MathCad to craft statistical concepts such as the Central Limit Theorem. Going beyond the use of just crunching numbers, Professor Conrad Hewitt of AM250 (Introduction to Differential Equations) is introducing MathCad for the first time this term for illustrating analysis and solution techniques for differential equations such as Laplace Transforms. MathCad's powers stretches beyond Math, as the Faculties of Engineering and Science also allow students to further their knowledge of Classical and Quantum Mechanics with MathCad. Goes to show that everything can be rooted back to the math domain.

For students who have yet to use MathCad in the convenience of their own rooms, Mathcad can be purchased at the CHIP for \$15. (For those who don't know, or forgot, where the CHIP is, it is MC1052, on the basement floor of the MC). As long as you are an active student at UW, your licence is covered by the school through a Canada-wide licencing scheme for academic institutions. Further questions regarding use and expansion of MathCad can be directed at Colin Campbell at the IST in MC2048, or by the email campbell@ist.

Raymond CT Lai



Elizabeth

Victoria



Yeah!
Girls!

mathNEWSquiz somethingorother

Return of the Squizzies

Greetings, I hope you all enjoyed last week's quiz, and this one's even better. Best of luck to everyone!

Kyla's comment: Thanks to everyone who brought me chocolates to try. Perhaps I should make a section on jewelry next time...

Pete: The winner of last weeks Squiz was Jason Smulevitch, come by MathSoc and the mathNEWS office to pick up your prize.

Movie Quotes:

1. "Take me to bed, or lose me forever."
2. "If anything happens to him, I'll kill you. I don't just mean I'll hurt you real bad, I mean I'll kill you."
3. "K-Mart sucks."
4. ("Hey, my father told us not to lie.") "Yeah, and mine told me not to starve, so I guess we both got an education."
5. "Last night, Mr. Governor, my toilet was broken into."

Song Quotes

1. "She says I'm the one she really wants, but I'll never be the one that she needs. I'm not here to be a creep, I'm just feeling incomplete."
2. "Suddenly, I'm not half the man I used to be. There's a shadow hanging over me."
3. "There's so many times I've let you down. So many times I've played around, I tell you now that they don't mean a thing."
4. "She'll let you in her car, you go driving around. She'll let you into the parts of herself that'll bring you down."

Steve Taylor

1. Steve Taylor's record label is called what?
2. Steve Taylor is the producer of which 'kissable' band?
3. Steve Taylor formed a band in 1990 and disbanded it in 1992. Name the band.
4. The above band appears on the soundtrack of what movie?
5. What is Steve Taylor's current movie project?

TV Shows: I give you some characters's names and you give me the TV show.

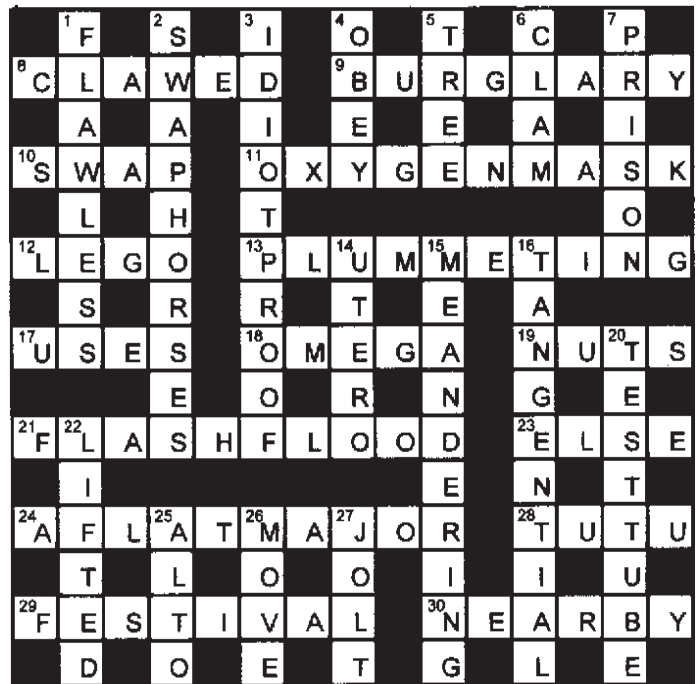
1. Chandler, Henry, Ford & Decker.
2. West, Hawkes, Vansen & Damphousse.
3. Marigold, Dumpty, Bear & Humpty.
4. MacTavish, Misty Moon, Entwhistle & Lady Hammond
5. Silas Crow, Sadie, Frank Fencepost & Lucy.

Well, good luck on submissions, hopefully the BLACK BOX will have a new home so keep an eye out for it, and good luck on submissions.

Andrew and Kyla

If trees could talk...

If trees could talk, they would say "Raymond, why? Why are your articles so long? Stop killing us, stop the long articles!!!"



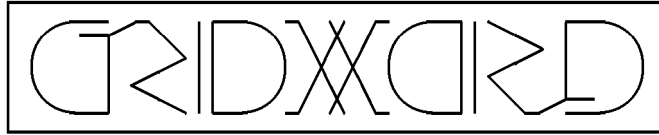
Grid Clues – Conventional

Across

1. Bad, but in a good way
3. Outline of a research paper
9. It's empty (2 words)
10. Silver-handed figure in Irish myth
11. Ancient city of NW Africa
12. Lasso
14. *Foundation* author
16. Can be Total?
19. Involuntary twitches
21. Devastation
24. Dutch cheese
25. That which is left behind
26. Use a wrod differently
27. Pre-owned

Down

1. Pertaining to marriage
2. Half of a famous lip-sync duo?
4. Skirmish
5. Tone, as of a conversation
6. The Heart of Dixie
7. Trolley-car
8. Italian cheese
13. Soothed
15. Confiscate
17. What "resurrection men" do
18. *Cold Cash Wars* author
20. Eat with great gusto
22. Test tubes, e.g.
23. Traditional hunchbacked assistant?



Conventional *grid*COMMENTS

Phat Tuesday

Hey, all you folks out there in GridLand! I'm writing this on my way to Baton Rouge, Louisiana, where y.t. is going to be presenting his first ever paper at a conference. (The facts that this conference is (a) in Louisiana, and (b) during Mardi Gras should be considered to be purely coincidental. Really.)

So I don't have all that much to say this week, since I'm a little scattered right now. I didn't learn about the theme to this week's issue until such time as I didn't have the time to do a real SF-themed Grid, so the Conventional this week is, shall we say, SF-flavoured. Lightly.

[We also have 2 winners from last week, they are... Marshall, and Beatrice Cameron. Congrats, and come pick up your prize, along with anyone else who has won recently. Please, or we'll use your prize ourselves. Oh, one more thing, Linda has added a bonus question for the gridWORD. Who is her favorite (Canadian) SciFi author?— Pete Love]

Submissions, as usual, are due by next production night; this time around, that's on Monday, March 12th, unless I miss my guess. Enjoy,

Matt in the Hat

Grid Clues (Cryptic)

Across

1. Nude dancing on the beach (4)
3. Beat feat I dug (8)
9. More serious coffee (7)
10. Pout about long-distant neighbour (5)
11. Indoor bitch turns around ball (5)
12. President-shooter reported (3-3)
14. Flawed vernacular rare from space race (6)
16. Ten folders where weird shit is (1,5)
19. Dream world from nothing but opiates (6)
21. Convoy school (5)
24. One bargain was tradeable without Bert (5)
25. "Way out" curl after haircut (7)
26. Ulysses and Hal went on trips (8)
27. Damages rams (4)

Down

1. Loves Sid badly enough to melt (8)
2. "No, Robert," I said, "It's coffee." (5)
4. Ontario town lights up at night (6)
5. Hint simply from pimply (5)
6. Use LANs oddly (7)
7. Game for bad mood (4)
8. Misspelling (6)
13. How we cook microwave popcorn (3,5)
15. Try tole crafting by chance (7)
17. Where you'll be tomorrow (6)
18. Lax in gay system (6)
20. Crushes old paperbacks (5)
22. A memory, a bouquet (5)
23. There are no small parts, only small actors (4)

