

math

NEWS

Volume 81, Issue 6

Friday, December 3, 1999

Scientists Prove...

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RULERS**



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DECEMBER 3, 1999



**THE
END
IS
NEAR**



EGYPTAIR CRASH



EARTHQUAKES



TOKAIMURA RADIATION



COMPUTER FAILURE

Orientation 2000

By the time you read this, interviews for this term will be completed. Right now I'm still in the middle of them. Don't worry if you missed getting your application in and having your interview because we will be doing this all again in the Winter and Spring terms. For you those of you that need to be PACO trained (if you have been a leader in '98 or '99, then you have been trained, if you were not a leader in those years then you need to be trained or you can't be a leader), the training sessions will be starting in the Winter term and they will also be run in the Spring. Get these done as soon as possible! Even if you are not applying until next term you can start the sessions before having the orientation interview. The website to sign up for these sessions is: <http://adm.uwaterloo.ca/infossa/Orientation/ndex.html> (note: this site hasn't been updated yet, but should be by Winter term or shortly into it)

As some of you may or may not know, an administrative decision was made which essentially said that Stephen Skrzydlo could not be one of the Math Orientation Directors. This decision was made due to new PACO regulations stipulating all Orientation Directors must be approved by the Dean. He is however allowed to be a part of Frosh Week. Frosh Week preparations will still continue as usual as I have taken on the full director position. If this decision changes your interest in being involved in Frosh Week please email me (orientat@undergrad.math).

Nadia V. Ursacki
Math Orientation Director 2000

BUDS Advertisement

Here we are at the end of Week 12, the beginning of the end. It's hard to think of anything but our approaching final exams. Next month, high school students will face the same challenge, but when all is said and done, some will not have achieved their full potential.

(yes, I realize you might be a co-op student and won't be around UW next term... keep the following in mind for when you return in May.)

BUDS is a group of University of Waterloo staff and students who currently tutor at three local high schools. We are looking for staff and students who are available next term for two or three hours every week to help out in one of our many tutoring opportunities. Training is provided, so no previous teaching experience is required, and you will have plenty by the time you are through! There is room to help out in virtually *any* high school subject area, but lately, **math** has been high in demand.

We are also looking for people to help out on our organizational team next term for two to three hours per week as well. Both of these activities are challenging and very rewarding.

If you are interesting in joining BUDS, or just want more information, please contact me this term at gmgmill@undergrad.math.uwaterloo.ca or at buds@calum.csclub.uwaterloo.ca in the new year.

You may now return to your regularly scheduled studying, already in progress...

Glen McMillan
BUDS Co-ordinator

PMAMC&OC (Plenty More Aspidistral Managers Coming & Ousting Centrists)

As our last talk of the term (Prof. Tenti speaking on Quantum Mechanics) will be done a day before this prints, the PMAMC&OC has no further talks to announce for this term, but instead would like to say thanks to everyone who has come out to our talks & events this term, to our members, and particularly to our speakers. (Especially the Crazy Frosh.)

The PMAMC&OC is preparing a book of abstracts of talks given at this term's SASMS, which will be made available sometime later. We're already planning for next term: in the first few weeks of term you can expect to see talks in cryptography, number theory, and quantum computing.

The PMC Exec: Dan Pollock
Joel Kamnitzer
Steve Forrest

Exam Packages

There are exam packages available in MathSoc for the following courses:

- MATH 137
- MATH 135
- MATH 235
- MATH 237
- MATH 239

Thanks for all the midterm donations! Keep 'em coming for finals!!

MGC

Hello all you grads out there! This is the last message of the term, so here are a few quick reminders. The yearbook is always welcoming grad blurbs, and fun pictures of you and your friends in MATH. Deadlines will be in January, so get them in ASAP.

Math Grad Rings are continuously being sold. If you're interested in getting a ring fitting, or to pick up an order form, stop by the MGC office. For extra details, check the MGC homepage or contact Sam Lisi at stllisi@undergrad.

Finally, if you see your graduation looming before you, why not pick up and fill out an Intent to Graduate form? The deadline for the Spring 2000 Convocation is March 1. Come by the MGC office or go to Needles Hall to pick the form up.

May you all ace your finals... :)

Rebecca L.
MGC Communications

Something found one day on the CS120 Webpage

News for this week:

Nothing so far. Well, I witnessed a smile for the first time in the lab this week. The student wishes to stay anonymous but there was a definite grin. We, the lab instructors, do believe that this was not stress induced but merely a hallucination. We confronted the student, made the individual splash cold water on their face and warned them that smiling in the lab is against lab regulations. Consider this a warning to ALL students who wish to smile or laugh in the lab that this is not acceptable! COMPUTERS ARE NOT FUN!

Now Ready: the MathSoc Online Exam Bank

For years, MathSoc has provided a service to UW students by keeping a bank of old copies of exams for students to read and study. Now, we're expanding this service by offering copies of old exams in a variety of electronic formats, *freely* downloadable from the MathSoc server at <http://www.mathsoc.uwaterloo.ca/exambank/>.

Please note that the selection of old exams that are available online is rather limited at the moment. The bulk of our exam bank is still stored in hard copy in the MathSoc office (MC 3038). If the exam you're looking for isn't online yet, drop by the MathSoc office during regular office hours. Chances are good that we'll have a copy there.

If you have questions, comments, or suggestions regarding the Exam Bank, please reply to me (Steve Forrest) at sforres@undergrad.math.

Steve Forrest
(Co-)Resource Director

Dijkstra Talks Today!

Yes, THE Dijkstra will be on campus today and giving two talks:

- Proofs and Programs at 10:00am, Siegfried Hall (St-Jerome's)
- And then a special Q&A: 3:00 p.m., DC 1351

Dijkstra retired this year from his position at the University of Texas at Austin. He is best known for early graph-theory algorithms (shortest path first d00dz). This guy IS a Computer Scientist, and pretty much a legend of sorts.

Billy Biggs

lookAHEAD

mathNEWS

December 3 Issue #6 cures the common cold, among other things.

Math Faculty

December 6 Lectures End
 December 8 ELPE (PAC)
 December 9 Exams Begin
 December 15 Winter Registration Fees Due
 December 16 Start of Late Fees
 No, we're not kidding
 December 22 Exams End

MGC

December 3 Last Chance Grad Photo Re-takes

Co-op

December 24 Fall Work Term Ends
 January 4 Winter Work Term Begins

Miscellaneous

December 24 through 31 Christmas Holidays
 January 1 The end of the world as we once knew it...
 January 3 University Holiday

Prez Sez

Hey everybody, how you all doing? I'm tired. It's actually my new answer whenever anyone asks how I'm doing. Well, this is my goodbye article since this is my last Prez Sez, so see ya ;) I suppose I should introduce ya'all to your incoming executive. So here we go for the W00 & F00 terms:

President : Jennifer Cote

Vice-President, Activities and Services : Daryl McEachern

Vice-President, Academic : Andrew Drummond

And the following election to take place according to policy:

Vice-President, Finances : Nick Page, Jeremy Witmer (alphabetical order).

And for the S00 term:

President : Vacant (I assume nominations will be opened at the beginning of the Spring term)

Vice-President, Activities and Services : Kenny Chung

Vice-President, Academic : Anton Fedorenko

Vice-President, Finances : Buddy Betts

So if you are interested in helping out in any of those terms, email the correct people (or just send it to mathsoc@mathsoc, that hits the entire current executive and they will forward it to whoever should get it).

As for upcoming events, we have an Undergraduate Affairs Committee meeting coming up right after classes and a main item on the agenda is the impending changes to the CS program, including the removal of Modula 3 and the partial reordering of the second year CS courses. If you are interested in the details, come by the exec office and talk to myself or Trevor about it and we'll fill you in. All you first year CS majors out there can feel confident that me and Trevor will work on your behalf to make sure these changes are to the benefit of the students. There are a couple other items that we have seen in the past including the restart program (a chance to 'reboot' in the case of a horrible 1A term) and the scheduling of core midterms. (A proposal was made to start Saturday midterms to get them done within a more concentrated amount of time — the idea was rejected due to a number of reasons, and if the same proposal is brought forth we will continue to work against it cause we know that the week is crazy enough without having scheduled midterms on the weekend).

Finally, I would like to thank everyone who helped out with MathSoc this Fall and last Winter for making my terms as President be fun and exciting ;) A huge special thanx goes to the executive. Trevor (VPA), you've known me since I got here and you've always helped me out whenever I needed it, thanx, and if you ever need anything, you know I'm here for ya. Eddie (VPF), you saved our collective butts by coming in to take over the Finance position and in my opinion you are one of the best VPF's ever. You never had a previous MathSoc position, that is a huge achievement, to jump to executive and do a great job without prior experience is truly something to be proud of. Laurie (VPAS), the constant ray of sunshine in the office, you always brightened everyone's days with your smiles and your constant amusement with the world. Any credit that I receive as President should be shared with these awesome three people without whom the job would have been simply impossible. And of course MathSoc's efforts would be impossible without the multitude of volunteers, from the one hour a week office workers to the infinite hours of our Social Director (you'll only spend more time when you're exec Kenny, get psyched for it).

Thanx everyone, it's been a blast, I hope to see you in some future MathSoc incarnation.

President Snuggles, signing off
 I'm proud to be a part of this bunch of students called Waterloo Mathies

The Stairwell Never Sounded So Smooth Thereafter

NICE! For the first term ever I actually cranked out an article for every issue of *mathNEWS*! And here we are, the last one of them before Y2K... anyone else sick of that word, raise your hand. Anyone catch the made-for-TV-movie "Y2K"? It was great action, and it conveys the message that you can be reassured that the US has a lot of top TV actors at some underground US base ready to counteract US hysteria with 24-hour reruns of all your favourite sitcoms. Their slogan is, "If you're worried about Y2K, worry with all your favourite actors on your favourite network! They too are hysterical! So don't waste the new year partying with your friends when you could be panicking with us!" And then they show you a list of times and shows. Don't miss it!

Last article I wrote something about a guy and a girl and a piece of paper. I must apologize to all of my readers (I couldn't find all three of you personally!), because the story was purely fictional, and I should've made that clear. I thought that the story would encourage people to solve the clue, which is real (it's part of a series of clues in a sort of treasure hunt I made), and the real "searcher" was stuck on it. So I wanted to see if others could figure it out, and to help encourage the person to solve the clue before the issue came out. Anyways, I'm sorry I didn't make it clear; I want you to know you are reading truth when you read my articles.

Anyway, although there were complaints, one person did manage to solve the puzzle, and so he has won a C&D coupon! I know I didn't really offer a prize, but I didn't think anyone would get it, and then Andrew Martinez rocked the house with the answer the Tuesday after *mathNEWS* was distributed. Congrats! Uh, er, I'm not sure where you pick up your prize, either the C&D or *mathNEWS*, probably *mathNEWS*, I dunno. [Actually, get people in MathSoc to look in the *mathNEWS* mailbox —HoloEd] But you won!

You know what freaked me out the other day, I was reading (for my own protection from *mathNEWS* thugs I won't mention the name of the publication) another campus literary source and WPIRG was talking about Depleted Uranium. Now I wouldn't pretend to be an expert on the issue, but doesn't that just make you want to puke? The basic story as I understand it is that the US (and maybe others) started using the uranium isotope which is left over from nuclear reactors (and is not usable as fuel therein) and lined their bombs with the stuff. It might not be the type of uranium which can be used in a controlled fission reaction, but it is definitely the type that gives off radiation... anyway, all those bombs were dropped and the country (Kosovo?) is laced with the stuff. And again I'm also not an expert on which side was right and which side was wrong, but hmmm..., dropping bombs laced with poison that will contaminate the land and the civilians for years, does that seem like a good thing?

I don't know Canada's extent of involvement in this affair, but I think they were on the side of the US, right? What kind of sick people drop uranium on others? If someone dropped uranium on Canada, the UN would flip out! If someone dropped uranium on the US, their people would go nuts with rage! But since it was in neither of those countries, it must be all good?!?!? It's wrong; who out there doesn't think that it's wrong? That innocent men, women and children are just gonna die of cancer needlessly from weapons of countries that we support. As if they didn't know that the uranium would spread. It's disgusting! Yet these are the countries we support, and even just by not opposing them, we share their guilt because we tolerate their actions. But maybe I've got it all wrong, maybe everyone else but me is ok

with this crap; maybe finally the Americans have solved the problem of getting rid of nuclear waste: dump it on civilians! Alright! Yahoo! I hope that someone makes them accountable.

Speaking of disgusting, and trying to lighten it up a little, let me switch over to the Math building, and give a little bit of respect (props) to the janitors, the custodial staff, and the green men (and women), and all the above. I watched them a couple times as I was passing by or as I was chatting with people. They do a friggin' kick ass job; can you imagine vacuuming an entire floor of DC? And then you see them leaning out of their way just to get the corners and hard to reach places, places that aren't even seen, but they still do it. I wish the rest of the employees around here were as efficient/effective as them. I tried to start up a conversation once, but the person I talked to seemed suspicious of my intentions, like why was I talking to him, I dunno, just to be friendly? Or maybe just to show that I don't think there is any difference between me and him except he wears a uniform while in this building. But anyway, since that went sour, I'll just say a friendly hello in *mathNEWS*: hey!

Wow, last issue of the term. This is when I start looking over the term, thinking "why the hell didn't I work more?" and then I brace myself for the impact of the stress of exams. Like a single soldier in the wake of a massive attack, I hold my sword steady as I can as the incoming army crashes into mine. And when the dust settles, hopefully I'm still standing, with some sort of respectable average.

I hope everyone out there got to do what they set out to do, and that record numbers of frosh survive in record numbers. I know I didn't get done half of what I wanted to do this term, including work on a coffee house that will have happened the day before this is published. Sigh. Still there were some highlights this term: the Math basketball team went on a sensational 5-0 streak (losses-wins) in the regular season and then unfortunately lost in the playoffs, but we really picked up our game by the end. I also watched the most TV I ever watched in a term. You tell me the channel, and I'll tell you what's playing between 12-3 am.

And what about that kick ass casino thing in the hall last week, man that was wild! At first I sucked, I'm telling ya, I suck at gambling like no one else. I went to the casino in Hull once, and I was freaking out cause my friend was down like forty bucks and I was like stop, you're just gonna lose more; but he made it back, and actually netted 8 bucks. I played for five minutes, lost \$7.50, and said screw this. Anyway, after losing 50 or so chips at the tables on the 3rd floor, I finally figured out how to play craps well. It's a pretty cool game actually, very mathie game I think cause there are all these probabilities and statistics you're gambling on, and it's alot more fast paced then boring old roulette.

Well, on to the big year we've all been waiting for, where they call all of us CS guys to ski around with laptops for the first week of the new year fixing any systems that might go down. I remember when I was a kid, I was always thinking about the future in terms of how old I would be vs. how old my brother would be, like: The farthest I ever got, was I'll be 23, he'll be 15. I have never imagined past that point, what I would do, where I would be, what my life will be like, it's all up until then. So here's to the future, may it hold goodness and justice for all of us. Take care.

Jesse Bergman

Rage Against Rage Against the Machine

Fight the evils of capitalism and consumerism by buying our latest record!

So there I was, sitting and listening to Rage Against the Machine, tapping my foot to one of their killer guitar licks, when I suddenly thought to myself, What am I supposed to rage against? This is a serious question, because if the target audience can't figure out the political message, then the message is wasted. So am I supposed to rage against the US government? I thought that as a Canadian I already do that without an American music band telling me to do so. Am I supposed to rage against the GAP? Everybody in denial indeed. Maybe I should rage against consumerism in North American society. If so, then I should take out the CD I am listening to and put it into a microwave, set the power to high and run, then take a baseball bat to my stereo and for good measure burn the baseball bat afterwards. So that's no good either. Maybe I should just rage against the machine that is Rage Against the Machine?

You say you want a revolution?

Sending political messages with music is as old as politics. However it can be done with more eloquence and with less hypocrisy. Maybe Rage should take a lesson from music bands that had something to scream about. When the Beatles recorded their hit "Revolution" the song had this line:

"But if you go carrying pictures of chairman Mao; you ain't gonna make it with anyone anyhow"

I wonder what would John and Paul think, when hearing Zack de la Rocha sing about starting a revolution in front of a portrait of Che Guerava and Red Stars flailing about.

Everyone in Denial

Since the nineties are pretty well over, I am allowed to say this: In this decade the youth of the western world had nothing to rage against. We didn't have a war to stop like the youth of the 60s and 70s (unless you count the Gulf War or the Kosovo mess as a war). Compared to the youth movements of the 60s (especially 1968) the kids of the eighties and nineties might as well not be here. Having had nothing of the magnitude of a Cold War to fight, we have to settle for fighting consumerism and capitalism, the very ideals that have allowed us to live in these relatively peaceful times. Sure, sweat shops are bad, but I don't see Rage Against the Machine donating the huge proceeds from album sales and concert tickets to help people in sweat shops. In fact what I do see is that Rage is selling their own clothing, collectibles and accessories right on their website! What could reek of capitalism and consumerism more than selling T-shirts for \$14.99 (US\$) on your own website! And Zack, I want some guarantees that the T-shirts were not made in a sweatshop.

Nobodys of the world unite!

A lot of people don't like the GAP. However the GAP is not the point here. The point is, why are so-called celebrities telling us what to do? Why do we need a Sally Struthers to tell us where to get education (or worse: Sarah Polley on how we should be educated), why do we need Jennifer Love Hewitt to tell us how to have relationships? Why do Kevin Williamson and Aaron Spelling tell us how our American Dream should be instead of us figuring it out for ourselves? Face it, if at the top of this column it said "by Katie Holmes, special to *mathNEWS*" more people would've read this column and thought about it. It doesn't have to be Katie, it could be Tom Cruise, Sharon

Stone, Vince Carter or Tie Domi. Simply because a person has accomplished something in one field, it doesn't automatically make him or her an expert in everything else. The point is, we should leave artists to do their work, but no more. Let Katie and Jennifer act (hehe, "act" indeed) in their little introverted dramas. Let Vince and Tie do their thing, and let Zack sing. But just sing. I don't want politics. Leave politics to people who are supposed to do that job. Or else, I'll start singing about the unheeded plight of the overworked mathSOC office drone.

Anton "zer0man" Fedornko

The Philosopher's Stoned

Ten things that bug me about the States

Good day, everyone! Falling back on a time-honoured *mathNEWS* tradition, I've decided to give you all a top 10 list to take with you on your holidays.

10. The climate. This is mostly a Deep South thing, I suspect. But it's the end of November, and the skies are clear and it's more than warm enough to be wearing T-shirts. I think that I might get some snow imported for January.
9. The fact that if I order "tea" in a restaurant, I get unsweetened iced tea. Again, this is a southern thing. "Hot tea" or "sweet tea" are the versions that might get me something that I'd expect.
8. The fact that everyone has a car, loves their car, and goes everywhere in their car. Not having a car (or indeed a license) means that people look at me funny. On the other hand, it's pretty easy to catch rides anywhere I need to go.
7. All of their paper money is the same colour. I miss having blue fivers!
6. I always have to explain where Ottawa is when people ask me where I'm from.
5. No one's heard of Great Big Sea down here. In fact, the entire Celtic-pop scene is lost on these folks.
4. Signs that say "No firearms allowed on premises (including concealed handguns)". It's not the signs that bother me, so much as the fact that people feel the need to put them up.
3. Everyone uses personal cheques here. Back in Canada, it's not uncommon that grocery stores, etc., don't like to take personal cheques. Here, it's standard. On a related note, almost no one uses Interac service, and certainly no one calls it that.
2. Filling out medical insurance claim forms after a visit to the doctor.
1. Drive-through banking. I mean, what's with that?

Good luck on exams, everyone, and I hope that Year 2000 Paranoia doesn't seriously harm you. Slainte!

Matt "So-Krates" Walsh
The Man in the Feathered Cap

MC2066? I hate thee word...

After a brutal term of six hours of classes per week in MC2066, I have discovered that this is clearly, without a doubt, the worst classroom in MC.

What is so bad about having MC2066 as a classroom? Here are a few thoughts:

1. Crappy “egg” chairs mean you can’t sleep in it without waking up with sore back.
2. Room is friggin’ cold.
3. Dark lighting makes you **WANT** to sleep, but you can’t. (See #1)
4. Not enough blackboard space, and what is available is covered in glare.
5. Stupid “all-in-one” arm-rest-table solution doesn’t have enough room to rest a doughnut.

So in summary MC2066 just plain sucks, but it’s not all bad. Here are some good things about MC2066:

1. So big and dark, it makes you feel like no-one else is in the class so you might as well not go either.
2. Crappy “egg” chairs give you a chiropractic excuse for not going to class.
3. Really close to C&D stairwell for those “I need a coffee/bagel/muffin right this instant” moments that occur every time you’re in the room.

And in some ways, MC2066 was ahead of its time! Check out the following points:

1. Stadium seating.
2. Quick exit to second AND first floors of MC. (All we need now is a “super happy fun slide” to the outside.)
3. Automatic falling chalk boards.

For those of you who decide to endure the go to your classes in MC2066 in the future, I commend you, for you are truly hard-core mathies (err, students if you’re not in math). For those of you who don’t know what I’m talking about, go check out the room, and you’ll understand. Anyways, here are some tips to make your stay in the “Hotel of Hell” MC2066 a little more enjoyable:

1. Bring an obus-form seat cushion. The crappy “egg” chairs are designed to curve your back, so these cushions should help. Plus, it’ll make you the envy of the class.
2. Gin. Remember how you wanted to fall asleep but couldn’t?
3. Sit at the front. This may sound like insanity, but if you want leg room, this is where it’s at. And trust me, all the other seats feel like economy class tickets on the world’s cheapest airline.
4. Brandy. Lectures are pretty painful aren’t they? Try 90 minutes of CS in MC2066. Crappy “egg” chairs. Brandy.
5. If you can’t sit at the front, sit behind someone with really neat writing. This is so that you can copy THEIR notes, instead of the ones on the board which you can’t read. (Remember, Stadium seating.)
6. Beer. What lecture is complete without the world’s most popular beverage?
7. Bring a 20 inch piece of plywood to use as a table to take notes on. You can balance it on the “all-in-one” arm-rest-table solution on your left. The only other ways to solve the note taking problem are to i) use your beer/pasta gut ii) sit really funny and make enough room to cross your legs without kicking the person in front of you iii) don’t take notes.

8. Don’t sit on the side alleys of seats. They’re like the corner seats of movie theatres; can’t see anything.
9. Whiskey. I said the room was cold, right?
10. Champagne. When the class is over, pop open the bottle, and everyone can celebrate!

Well, my term is almost over in MC2066. And with new classrooms being built on second and first floor MC (the big red room), hopefully I’ll never ever again be in MC2066. I pray for all souls that enter into the depths of MC2066 that they may emerge with a straight back, a rested mind, and an empty bottle.

Kev(o)

Hotmail vs. Undergrad (Round 2)

A few issues ago, someone put in a complaint about how many of this year’s Frosh are giving out Hotmail addresses for their general contact purposes. I’m going to try and offer an answer to the question a lot of people have been asking since then: Why?

This may not be the only reason that more and more students are using services such as Hotmail and Yahoo mail as opposed to their account on the math undergrad server, but it is a very good one — Most students only want to have one universal e-mail address so they can be contacted even if they move from one city to the next. An account on the undergrad server may be free to students taking math, but many of them don’t want the hassle of giving out their new e-mail address to their (most times) lengthy list of friends and professional contacts.

Moreover, many students switch internet service providers frequently over work terms, or even if they switch universities. The idea here is that one mailing address is more convenient than two, three, or even four possible accounts. Ever want to print a batch of business cards, but couldn’t because you knew your e-mail address would be different three months after they were first given out to your clients? Using a free e-mail service like Hotmail can help here. Although it’s not the best solution, it might save a few headaches in the long-run.

Dave DiGaetano

Solutions for this week’s logos puzzle

Person	Role Played	Cards Held
Ana	Professor Plum	Ms. Scarlet, Hall, Dining Room
Benny	Colonel Mustard	Mrs. Peacock, Billiard Room,
Craig	Mr. Green	Mrs. White, rope, wrench
Diane	Mrs. Peacock	Colonel Mustard, Study,
Elaine	Mrs. White	revolver, Kitchen, Lounge
Fred	Ms. Scarlet	Professor Plum, Conservatory,
		knife
		Murderer: Mr. Green in the Library with the candlestick.

Cynic's Corner

Study Topsy

Well, here we are at the end of another term. (Seems like only yesterday it was the end of S1899; according to the University's non-Y2K compliant term referential system.) Hopefully you've all learned something over the last four months. (If you learned something by reading *mathNEWS*, that's even more impressive.) If you haven't, well, here's a few things that I discovered over the course of doing this term's assignments. Some of it might even be applicable to your exams or work next term! (I know, I'm still dreaming, aren't I...)

1. Make sure you understand the question. One of the worst things that can happen is getting zero on a question you spent four hours on, where the error stems from confusing the concepts. If you think you understand things well enough, doublecheck anyway. Be especially suspicious if you've found a simple, elegant solution to something. Your proof may only be valid if $0=1$ on alternate Wednesdays.
2. Do the easy stuff first. Seems obvious, but there is a problem in that sometimes the hard stuff can be really neat or interesting. You know, the sort of problems that make you think and that you might actually enjoy playing around with for four hours (though see point 1). Don't be fooled. If you end up not solving the hard stuff all your time was wasted because no one will believe you could do the easy stuff. (Unless you're on the Dean's list or something. His good list, that is.) So do the easy stuff even if it is tedious.
3. Consider the weight of the questions. This relates in part to the previous point. If the hard question above is only worth 5 marks, skip it and come back later. Similarly, if the easy question is worth 20 marks, two lines probably won't get you a pass. Assume of course that you don't have a course which is sneaky and only requires a one line statement in order to prove something difficult. Sometimes then half the problem is figuring out what the question is asking (see point 1).
4. Pace yourself. I suck at this, probably because of the double-checking as per point 1. Hence the problems with points 2 and 3. (It's like time/space complexity, the better you make one thing the worse everything else gets.) In general, don't spend a lot of time on one question, unless it's worth a lot of marks (as in point 3). And try to get to the programming part. At least in an exam, the written word doesn't technically have to compile.
5. Avoid distractions. In general, these are bad things. For example, if you're reading this right now instead of studying, stop that. Put away the *mathNEWS*. (Of course, if I did that you wouldn't be reading it anyway... what a world, what a world...) Oh, and see point 1 (for no particular reason).

If you follow these guidelines, you should be okay. If you just photocopy your friend's answers and white out their name, you probably won't be. (Especially if your friend is into martial arts.) And just a reminder that the Fees Due Date for Winter Term is Dec 15th. (So late fees start on the 16th, though you can postdate your cheques to January.) Tell me this system makes sense and is not simply trying to squeeze more money out of those of us who are under exam pressure and prone to absentmindedness. "Finally finished my last exam today on the 22nd! Wait a minute... fees were due a week ago! Agh!" As if people are

doing to bother processing them in the last two weeks of the year anyway. (Or is this need for early cheques a sign that the University system isn't Y2K compliant? Hmmmm...) At any rate, best of luck on exams, and all hail Ruri, fay of the cybernet!

Greg "hologrami" Taylor

Dan Pants and Derek Doors

Hello. Dan's got good pants now. You're welcome. Marshall Likes Jolt. And he dislikes my grammar/apostrophe. About the pants: They used to be shorter... Now they are longer... Sometimes... Jolt is still funny... even if Marshall likes to pretend that he doesn't care. If you're gonna do gravy shots... then make sure u let the gravy cool down. I didn't and I have the burn marks to prove it... and another name on the list of people who will never date me. Marshall complained about the English shit again... Follow the arrows... but you can't sorta... cause some jerk removed all the ones in the elevators... but if you still want to, the general idea is: 3 to 6, 6 to 2, 1 to 4, 4 to 5, and down the MFCF hallway. That'll get you there... In general don't push doors that you see other people pull open (DEREK). In general the Crazy Frosh need a new prank... please submit all suggestions to the MathSoc Suggestion box. Address them to "The Crazy Frosh", and we'll get them... maybe. There is only one Yolanda, but there are two Liams (Big and Little). Hide'n'Seek was fun... but it's sorta hard to stand/sit/crouch in one place for 40+ minutes while people try to find you. Proofs by "Bob and Simon" are funny, and so is the S&M algorithm. Enough with the dead baby jokes already. They are really really SICK (Dan). When walking someone you don't want at the party home due to extreme drunkenness, walk them in a circular route. Otherwise they come back, and may try to remove the algebra TA's sweater. Oh... and while talking about the party... did anybody not see how skinny Tyler was in the nude pics? Marshall got drunk... Again... He's a funny drunk. Yolanda was not impressed. There was no getting dressed up that night. PORN. Did anyone find Zavosh? The 4000 Gold reward still stands. Anyway we all really NEED sleep, but there are more important things to do, like race around MC in roller chairs, and play Monkey in the middle in front of comfy with a Frisbee, and 5 players, and lots of innocent pedestrians. (My Apologies to the guy who didn't run fast)

A Subset of Crazy Frosh
Little Liam
Yolanda
Marshall

P.S. For those of u who haven't heard, The advanced section was escorted out of MC by the campus police for being "Bad Asses".

P.P.S Marshall thought that this should be P.S.S. He's wrong. And he should type next time cause he complains tooooooo much.

P.P.P.S Blue cows don't bite hard.

I dub thee Nostradamus!

Pikachu ain't got nothin' on me!

"... and on the sixth day, he created iMacs. He saw that it was good. And on the seventh day he rested..."

Coming to the realization that no-one actually cares what other people think, but most of those people are thinking the same thing, I present to you a series of, hopefully humorous, predictions for the new millenia. While some are predictions, others... well, take them as hopeful suggestions, and the others, maybe they're just crazy talk. So, anyways, **Come the year 2000...**

- CS assignment specs will be written in Larch so that there is no ambiguity, making CS newsgroups a thing of the past.
- CS370 will be dropped from computer science degree requirements making EVERYONE rejoice and those who've already taken it go postal.
- The mathematics faculty will run the EngScunt.
- The Huge 40ft High Pink Tie will be outlined in glow-in-the-dark pink paint, and during frosh week, its location will be signified by huge rotating spotlights.
- The comfy lounge will be clean and not smell.
- Access will be replaced by a solution developed on campus that is open-source so that everyone can hack it and set the rankings and interview times that they want.
- Denise Richards will learn that her ASSets aren't enough to keep her out of Playboy, and will learn to act. (A quote from the world is not enough "No James, it's too risky!", what crappy writer WROTE THAT!?!?!)
- Pixar (makers of Toy Story 2) will "render" its RenderFarm obsolete and will donate it's 1400 sun cpu's and machines to UWaterloo for CS100/CS120 use. iMacs will be used for upper year CS.
- Having been removed from CS246, Larch will be introduced to CS130 continuing the tradition of failing half the class.
- Crowbar Sideways will be entered into the Webster dictionary with definition: University of Waterloo; CS246.
- The band Serial Blow (aka Serial Joe) will admit to being the worst band ever conceived and will offer as self punishment a tar and feathering and complete removal from tv and radioplay.
- A few years after the double cohort of high-school students, enrollment in CS will decrease, and MC will restore the Big Red Room as a dance club that serves BEER (not mike's) with a super happy fun slide, and employ a DJ that will refuse to play anything except what I tell him to.
- Pikachu will take Larch and beat him up.
- Emoticons will be added to undergrad user ID's and will be called FunID's. eg: SPredator)=P
- All submissions for *prof*QUOTES will be funny as hell.
- Star Wars Episode II will be titled "Meesa Meesa Jedi!" and will tell the story of Jar Jar being turned to the Dark Side due to his curious mind and loose tongue.
- Star Wars Episode III will be titled "Die, Gungan, DIE!". It will feature countless scenes of Darth Vader creatively killing Jar Jar over and over again as Vader attempts to gain his rightful place as Lord of the Sith while Jar Jar demonstrates the Jedi power of immortality.
- After the construction on the big red room is done, everyone will miss the banging and rumbling of the construction. To replace it, MC 2066 will be blown up and turned into

a bowling alley, pleasing students (no more MC2066) and bowling enthusiasts alike (what's not to cheer about a new bowling alley?).

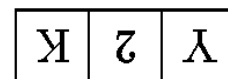
- The math faculty will strike an agreement with Apple and every computer will be replaced by an iMac, and all food sold in the C&D will be courtesy of iFruit Foods Inc. After all, who needs disk drives? (tnx goes out to SPU)
- To make it easier for vehicles to travel between buildings and to run over pesky pedestrians quicker, all grass and trees on campus will be replaced with asphalt and a Waterloo school uniform will be introduced with concentric red and white circles on the back.
- The theory that the iMac is a complex number will be proven, and the discovery of the complex conjugate of iMac will be made. (If anybody knows what it is, PLEASE TELL ME!)
- MathSoc's Social committee will continue to run awesome events like the Candy Casino with grand success and do a better job of promoting fun and spirit than a certain student federation.
- Everyone will exclaim, and cheer: "Hmmm, it doesn't look like the submit command is year 2000 compliant..."
- *mathNEWS* will win the Nobel prize for keeping the world's best students sane.
- Dance Dance Revolution will continue to rake in the loonies despite its ridiculous nature and even more ridiculous looking participants.
- =)
- The FEDS will actually do something besides complain about themselves. (see next)
- Due to the tremendous success of St. Patties day at the bomber, UWaterloo FEDS will try to freeze the calendar at St. Patrick's day to increase profits.
- Due to the removal of funding from the provincial government, UWaterloo is forced to seek commercial sponsors, and MC is renamed the Apple iMaC.
- At exactly 3:14 a.m. of the next millennium, MC will transform into a giant (warm?) Apple Pi. (tnx to JeffZ on that one)
- Dawson's Creek-like relationships will dominate MC and Math will be known as the campus brothel.

Phew! Thank goodness that's all over. A helpful reminder for Finals, DON'T BRING CELL PHONES. And repeat to yourself slowly, "I'm not an integral. I'm NOT an integral." Oh, and maybe a small holiday wish list that we can all relate to: i) safe holidays ii) Plenty of food and friends iii) No Worries iv) Some iMacs for good measure.

Cheers,

Kev(o)

Solution to This Issue's *gridWORD*



The End is Near

Get out your lead raincoats

Wow... here it is, the last issue of *mathNEWS* for the millennium. (Depending upon your beliefs, maybe the last issue of all time.) So, does anybody have any bets on what is going to happen as the clock rolls over midnight this December 31st?

SMACK

Ryan you idiot, that was a really stupid question. Of course you do, and to miss all of the coverage that the media has been putting on this issue you would have to be living under a rock. A big rock. In a cave. A deep cave. On Mars.

I've heard scenarios ranging from minor little problems to the destruction of all banks, power plants, telephone exchanges, televisions, watches, batteries, rocks, and small to medium sized animals on the stroke of midnight. Who knows, maybe at midnight all water in the world will suddenly split into its component parts of Hydrogen and Oxygen, causing all organic things in the world to become instantly dehydrated piles of Carbon, Nitrogen, and other such atoms. This would look especially cool to those people standing at the edge of one time zone, say Central, and watching everything in Eastern time suddenly become a pile of multicoloured dust.

Well, if you believe that then I have a bottle of dehydrated water that I want to sell you for the lovely asking price of only \$999.99. The most likely scenario is that one or two companies somewhere will get seriously hammered by this, but the vast majority of us will only see the effects of this bug in the sudden lack of a large catastrophe for the media to fixate on and speculate about to no end.

Anyway, I suppose it is time to go back to that assignment that I have been procrastinating from (Blasted end of term assignments!!). Hopefully, the majority of you will still be here on January 4th, but I guess we'll just see what Mother Nature has in store for us.

See you on the Time Zone border.

Ryan "Straxus" Slobojan

Slaves to Science

World domination now less than a month away

A new study from the United States has recently come to light. In it, a group of scientists (who have refused to disclose their identities) make the claim that, come the new millennium, robots will be our rulers. "It's happening even now," notes Professor X. "If you need to take a really precise measurement you no longer use a ruler made of a piece of wood or plastic: you use robotics! But what you don't realize is that these robots are actually just biding their time and seeing how WE measure up." According to the study, which supposedly polled over 500 household appliances, when the Y2K bug hits it will provide the perfect opportunity for robots everywhere to initiate a global takeover.

There is naturally some opposition to this theory, and in particular to the manner of presentation for the "irrefutable proof" found by the scientists. Said proof was apparently accomplished by induction; that is, by placing a magnet inside a robot and examining the fields produced by a strong current. The result corroborates all the data gathered during the study. Yet one well known investigator of robots and early science fiction television calls their proof "very hand wavy, with lots of shouting 'Warning, Warning, Danger, Danger'". Still, he isn't planning on operating any sort of electronic equipment come December 31st. We would equally advise all readers to lock yourselves up in your house at the end of the month, well away from anything which may contain a current. If you do not, when the dates roll over, you may get a nasty shock.

The *mathNEWS* Board of Directors

How You Can Survive The Millennium!

Avoid Dying

Survey 007

Favorite Bond

- Sean Connery : 65
- Roger Moore : 20
- Pierce Brosnan : 14
- Timothy Dalton : 3
- Monkeyman : 2
- George Lazenby : 1
- Gold Bond : 1
- Nuclear : 1
- C... : 1

fs : 1

Least Favourite Bond

- George Lazenby : 40
- Timothy Dalton : 39
- Pierce Brosnan : 13
- Roger Moore : 13
- Tribond : 1
- Sea of Electron Bonds : 1
- Anything from CIBC : 1
- Everybody Except Sean Connery : 1
- Sean Connery : 0

Total : 109

By popular vote, Sean Connery is the most favorite Bond.

Tushar "Random" Singh

Dear Sparkle

Dear Sparkle,

I mean, I didn't think that I had problems like that, issues, or whatever. She offered me the knife and said something like "Do you want to do this? I know that sometimes you get funny about things like that..."

It was just something small: serving food, cutting out portions from anything round, really. And I didn't think that I cared. I think that the thing was mostly that for some reason I had done it in the past, and for the sake of pattern, I wanted to continue. I wouldn't really have cared if anyone else had wanted to do it, but when she said that, I decided that perhaps it was an issue.

Suddenly it changed in my mind into some awful male thing. Like it was a matter of pride. I don't think that was really all that true, but that was suddenly my perception of it.

Is it wrong that somewhere deep inside I am desperately afraid of my genetics? Somewhere I will always hate myself because I often hate my gender?

Genetics seems to be the cause of many scary things, love. It's not surprising that fear comes as a reaction to them. When the man behind the counter assumes you can't lift heavy things because you are a girl, it's so easy to try and hold science accountable. To hold someone, anyone, accountable.

But perhaps, love, we need to remember that while we like to blame the scary things on genetics, that may not be the case. The scary things may not be hard-coded in. Which may be an even more terrifying thought.

And it is important to remember that while you may think she asks because it's a matter of gender that may not be the case. It may just be a matter of you.

Dear Sparkle,

There were days, long ago, when the rain would come and I would stand on the front walkway and let it wash over me. And the water would rattle down through the leaves and splatter on the concrete around my feet.

There was time then to stand there without distraction. There was no need to go inside before you were ready to go. Time to just stand under the trees until my clothing turned a darker, more perfect, shade of navy blue.

What happened to the days when you could do that? When it was enough to just be there and wet. What happens when the rain comes and you can't even get to the window because you've let yourself get entangled with people who don't understand the need?

Love, whether you are entangled with people or not, they will always be there to question your needs. Some people, whom I make all sorts of allowances for, surprise me by insisting that every need is circumscribed by popular works of fiction.

When the same sort of things started to happen to me, I tried all sorts of things, love. I became disturbingly good at pretending. I would watch the rain under the guise of waiting for people that might be coming, and so forth. I had a repertory of reasons for ever unexplainable need.

That was when I realized, love, that always excusing things becomes intolerably painful.

So I became unapologetic. That hurts too, but it means that those looks of confusion and scorn that people make when they look up from what they are doing are now blissfully tolerable.

Self-justification is easy, torturous and natural... but it is unnecessary. You are self-justifying. Drink your coffee, love.

Dear Sparkle,

I have started being dangerously late again. For work, for appointments... for a lot of things. I wonder if this is a sign that I am getting worse, or better?

On one hand, I could be late because I am getting caught up in the things that I am doing. For example, I was tragically late for dinner with my parents because I was lost in a fabulous, wonderful conversation. Being interested and carried away can be a good sign, right?

On the other hand, I could mostly just be reluctant to move forward. Perhaps I stumble through things until they progress to tolerable, then become unwilling to move. Lateness is usually a matter of inertia, even when it is the streetcar's fault. Lateness, maybe, is just a newer, more harmful way of hiding.

So am I getting better? Worse? Or do I just like foolish dichotomies?

Dichotomies are always a refuge, love, as they boil down complex problems into an either-or choice. However, they don't always reflect the truth. Often, what seems to be a black and white choice is actually four hundred shades of grey condensed so tightly they seem to have merged.

I often find that lateness happens when I suddenly realize that I have committed to many more things than there is time to get done. It helps to remember that no one can do everything and you get to be important to people even if you can't make every engagement.

Are you better? Worse? Maybe. Maybe you are four hundred different kinds of better and worse.

Queen Sparkle is a syndicated colonist.

Routine20 or Trip Like I Do

To go inside and find a vast and deep sea of unspoken energy churning, turning, moving, dying to go somewhere, touch something, flood something and then to take this energy that is all mine and turn it upon itself — feedback loop from myself into myself, into the scenic abyss that is the personal psyche — that, my dears, is how I trip.

Go deep, inside, inward. Breathe nothing but your own spirit, your own energy, feel nothing but the music that is now your own, that is you, that is your heartbeat, and then unlock, yes simply unlock. Use the magic combination created from the resonance of your own personal rhythm with that of the vibe and the beat and the melody within which you exist.

Find what you will, fear not, you will find nothing but yourself, you will see nothing but your own self reflected in your self-mirror. Your true self, as seen by your true self. All colours, all shades, all facets, all the darkness and all the light. The monster that you are, the angel that you are, the personification of love that your inner self is, the manifestation of hate that your inner self can become, all your fear, all your struggles — past, present and future, your hopes, everything that is you in the abstract will be visible. And feel this, know this, learn this, feed on it, DANCE with it, for it, into it, through it. Move with this, and you will be you and nothing more and nothing less and in this grandeur you will be what you most want. In that moment of vision, of dance and rhythm and of knowledge you can become what you most want. Goodluck.

Aziz Ebrahim

The (not quite) Flaming Garbage Cans of DOOM

It's amazing what some people will do...

I will relate to you a little story about a strange phenomenon which I came across early one morning after spending a sickeningly large amount of time in the XTerm lab on the 6th floor of MC...

I had taken a break from the CS assignment which had kept me typing on BellaDonna 109 for the entire night, and had noticed that the sun was in the sky. This meant to me that it was time to stop coding and prepare to go to the neverending stream of classes which were about to begin once more (I had no worry about my lack of sleep, for I was sure that I would get plenty in the day's rather tedious classes).

So, I returned to my XTerm, logged off, and went down to the 4th floor to hand in an assignment in the drop boxes outside of the CS tutorial centre. I entered the centre through the rarely-used side hallway and slammed my assignment gently into the box. As I turned to leave through the main entrance, I discovered that I most certainly would not be leaving by that direction.

A wall of garbage cans had miraculously sprouted from the ground, blocking off the hallway. I stopped, thinking this to be a radiation-induced hallucination, but soon realized that such was not the case and that I faced a detour. Now, I might have elected to take the garbage cans down (either gently or with my backpack swinging) except for one minor detail: Lack of sleep. This same factor might explain the rather disturbing laughter that echoed through the hallways of the 4th floor when it hit me that somebody had actually had the free time to collect all of the garbage cans on the 4th floor and stack them in this pyramid. I went around to the other side of this pyramid and found a message enscribed on a piece pf paper which said only "Geometry: Isn't it wonderful?"

I pondered this message for about 17 microseconds, then it hit me. It was the squirrels. The squirrels! They were planning their invasion, and they intended to wall us in and FINISH US OFF! Well, being the brave soul that I was, I promptly fled for my life, fearing what force might have arranged this deathly wall of refuse containers to annihilate mankind. Before you could find the derivative of a constant, I was down the side stairs, out the door, and past Dana Porter library.

And so, if you should ever come across such a thing as this, you would be well advised to get as far away from it as humanly possible, for the squirrels know how curious we are of such things, and their tauntings about Geometry will surely lead us to our destruction.

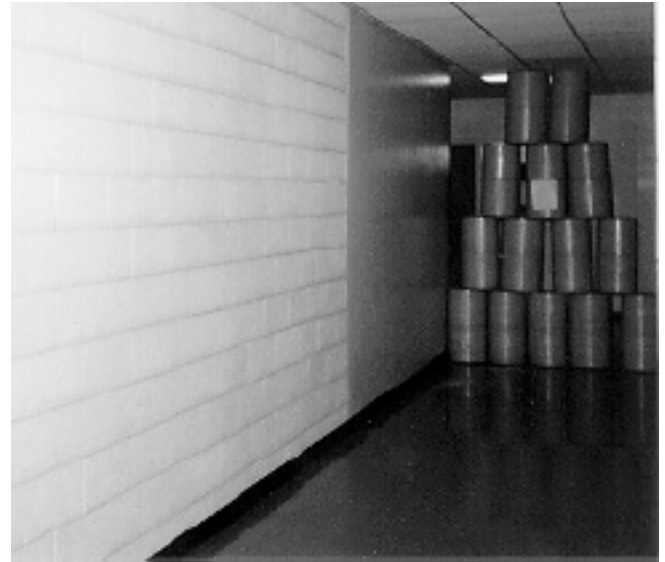
Beware...

BEWARE!!!

Ryan "Straxus" Slobojan

Late Breaking News

*Squirrels have been declared
non-Y2K-Compliant*



BOWLING ANYONE?



**MORE MYSTERIOUS THAN THE
PYRAMIDS OF ANCIENT EGYPT...**

profQUOTES

"If you have some sort of narcotic you may wish to take it now. Tylonol 3 is good."

Shallit, CS 462

"We have four more failures. They got to the coffee shop before me. They know who they are..."

Lawrence, MTHEL100

We've got to keep up the reputation of the course: It's a bird course!"

Lawrence, MTHEL100

"I have to bring my dogs in sometime. They even took this course. One of them passed it even..."

Lawrence, MTHEL100

"Sign here... give me the whiskey... sign here... give me the whiskey..."

Lawrence, MTHEL100

Prof: "A pirouette is a kind of turn thing, like so." (*does a pirouette*)

Student: "Will Karel raise his hand like that?"

Prof: "No, Karel will not raise his hand like that and look like a fag."

Rehder, CS130

"I'm putting on a Riverdance."

Rehder, CS130

"I'm going to take this text away and store it in a variable so I can use it for the rest of the game. I don't actually have a variable... Yes I do... Oh no I don't..."

Rehder, CS130

"There's a lot of information I can actually find; the point is, I don't actually care."

Jack Rehder, CS130

"A couple of people have their hands up who know the answer, but I want someone who doesn't know to answer the question."

Rehder, CS130

"You may have a list of printers. Some may be laser printers, others may be bubblejets, and others may be dot matrix... I hope not."

Rehder, CS130

"This assignment is FUN. The last assignment was fun, but this assignment is MORE FUN. I would liken this one to a whole day at Canada's Wonderland, while last week's was only half a day."

Irving, MATH 239

Prof: (*After fixing mistake on the board.*) "Why didn't any of you tell me about that? Why did you just sit there and take it?"

Student: "Because we worship you. Because you're smarter than us."

Prof: "OK... That was scary. Someone's got problems on the left side of the room. Who wants to be my bodyguard?"

Irving, MATH 239

Prof: (*writes "colouring" on the board*) "Minus 5 marks for any-

one who forgets the "u" in colouring. We're all Canadians here."

Irving, MATH 239

"When in doubt, we just reboot."

Rehder, CS130

Student: "We don't go out of our way for other profs..."

Prof: "And I don't go out of my way for you... oh, wait, that's not what I meant to say..."

Rehder, CS130

"Learn enough acronyms yet?"

Brecht, CS 354

"If your algorithm can't do better than random, then basically you suck! A monkey can do better than this!"

Brecht, CS 354

"We learned the concept of trust in about a year and a half in law school, so we'll go over it in about five minutes."

Lawrence, MTHEL 100

"Some people call a will a 'Dead Giveaway'"

Lawrence, MTHEL 100

"So $q(z)$ equals 1 plus some higher order terms. Precision is important in mathematics."

Haxell, MATH 145

"[It's like poetry,] it's powerful, but only for those that understand it."

D'Alessio, MATH 135

Prof: "Did I tell you the story about how this poem was created?"

Student: "He was on acid!"

Prof: "Sort of. He was on something like acid, only not as strong."

Spielmacher, ENGL 208A

"I've done some crazy things with Saran Wrap, but not that."

Spielmacher, ENGL 208a

"*Articulo mortis*: I guess it means 'in the moment of death,' as opposed to *rigor mortis*, where you're all stiff. ... I guess at that point it doesn't matter much."

Spielmacher, ENGL 208a

"If someone comes up and says to you, 'you *purulent* son of a...' then you can be really offended."

Spielmacher, ENGL 208a

"The difference between terror and horror [is that] horror... makes you wanna throw up."

Spielmacher, ENGL 208a

"Do we use the word 'barf' any more? It's not really a university-level word."

Spielmacher, ENGL 208a

Prof: "...and I'm wondering where I'm going with this."

Student: "Aren't we all."

Spielmacher, ENGL 208a

profQUOTES

"I *could* go into Arts... or I could go into something that'll get me a job."

Spielmacher, ENGL 208a

(referring to 4 colour theorem) "I will illustrate by waving my hands and drawing cloud shaped pictures..."

Wagner, MATH 239

"Imagine you're walking in downtown Kitchener and you see a guy with a big raincoat. He opens his raincoat and exposes his nuts..."

Kruk, C&O 350

(on suicide): "That's the easy way out, that's what *you* would do... that's what bankers would do."

Smith, ECON 101

"When a new idea comes along, your first idea is to take a nap!"

Smith, ECON 101

"Would you really want to live in a world where good-looking people get all the stuff? I know I sure wouldn't!"

Smith, ECON 101

"I can't wait for spring to come because we castrate the calves."

Smith, ECON 101

"You may have a Renoir painting in your living room, but it won't get you on the bus."

Vaughan, ECON 102

"Subtypes have more capability than their parents... sort of like you."

Simpson, CS 246

(about the solution to the Critical Section problem): "We're going to do exactly what Peterson did... we are going to cheat."

Buhr, CS 342

"For those of you who have never gone into a store like Future Shop and actually bought software... you have friends who have, right, so you know what it's like... it's like drugs."

Kreindler, CS 494

"And we do a sleight of hand and... we weren't lying."

Cummings, MATH 135

"Have they told you about Horner's Rule in CS? Good! Because I'll tell you about it. By the way, it's pronounced 'Horner', not 'horny'."

D'Alessio, MATH 135

"The equation on that board should be the same as this one... but it's not, because I'm on drugs."

D'Alessio, MATH 137

"I've read some of those *profQUOTES*. I'm not sure I want to be in there. Being in there is kind of like being peed on."

D'Agostino, MATH 137

"Let me ignore what happened in the past few minutes and go back in time."

D'Agostino, MATH 137

"If I spend more than 4 minutes discussing it, it's not trivial. So I'll stop discussing it to convince you that it is trivial."

Ng, MATH 235

"Don't waste your time doing nothing for nothing."

Ng, MATH 235

(in the middle of an example) "WHAT am I writing?"

Ng, MATH 235

"So I guess I'm a moron, because I didn't see you put 'more on' it..."

Shallit, CS 462

"So that's a nice language... the kind of language you might want to take home and introduce to your mom."

Shallit, CS 462

"Call this involution (psi), because I always call my involutions (psi)."

C&O 630, Wagner

"Well, it's clear what I mean by a horizontal edge and a vertical edge. A horizontal edge is horizontal and a vertical edge is vertical."

C&O 630, Wagner

"This doesn't make a lot of sense, does it."

Forsyth, CS 370

"Where am I heading?"

Younger, MATH 135

(staring at corollary) "Is that what I want? Yeah, I guess..."

Schellenburg, MATH 239

"If you wanted to describe this course in terms of a meal, we just started dessert. Here comes the sweet stuff."

Schellenburg, MATH 239

"I'm convinced that hair loss is exponential."

D'Alessio, MATH 135

"A clever person could probably look at this and write down the answer, but I don't think any of you could."

D'Alessio, MATH 137

"Today we'll talk about DeMoivre's theorem, not to be confused with DuMaurier cigarettes."

D'Alessio, MATH 135

"It is not at all clear from the diagram that the parabola is better."

D'Agostino, MATH 137

(on integrals) "If only I had something upstairs..."

D'Agostino, MATH 137

"If you're not sure, just use the guess and fix up method."

D'Agostino, MATH 137

"Okay... that's enough. I'm tired."

Wagner, MATH 239

"What does the answer mean? Maybe it means nothing... so

Snuggles Sez

It's like Simon Sez, but Simon is trapped in a Broadway Musical and he can't get out. No really, this is where I say stuff that I shouldn't say as President. So I would like to officially say that this article is only representative of my personal views and reflects in no way upon MathSoc's views or the views I have as President. In fact the opinions expressed below don't even really represent my views, they just represent what I find funny.

A friend of mine is on Broadway, that kind of scares me, knowing someone who is playing a lead role in a Broadway musical. Hmm, go figure, anyway. Hey everybody (I know, I know, Hi Snuggles). Do you know that on Cotton Candy day I walked from the comfy to my office and no less than 4 separate groups of people yelled the "hey look everyone it's ..." line. Wow, talk about crazyness. Well, from all the randomness you can be assured that it's really me writing this as opposed to the crazy handoffs that was happening last article between all my roommates. I like living here, in addition to the constant amusement of the various voices in my head that give me the inspiration for all my randomness I also get the added randomness of two of crazier and thereby more entertaining friends. And a third random roommate who adds the random aspect to an otherwise not enough overly random sentence and existence (random random random, I can keep saying it, that doesn't mean that saying the word implies you are me).

Oh ya, that reminds me (don't ask me what, no one can truly understand the intricacies of my brain except my best friend, I'll tell you about that later), this is to the editor (Hey Greg, look here). Corey wrote in the last article something about being old and you wrote some editors note about someone else being the Old Man, who were you referring to, yourself, or Drew, or what? *[I didn't actually write that. That's how the article looked when I got to it, I thought you did that. I sign my comments like this: — HoloEd]* Anyway back the article.

I want a keyboard that rumbles when you press the g key. I think that would be funny. Or it could be a random key depending on a random function, that turns it on. It would be like a little game, everytime you wanted to turn your computer on you had to guess which key to press, maybe after a certain amount of tries it would switch which key was required to hit in order to turn it on. That way you couldn't just use logic, you would have to submit to the randomness of guessing. Unless you somehow understood the algorithm somehow, which you can't do, since it's a computer and you're not.

You know, I tried something completely different with the last article (three different people as opposed to three of the same person) and no one mentioned anything. Not one damn thing. That's something that bugs me about people. People are more likely to speak up about something that pisses them off than about something they really like. How often do you watch the news and hear about more good things (inventions, innovations, good samaritans etc) then bad things (natural disasters, human made disasters etc). Hmm, maybe the news is a good indication of the general decline in the overall wellness of our society. Either that or the increasing vulgarity of our humour, or the increasing violence in our entertainment. One of them. Wow, look, misplaced political commentary. Go figure.

Hmm, the only person who really understands my insanity.

She's back in Canada now for a little while. Then she's leaving again, <tear, cry>. Ah well, I'll go visit her soon. Sorry for that randomness but I was just thinking of her, so I figured you should read about it. These articles really don't necessarily represent the funny things that happened over the past two weeks, they consist of the things that go through my brain as I write the article, or things I managed to write down when they happened cause they were that funny. I really have to be in the right frame of mind to write these articles.

Things that are awesome: Maxim & Stuff, Hercules & Xena, Seven on Voyager & Nikki Cox on Unhappily Ever After (watch it at 12:30 every night, so good), the Fonz & James Bond. Things that aren't: A computer that crashes more often after installing a system doctor program & the blue screen of death, Mice & badly placed mouse traps (they hurt), Washing Dishes & death, controversy & not being allowed to do something that you really enjoy and that you're good at.

Anyway, see ya next term, the Thompson Twins are coming back so we will be revisiting the crazy stories that result in them being around. And I'm happy cause a certain person switched terms so she'll still be around next term. Stay Snuggly. Have Snuggly holidays. (Happy Chanukah, boy I crave homemade latkes to remind me of my roots, I think I'll go home if only for that.) Oh ya, hope we're all still around after the millennium madness and that we have a school to come back to considering the amount of outdated computers around.

Snuggles

Top 10 things heard in MC 12:00:01, January 1, 2000

10. Yawn... [student(s) open(s) eyes] Is Algebra class over yet?
9. "Wow, that would be so cool!" — "Crazy frosh, GO HOME!"
8. I can't seem to find an x-term to use, but there are plenty of iMac's available.
7. Odd, I didn't know the CSC was having a new year's party!
6. What course are you, cs240? It DOESN'T MATTER WHAT COURSE YOU ARE. Shut-your-mouth-and-KNOW-YOUR-ROLE. I'm gonna take this Rudy Pooh assignment, and shove it up your CANDY @\$\$!
5. I can't leave now! Access hasn't been updated yet! I still have four "YESses"!
4. Yawn... Is Stats over yet?
3. I'm almost done *[takes sip of jolt]* that cs452 assignment...
2. Ggrrr... Must... Find... Way... Off... Sixth... Floor...
1. That guy sleeping in the comfy is **STILL THERE!**

Kev(o)

Bonus profQUOTES

much for the Fundamental Theorem of Calculus!”
 D’Agostino, MATH 137

“Unless my lawyer is present, I won’t answer that question.”
 D’Agostino, MATH 137

“Why do professors give tests? Well, it’s because they are mean cruel beasts and they enjoy seeing students suffer. Well... well no, it has nothing to do with that.”
 Centore, PHIL 100

“Yeah, but now you’re pissed off at me. I made you write it down, but now you’ve got to rub it out. I’m trying to teach you, I’m not trying to be popular. I gave up trying to be popular a long time ago.”
 Hewitt, MATH 137

“I’ve got an integral, I’ll call it ‘*m*’ ‘cause it’s a mess.”
 Hewitt, MATH 137

yeah... go do it.”
 Wagner, MATH 239

(written on board) “Integration by Parts: one of the most useful techniques especially in science and engineering (Vulcans, Klingons and even Romulans used it; it’s the basis of ‘cloaking’).”
 Vrscay

“It’s all a bunch of useless memorization. Save that for Biology class. In Physics we learn to think.”
 Brandon, PHYS 121

“It’s some quadratic function opening upwards, so sure as shootin’ it’s going to have a minimum.”
 McKay, STAT 231

“You’re right... I forgot the punchline.”
 Djkovic, PMATH 442

(referring to partial fractions): “It would make a good exercise...”

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That crazy, crazy editor guy

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Quantum Loop

"That went well," Hal acknowledged. Sham was returning from the police office, where he had left a well documented statement. After all, once Sham looped, Ray Toobe would likely have no memory of the pivotal events.

"It's remarkable that Millie came quietly," Sham markedly remarked.

"I don't think she really believed you could expose the truth," Hal observed. "She seemed unphased."

Sham shrugged. "I just figured that Millie's encoding was going to have something to do with 357,686,312,646,216,567,629,137," he pointed out. "No matter how you decapitate that number, you end up with another prime."

"I don't know how your swiss cheesed memory can recall stuff like that but forgets terms like the 'lucky numbers' or the 'weird numbers'."

"The weird numbers are abundant numbers without being the sum of any set of its own divisors. Like 70," Sham noted.

Hal rolled his eyes. "If only you'd remembered that last loop..."

"So, what happens to Millie Niem anyway?" Sham continued.

"Oh... it looks like she gets off with a light sentence but they confiscate her viral device," Hal answered, tapping at his calculator. "So everything's back on track at the Project because of that... she doesn't try it again. And hey, Sham, it looks like you accomplished your mission too!"

"What? I thought that was to provide room for terminals."

"Yeah, well it looks like Millie's son, Tita Niem, was going to prevent some initiative by the University of Mizuloo this year... that is, in the year 2000. But due to this disruption in her life, now Millie never has kids. And without the hindrance to the Mizuloo space program, it seems there is no longer a need for you renovate the original MC design!"

"Oh." Sham paused. "But then if I've fixed Y2K and accomplished what I was supposed to do here, why haven't I looped yet? Am I supposed to prevent your alien invasion in the year 2000 too?"

"Oh... that turned out to be a hoax. It was a scam run by some cracked group of PCs," Hal admitted. "And... it seems you're still here because you need to render your art."

"My art? Do I have to make a mosaic?"

"Hmmm... if ice in act, I've..." Hal smacked his calculator. "Sorry, you're here to render your artifice inactive. BigE is playing with parsing..."

"My artifice?"

"You know, the thing you used to broadcast your mapping? It's going to cause problems for some guy named Sine Field who ends up living on the sixth floor."

Sham shrugged and detoured back to where he'd left his equipment. Arriving promptly at his destination, Sham Breakit switched off his device and began to dismantle it. "So, I guess that even though this wasn't a routine loop, it at least has a good end," Sham concluded.

"Uh oh... wait a minute," Hal abruptly broke in. "It looks like there's still a lot of unexplained Y2K problems in the future."

"Pardon?" Sham mused, putting away his circuits and wires before looking back at his friend.

"Sham — someone else has a Y2K Bug!" Hal declared, shocked. "And... oh man, Sham, it's..."

Sham looped.

Finis

Greg "hologrami" Taylor

I bought him a cookie, dammit

Last week in *mathNEWS*, there was some mention of buying a cookie for those of you who decide to follow the arrows on the floor of MC, could tell me what they were for, and which alien species put them there. Well more than a couple people actually had the nerve to ASK me to buy them a cookie. One of them, a certain Sexual Predator, in his boredom was able to complete the MC circuit despite many of the arrows being removed, by visiting EACH AND EVERY FLOOR using the elevators. It is my sad duty to inform the public that, due to crazy stunts like asking me to buy a cookie, this offer is now CLOSED.

So this is the final issue of *mathNEWS* for the current millennium. And quite the millennium it has been. But thoughts on the millennial turnover can be found elsewhere in this issue. So instead, here are more things to do in class as the millennium approaches. (Due to considerable success with this series, I have been receiving ideas from a variety of sources. I thank you for everyone's support and awesome ideas.) Here is this week's 'millennial' game list:

- **Grubbiest kid of the millennia** - Summary: Identify the grubbiest kid(s) in your class. Monitor the "grubs" each class to see how many days in a row each wears the same clothes. Place bets on the grub and the value of the number of consecutive days. This game is a good game to play in *every* class since it is guaranteed to increase your class attendance. (This game may be a little late to start now, but try it starting next term. 10q's goes out to Louis for the idea.)
- **Sit down and spread 'em** - Perhaps what you're thinking, but probably not. This requires essentially a full class, so try it in one of those really popular prof's classes that everyone switches into. It's not disruptive to learning, so give it a shot. Idea: get half the class in on the game, and sit in every other seat. The fun begins when groups of friends (who can't live if separated) try to sit together. They'll probably end up standing in the back, or even leaving! Sound lame? Well maybe the 'extreme-contact Sit down and spread'em' version is more your style. Essentially, the competing players follow these groups around (couples are even better!), and when they spot a row of seats just the right size, race each other to quickly sit in between the sitting parties. (Try not to get punched out.) You can keep score among competitors by seeing what size of, and how many groups can be separated by the *same* competitor in the *same* class and the degree of dirty looks and middle fingers each competitor receives. (This game courtesy the Wrong Taxi.)
- **Imp'tint Airplanes** - You know that "other" publication on campus that has no real good content? It has been discovered that it is made of the precise material needed to make the world's THICKEST and BIGGEST paper airplane. Now don't throw them in class mind you, cuz someone might get hurt. But if you're stuck in a game of "Asteroid Warfare" and you've run out of lecture notes to crumple up, you can always wait until after class to exact your revenge... (This game courtesy of Medic.)

So as you can see, I haven't really done all that much creative thinking this time around. Thanks to everyone for their ideas and feedback. Have a great next term!

Kev(o)

Spermatikos Logos #4

Welcome, puzzlers, to another week of logic puzzle corner. I am your host, fat, lazy math student. This week I am hopping on the band wagon with your favourite syndicated TV-series and reprinting a classic episode. But first — a word on last issue's (ok.. I lied it was from two issues ago) puzzle. The correct solution for our last puzzle was:

Rinoa Villanova's topic is DVD technology

Rinoa Ubula's topic is real-time airtraffic control systems

Peter Ubula's topic is Computer Chess

Orel Yiddle's topic is DNA computing

Suzie Zoozoo's topic is organic storage devices

We received submissions from Karen Szeto, Drooly Bobone aka Louis Mastorakos, Lina Lum and Nabeel Kaushal. The correct submission from Karen Szeto makes her the winner!

For this issue I have decided to print my first ever logic puzzle. I was looking over my old files the other day remembering just how much fun I had with this puzzle, and I thought I would share it with y'all <again>. Ok... maybe that's a lie, perhaps I did it as an homage to myself. Ok that's a lie too... but none the less — for your puzzling pleasure...

Six members of the Psycho Computer Science Club (PCSC) were playing a game of Clue; three women (Ana, Diane and Elaine), and three men (Benny, Craig and Fred). Clue is played with a deck of 21 cards, 6 characters (Mr. Green, Prof. Plum and Col. Mustard (who are men); and Ms. Scarlet, Mrs. White, and Mrs. Peacock (who are women)), 6 weapons (knife, revolver, rope, candlestick, lead pipe and wrench) and 9 rooms (including the Dining Room, the Ballroom, the Conservatory, the Kitchen, and the Lounge). One of each of these three types of cards is removed from the deck and becomes the solution while the rest of the cards are evenly distributed amongst the players. In order to play the game each player must play one of the characters. Given the clues below can you discover each player's name, the character they played, the cards they held and of course the solution to the mystery?

1. The six players were, in no particular order, Col. Mustard, the player who held Col. Mustard, the only player that held two weapons, Ms. Scarlet, Ana, and the only player without a person card.
2. The game ended in a climactic race to the Library which was won by Craig who, ironically, played the murderer.
3. The three male players are, in no particular order, the murderer, Col. Mustard (who isn't the one who held Prof. Plum) and the man who held the knife.
4. Only one player had no rooms.
5. Ana (who held the Hall), was the first to discover that the murder weapon was the Candlestick.
6. Ana and Fred held each other's identities.
7. Reading down the rooms in alphabetical order you have: The room held by the person who held the Study, the Billiard Room, the room held by the only man who played a woman, the room held by the person who held the Hall, the Hall, one of the rooms held by the person who played Mrs. White, the murder room, the room held by the woman who held the revolver, and one of two rooms held by Diane.
8. Ms. Scarlet was played by a man, but isn't the murderer.
9. The person who played Mr. Green did not hold the lead pipe and the lead pipe was not in the same hand as Elaine's character.

Robin J. Stewart

mastHEAD

Doomsday is at Hand

So here it is. The big switchover to four digit dates is less than a month away, thus this is the last issue I have left to layout for this term. In some cases I know I've been too generous on when articles are coming in this term, just because I'm a nice guy, so here's a warning to everyone that you may not get away with it next term. Thanks to all the former editors who have provided advice and articles over the term (and you have Richard Bilson to thank for this issue's cover). Jim Jordan actually dropped by the office at one point too, and he verified a suspicion that sometimes editors swear they will "never edit again". I'm not sure about that yet; we'll see how my marks end up this term. (I pretty much know the material but my assignments need help.) Though I think I'm still among the few CS majors who has managed to avoid coffee (thus far) in the pursuit of a degree.

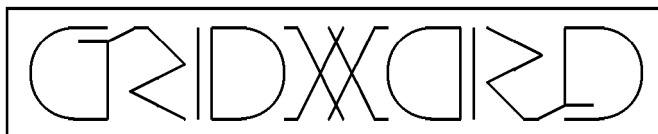
Oh well. Just one more thing I want to mention before I give the list of people who helped out with Production Night. It concerns *prof*QUOTES. First of all, yes, there really are some that still don't make it in, second of all the second Haxell quote last issue was printed in error, and thirdly, do you guys know how many trees you're killing when you submit an entire sheet with one quote written on it? Anyway, professors out there can

take heart: at least students are listening to you.

And now, without further ado, here's everyone who put this issue together on Monday, along with their year, major, and their answer to the question, "What's *really* going to happen on January 1st, 2000?": Michael Thorsley (6A, AM, a lot of people are going to be hung over), Anton Fedorenko (2B, CS, a girl will roll over and introduce herself to me. That's how I know that the world is ending), Ryan Slobojan (2A, CS, all matter in the universe will suddenly explode on the stroke of midnight, according to the media), Dave DiGaetano (1A, Math/Teaching Option, it'll be revealed to all of humanity that rulers aren't actually straight, but curved like they always were), Kev (2B, CS, all the world's biggest parties will erupt into insanity, chaos and a whole lotta fun!) and Gigi Garbett (3N, Psych, I will be ruler of the world... at least in my world).

Thanks goes to Marion at Graphic Services as always. I hope everyone passes their exams and has a blast this New Year's!

Greg Taylor (4A, CS, The souls of dead computer programmers will be resurrected, and they will laugh at us)



gridCOMMENTS

Hey everyone and welcome to the final *gridCOMMENTS* of the term. I've had fun with this whole *gridWORD* thing, and I'd hope you all did too. Before I leave I'd like to thank Mandi, Katia, Anton and Nory and just about anyone else who helped out with the grid, especially when Mandi and I were too busy to do it by ourselves. We got 5 submissions for last week's *gridWORD*, and although no one quite got perfect, a few came really close.

Our winner for last week is Charles de Gaulle, with just one error, followed closely by: Adam n' Carrie with two errors, the team of John, Greg, Halle, Christina, and Chris with a couple more and way too many things to do with Silverchair (I was considering devoting a column to them), with honourable mentions going to Scrote, and Jeff, Chris, Ian and Al "The Pal".

Our most entertaining responses to last week's gridquestion, "How would you abuse Silverchair more and make them like it?" include:

Schism all over their schisms while schisming in a schismal way. (By the people with too much time on their hands)

Two words: Roller Derby! (By Adam n' Carrie)

Even though there isn't another issue this term, I have just one more gridquestion: What should I do for New Year's Eve?

Thanks again to all that helped out and everyone who submitted this term. See you around next term perhaps.

Dan "Ringmaster" Pollock
 Mandi "Vocab Girl" St. Amand
 Anton "insert nickname here" Fedorenko
 Kaaaaaatia Bassenko
 Nory "Candy-Coated" Prins

1	2	3
---	---	---

Grid Clues

Across

- Popular Bug

Down

- Sounds like a good question
- Answer is to the left
- Usually denotes a constant

SquizComments

you're SOOOOO dead

Welcome to Armageddon, Satan speaking. Today being Judgment Day and all, I would first of all like to give everyone the correct answers to last week's squiz, so that all of you can feel perfection, for one insignificant moment of your wretched lives. Here they are: **Song Lyrics** 1)Weezer, "The World Has Turned"; 2) Oasis, "Half a World Away"; 3) David Bowie, "The Man who Sold the World". **The Year 1899** 1)Philippines; 2) Boer War 3) Uncle Vanya 4) Pacific Samoan Islands; 5) The Hague. **The Smashing Pumpkins** 1) Where Boys Fear to Tread; 2) Disarm, (bonus: "Cut that little child, inside of me and such a part of you"); 3) Bullet With Butterfly Wings; 4) 1994; 5) Jimmy Chamberlain, D'Arcy.

Satan has received exactly 2 submissions, both of these mortals receiving an identical score — 1. Ironically, they answered correctly the same question. But, John, Greg, Christina, Chris and others don't win the prize, because they implied that Anton has an unhealthy obsession with Stephen Skryzdlo. Therefore our winner is: Mike "The Great and Powerful"!

Because of the impending end of the world, there will be no Squiz today. We want you to concentrate on surviving the Judgment Day in one piece rather than doing the squiz.

zer0man

O	P	H	T	H	A	L	M	O	L	O	G	I	S	T		
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			O			T			G			E	M	U		
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Tired of spellchecking the word 'millenium': Greg Taylor