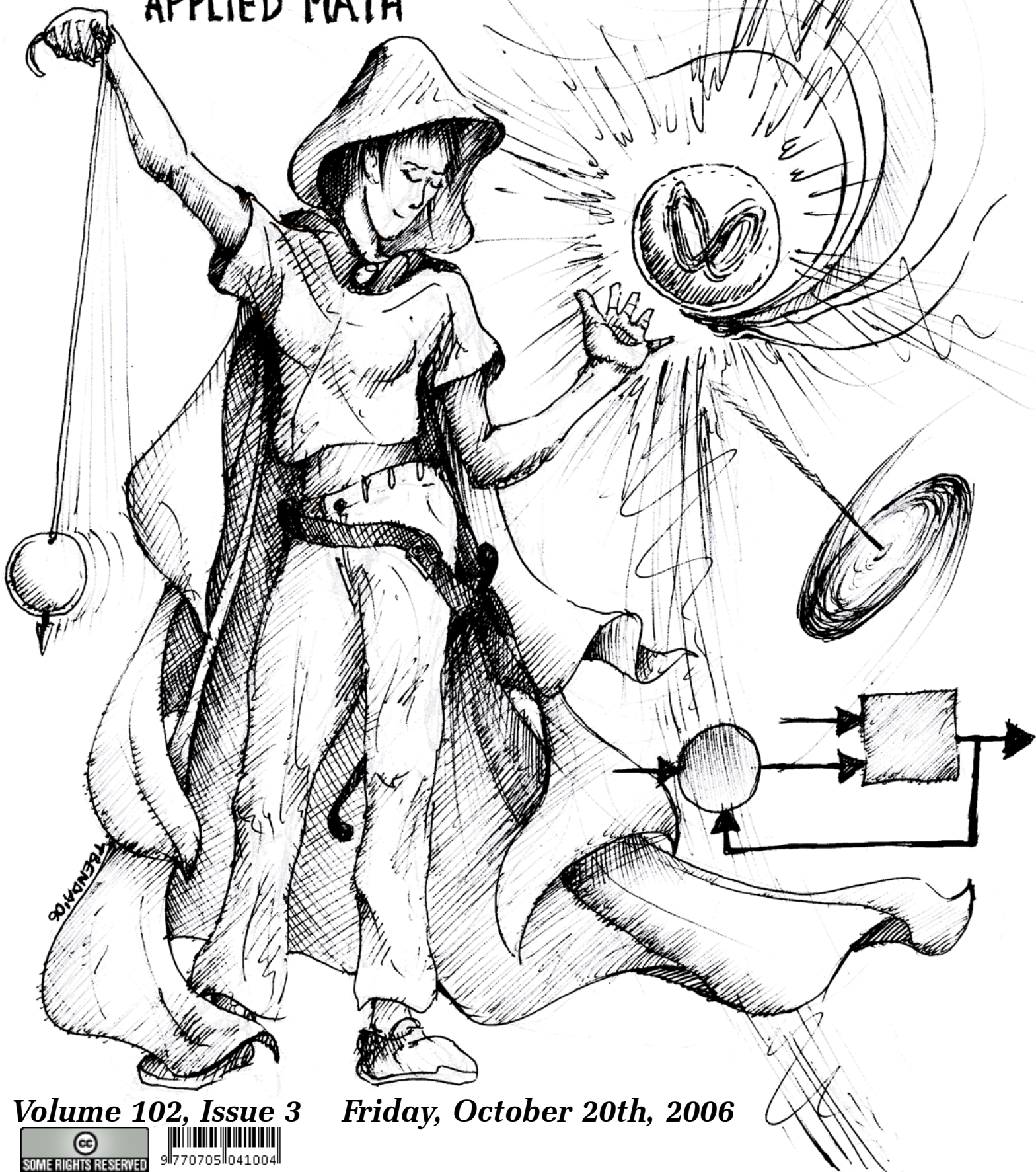


math NEWS

APPLIED MATH



Volume 102, Issue 3 Friday, October 20th, 2006



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lookAHEAD**mathNEWS**

October 20	Issue #3 interrupts midterms
October 30	Production Night #4 6:30PM, MathSoc Come out and help write an issue the day before Hallowee'n! Wear costumes!
November 3	Issue #4 hits the stands

MathSoc

Today	Fields Field Trip Mathematical Applications to Divorces at the Fields Institute - \$5 4-way Cross Campus Capture the Flag
Monday	Smash Bros. Melee Tournament Duke it out with the best of the best for \$50 gift certificates Sign up online at uwgamers.org
Tuesdays	Games Night Check it out in the Comfy at 6:30
Wednesdays	Two movies, no dollars! Look for posters!
October 26	Name That Tune 4:30 Room TBA see posters
October 28	Charity Ball Early Bird Price Ends
October 30 and November 1	Halloween Movie Nights Scaaary movies in the comfy.
October 31	Pi Day and Costume Contest Pumpkin and Pecan Pie
November 10	Charity Ball

Math Grad Committee

Wednesdays	Pizza day!
Buy cheap pizza to support the graduating class of 2007	

Math Faculty

Questions about some of these? See an academic advisor!	
October 16-28	Winter term enrollment appointments Check on Quest to see when yours is
October 27	Last day for 50% refund
November 3	Last day to WD from a course
December 7	2 nd chance to write the ELPE
December 8	First day of exams

CECS

October 26	Last Day for Main Group Interviews
October 27	Rankings Begin
October 30	Rankings Close at 10:00am

Feds

October 20	The Almost Hip
October 20/21	Warrior Weekends SLC, Great Hall
October 26	Trew's Concert Fed Hall
November 3	Theory of a Deadman Fed Hall

Miscellaneous

FTP is old enough to drink in the US!	
October 18	Persons Day
October 24	United Nations Day
October 30	Feds AGM - SLC Great Hall
October 31	Hallowee'n

mastHEAD

Well, it's the other editor writing the *mastHEAD* again, your pal inkEd. It's been an exciting couple of weeks for me, and I hope it's been the same for you. It's been a little chilly, though, so I've had to start walking in to school after biking daily since mid-March. I'm slowly rediscovering the loping walker's gait that makes my 25-minute journey more comfortable.

MATH135 midterms stole a lot of our staff this week, but that didn't stop them from emailing in articles ahead of time. You should try that, too! I think I remembered to slide in my old "Write for *mathNEWS*!" article this week; follow those instructions!

One of the things we do on production nights is casually sit around at the end and munch on pizza. It's a long-standing *mathNEWS* tradition. And among our little chats, my co-editor and I asked the staff that were present, "What are you dressing up as for Hallowee'n?" People present and their answers were: Richard ("I made a list, I'll think of something"), Andrew ("A bitter fourth-year — the costume will be free"), Insider ("Myself, that's scary enough as-is"), Alex ("Wolverine. So badass"), Michael ("Guy burnt out fro midterms"), Angelo ("The null set"), Robert ("!Link"), Matthew ("The empty word"), Aaron ("A squirrel and/or token"), DanS ("Hallowee'n? That's like two weeks from now. I don't plan that far ahead."), and Jos ("A brownie...the 8-year-old girl, not the food...and get your mind out of the gutter!").

As always, we send some sweet sweet lovin' to those hep cats at Graphics for doing that thing they do, my friend Linda (happy 21st on the 21st!), and also to Warrior Pizza, who didn't answer their phone.

Eric Logan ("My good twin")

Jenn Smith ("A slutty witch")

VPAS Feels the Sting of Work*So I'm Having Some Social Events*

Ok, so maybe the social events have been a little lacking lately, but there's always movie nights. Fine, fine! If you don't like the job I'm doing then it's yours! Take it! I never wanted this job anyway! Nah, VPAS is a pretty sweet gig, besides all the work and none of the pay, but it's good times anyway. So to celebrate the good times I'm having, I'm getting you some social events.

Today there's a trip to the Fields Institute in Toronto to hear a talk about the application of mathematical models to divorce prediction. Should be a good time. Monday is a Smash Bros. Melee Tournament brought to you by UWGamers and MathSoc. Top prize is a \$50 gift certificate and entry is only \$2(snacks and drinks included). Tuesday is games night in the Comfy with fun board/card games for all. Wednesday is yet another movie night. 2 Movies, No Dollars. Meet us in the Comfy at 6:30. Thursday is Name That Tune. It should be 2 hours of guessing the names of songs that most people don't know, or most people can't hear yet. It's going to be a dandy week. Lots to do. Give you all a chance to calm down after your midterms :).

See you all there!

Alex McCausland

MathSoc VPAS F06

vpas@mathsoc.uwaterloo.ca

Prez Says

Just a few things to report right now.

I do encourage you to check out the article I've written about J.D. Murray's talk at the Fields Institute. It sounds positively fascinating!

In other news, Honourary Lifetime Member nominations will be opening on Monday. Nomination forms will be available in the black rack outside the MathSoc office. Honourary Lifetime Membership is an award for students who are completing or have completed their studies that have made a significant positive contribution to student life in the Mathematics Faculty. The award confers lifetime membership in the Mathematics Society on the recipient. So, if you know someone who deserves this honour, get nominating.

In other other news, nominations for a variety of positions will be opening soon. These include Program Representatives, the nominations for which will be opening on Monday as well. Also coming up soon are nominations for Spring 2007 and Winter/Fall 2007 MathSoc executive. After being on the job for about five-and-a-half months, I can say that being an executive can be pretty rewarding and an excellent learning experience. If you're interested, feel free to send me an e-mail for information about positions or general questions.

Andrew Fransen
MathSoc President F06
prez@mathsoc.uwaterloo.ca

VPF Sez

Hello again everyone. I would like to inform you that dreams on sale come true! I was able to have a wonderful vacation in lovely Moncton, New Brunswick. It was so nice to have a break smack dab in the middle of midterm season. I suggest that all of you take time away from studying, even if it's only 10-20 minutes, and do something enjoyable. It can actually make things slightly less stressful.

From the financial aspect of things, I'm busy at work. I've been trying to keep the photocopiers working (trying being the key word), paying bills, writing cheques, investigating calculator prices, and overall keeping the finances of the society under control.

As always, if you have any questions, please e-mail me at vpf@mathsoc.uwaterloo.ca or feel free to come and see me in the exec office (MC 3039).

Until next time,

Nicole LeBlanc
MathSoc VPF F06
vpf@mathsoc.uwaterloo.ca

4-way Cross Campus Capture the flag

For those of you who have never played before, the name is pretty self explanatory. A group of people get together, split up into 4 groups, each with their own flag. They then proceed to capture each of the other three flags. To make this classic game more interesting, it shall be played across the campus, so if you don't think that running back and forth across campus with colorful flags is fun, then this probably isn't the game for you.

For everyone else, the game will be running Friday, October 20th (that's today). If you want to play, meet in RCH 101 at 7pm

VPA Says

Hello everyone. It's that time of the term again — midterms. That means long nights studying for the exams (and then long nights partying afterwards). However, there are some important events happening this month you may want to know about:

- Minutes of various minutes can be found on the VPA web page: http://www.mathsoc.uwaterloo.ca/minutes_vpa.php
- Trip to Toronto — Centre for Mathematical Medicine: Today: Friday, October 20! Bus leaves at 2pm. Only \$5. Look for posters to get more info.
- Professor and Course Evaluations: You know those evaluation forms you complete at the end of each course? Traditionally, the results have been compiled into binders, and made available in the Mathsoc office. Now the UAPC (CS Undergraduate Affairs and Plans Committee) voted to make the evaluations results available online. Stay tuned for more information.
- CS Undergraduate Attrition Report: Last fall the school of CS asked several hundred current and former CS students what they thought about the CS program at Waterloo. The report presents a very good summary of the data, as well as all the raw statistics; it's an interesting read. Don't be afraid of the length; the first 10 pages summarise everything. Available at: <http://www.cs.uwaterloo.ca/admin/curric/attrition-report-topublish.pdf> I want to hear your comments and any other concerns the report may have missed.

Co-op Students' Council Meetings: The Co-op Students' Council is a Feds-organized initiative to discuss concerns from co-op students in all faculties. In particular, we will be discussing the issue of mandatory submission of grades to employers (a new policy this term). Meetings:

- First meeting was Tuesday Oct. 17 (after this issue goes to print). There will be a summary or minutes on the VPA webpage.
- The second meeting will be on Monday, October 30, 12:30pm - 2:00pm. Look for more announcements on the "Academic Information" board outside Mathsoc. The meetings are open to all co-op students, so please come share your ideas!

I wish you success on your remaining midterms!

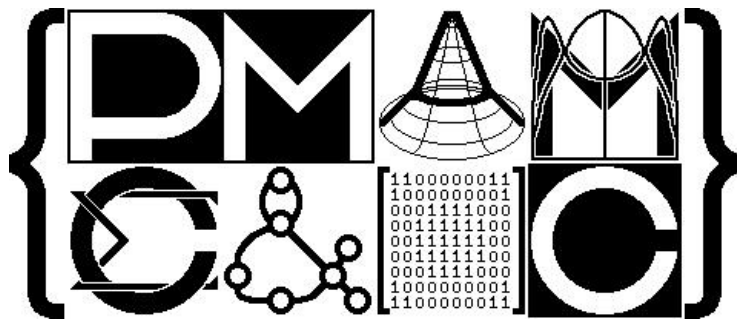
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Truth & Beauty (Beauty & Truth): Eric Logan and Jenn Smith



Pure Math Corner

This term, the Pure Math Club has received interest, unprecedented in recent terms, from math students of all varieties. Although the official name of the Pure Math Club is the Pure Math-Applied Math-C&O Club (PMAMC&OC), it is club policy that we are to be referred to informally as a single element of the set {"Pure Math Club," "Applied Math Club," "C&O Club"}, according to which discipline of math has the highest total number of members. Although non-pure mathies clearly outnumber pure mathies this term, we are still the Pure Math Club (and we have been this way since about 1996).

In response to the rising interest in our club, we have scheduled a lot of fun and interesting events this term, including talks and social events. If you are interested in joining the fun, drop by the Pure Math Club office and hang out, or send us an email (pmclub@gmail.com). If you are a professor or grad student (and I have seen members of both these classes reading *mathnews*), and you want to give a talk to undergraduate students in our Unveiling Mathematics lecture series (these occur on Thursdays at 5:00pm), please send us an email. See you in the MC.

Lloyd

The CS4XX Riot

Professor starts the class again
We smirk, ignore his boring slides
to work on more important things
like essays, Risk, organizing
our electronic outliners.
But then, a Spartacus cries out
"Look there, he speaks of OOP
a thing we learned so long ago
Do you, dear prof, think us for fools
that we know not polymorphism?"
The teeming mass awakens from sleep
its fourth year eyes face first year stuff
it screams at this callous affront
our speaker falls under a wave
of real-time, graphic rage.

C.A. Beret

Robocode Returns

The Computer Science Club is proud to announce the second ever Robocode Contest! Write the A.I. for a killer tank and send it to battle to vanquish your foes. First place prize is \$100 (imagine the freedom!), second is \$50, third is \$20. Write your bot beforehand, the actual contest will be held on Friday, November 17th, 2006 in a TBA location. See <http://csclub.uwaterloo.ca/robocode> for more information!

Triangulation and Cutting Cake

A talk by Dr. Penny Haxell

Winner of the 2006 Krieger-Nelson Prize (CMS)

Department of C&O

Date: Wednesday, November 1st, 2006

Time: 3:30pm

Place: MC5158

Audience: Graduate & upper-year undergraduate

Refreshments will be served!

Presented by the Women in Mathematics Committee

Write for *mathNEWS*!

It's bloody easy

You may have noticed that this rag is full of articles. Since the editorial staff don't generate material by posterior extraction, we rely on submissions by readers like you.

We're not particularly choosy here at *mathNEWS*. In fact, if you were to send us something, your chances of getting it printed are pretty good. Our criteria for publishing material are pretty simple: your article should be informative, interesting, insightful or funny. Long, rambling, pointless material is out. So are jokes, rants, and flamebait (no lawsuits, please).

If you have a modicum of writing skill, feel free to submit. You have many options:

- Write it down on some paper and shove it in the BLACK BOX, conveniently located on the 3rd floor of the MC between the C&D and the Comfy Lounge. If you type up your article and print it off and then put it in there, we will be very upset, because you should...
- Email it to mathnews@student.math.uwaterloo.ca with the word "article" in the subject line. Plain text only, please! Alternatively, you can...
- Drop by Production Night! Write an article, and while you're there, help us with the proofreading and editing of the issue. All are welcome! We might even feed you. The date of the next production night is given in the *lookAHEAD* of every issue.

See, isn't that simple? Perhaps you're the next great Hemingway, Atwood, or Davies, just waiting to be discovered. Submissions for a particular issue are due by 6:30PM on Production Nights. Submit, submit, submit!

Eric "inkEd" Logan

Not about Midnight Capture The Flag

MCTF is not an event that is happening on a Sunday evening in the MC. We certainly won't be meeting in the Comfy at 11:59 PM.

The Other Management

Does God Exist?

Probably not, but it doesn't stop his posters from showing up everywhere.

Angelo

MGC Sez

We want you!!!

To attend the Grad Information Session!

Are you graduating in 2007? Not sure what you need to do before you graduate? Like free food? If the answer to all of these questions is yes, then drop by MC 2065 on Wednesday October 25 or Thursday October 26 at 5:30pm and meet the people who will give you the information you need in order to get your composites taken (You know you want to...if not for yourself, then for your parents who helped put you through university), how to keep in touch with the faculty after you graduate and how the university can help you find a job. Also, get some **free food!!!**

To help out with MGC!

Volunteer with MGC, put it on your resume! Employers dig people who actually do things other than study (Trust us). What better way to add more volunteer experience than to volunteer with us! We need people to help out with the Grad Ball, publicity and selling pizza. If you are interested, drop by MC 3029 during our office hours and we'd be glad to set you up with a job that will definitely impress your potential employers.

To buy pizza!

Buying pizza helps us reduce costs for the events that we will be hosting. Events such as a planned ski trip, pool night and grad ball. We will be selling pizza from 11am to 1pm every Wednesday. Why go outside in the cold to grab food when we will have it readily available on the third floor of the MC right outside the C&D! Cash only though.

That is all for now. If you have any questions or would like to help us out, drop us a line at mgc@student.math.uwaterloo.ca and we'll get back to you shortly. Also, keep reading *mathNEWS* for any events we will be hosting or check out our website at <http://www.student.math.uwaterloo.ca/~mgc> for up-to-the-minute news. Have a great school (or co-op) term and we hope to see all of you grads at convocation in June!

Ivan Chin and Rodney Lam
Math Grad Committee Co-Chairs 2007
PS. Buy Pizza!

The Quest

Mathie D&D

Your party, having routed TAs and stopped the wrath of a Professor, has been wandering around the upper levels of the MC Building for hours. Unable to find an exit, your party considers consuming the SoftEng for sustenance. The C&O uses counting skills to determine seven possible exits. The PMath asked for a solid proof of this, leaving the C&O mumbling incoherently.

Your party runs into rogue Arts students. They seem underworked, actively drunk and could easily destroy your party with their abundance of free time. The Accounting student, resembling an Arts student, decides to try and deter them. The Accountant rolls a test to see if it works, fails the test, but reports otherwise to make it seem like a wiser investment.

Your party now faces an unrelenting assault from the Artsies. Like everything else, they will not bother touching you until the night before your party's demise is due. The Artsies go to get smashed at the Bomber. Your party is jealous. Except for the SoftEng who is currently sloshed.

Angelo

Can Mathematical Models Predict the Success of Your Marriage?

Find out!

There is a talk at the Centre for Mathematical Medicine at the Fields Institute in Toronto today, featuring Prof. J.D. Murray. MathSoc has decided to organize transportation to this event in the form of a big, friendly, yellow, school bus. The cost of the bus is \$5 for Math undergraduate students, and \$10 for all others. Graduate students and faculty are welcome to take advantage of the bus. It's too late to RSVP, but you can show up at the GRT stop outside the DC where the bus will be boarding. The timeline is as follows:

- 1:45 pm — Arrive at DC early.
- 2:00 pm — Bus leaves UW for Toronto.
- 4:00 pm — Talk by J.D. Murray
- 5:00 pm — Reception
- 6:15 pm — Bus departs for UW
- 7:30 pm — Bus arrives back at UW

Abstract

On the Virtues of Simple Models in the Biomedical Sciences. The siren song of elegant mathematical analysis often distracts mathematicians from the most important reason for working in the application of mathematical models to the biomedical sciences, namely to further our understanding of real biomedical problems. He shall describe, with minimal mathematical detail, examples ranging from brain tumour growth and control to divorce prediction which show how very simple models can often provide significant insight into real problems in medicine and psychology. In the case of brain tumours he shall show, for example, how the models can enhance imaging, highlight problems with current medical treatments and help design individual patient treatment regimens. With marital interaction modelling he shall show how to quantify a couple's 15 minute discussion and then use it to predict marriage stability and divorce. They achieved a 94% accuracy based on a longitudinal study of a large number of newlywed couples.

Andrew
That President Guy

New Labs Now Available

MFCF announces the opening of 2 new student labs on the 3rd floor of MC:

1. MC3010 is a 15-seat general-access Nexus lab. There are a few extra wired connections in the room for the purpose of connecting a laptop to the wireless network. All seats should be within easy reach of one of these ports, although it may be on another desk. Equipment in this room is partially funded by MEF.
2. MC3011 is a 22-seat general-access room for the purpose of group collaborations and wireless laptop access. There are 22 wired connections that connect to the wireless network (bring your own network cable), or you can just use your own wireless card.

For safety and security, both rooms are under video surveillance. Please use the facilities responsibly. Theft, vandalism and excessive messes will result in the rooms being closed.

Debbie Brown
MFCF

mathNEWSmailBAG*Yes, people care!*

To your Inky Eminence,

I have often read your publication, and would like to know how to join this *mathNEWS* cult. Are there any rituals I should follow, or rites I should perform? Please let me into your amazingly funny cult.

A Lonely mathie wannabe

Dear Lonely,

Cult? What cult? You see no cult. We are a group of mathies (and a few non-mathies) who like funny math jokes, and profQUOTES. The only rituals we perform involve pizza, not anything grotesque (unless Lino is participating) as we hear cultish rites are. We are offended that you think so little of us, as we are not marginalized like cults. Except that crazy girl in the corner who proofreads. She is marginalized.

We here at mathNEWS think you should stop reading this bastion of erudite thought, lest you taint it with your subversive ways. No math for you.

Jenn "DirtyEd" Smith

Dear mathNEWS,

Why aren't your articles funny? Do we blame the writers for this, or the editors?

A Non-I Moose

Well, Non-Moose,

Our goal is not to appeal to some abstract 'we.' Who is 'we' anyway? Obviously no mathNEWS writers or editors are part of your 'we,' and for that we are grateful. So no matter what 'we' decide is funny, we will print whatever we want. And by we I mean the mathNEWS staff.

Jenn the Dirty Mathie

To the *mathNEWS* writer (Name omitted for privacy reasons),

Your recent article about (subject omitted for privacy reasons) deeply offended me. I should not have to read such blatantly elitist literature. I expect a formal apology from you, and a promise that no such articles will ever be printed again.

Justly wronged

To the Justly party,

We are sorry that you have no sense of humour. We are also sorry that you cannot recognize satire for what it is. In the future, we suggest you have a mathie friend at hand while you read mathNEWS to explain to you the subtleties of mathie humour (Or non-subtleties, as they occur).

Such articles can and will be printed again, since I, the editor, think they are funny.

DirtyEd

Instructor of the Year Nominations

Instructor of the Year Nominations will open before the end of the month (October). Make sure that great professor you had recently gets the recognition he or she deserves!

Look for posters for more information. Nomination forms will be available outside the Mathsoc office after nominations open.

Anton Markov
The MathSoc VPA

Tricky Math*Putting Logic to the Gallows*

The events about to be described may or may not be true, people and places might have only been used to allow the readers to relate more to the situations portrayed.

You may not remember this, but last week the fire department, along with the university administration, decided that there was going to be a fire drill held within the MC to test the preparedness of those within in the event of a real fire. One week on a Friday afternoon it was announced that some time during the next week they were going to have the drill. Since it was to test preparedness they decided that only one person (the one who would eventually start the alarms) was to know what day the drill was going to be held on, and that no one else was going to be able to figure out what day it was going to happen.

A math professor who specializes in logic got to thinking, if no one is to be able to figure out what day the drill will be, then it cannot possibly be Friday since if it gets to Friday and it hasn't happened yet, then it must be Friday, but then I know when it's going to happen, and that is against the premise. He kept thinking, and thought, it can't be Thursday either, because if it can't be on Friday, and then it gets to Thursday and it hasn't happened yet, it must happen on Thursday, but deducing that breaks the rules. He kept using this logic and decided it can't happen on Wednesday, on Tuesday or on Monday either. He then started proclaiming that in order for no one to know in advance what day the drill was to happen on, it couldn't happen at all.

This professor was then very surprised when the drill happened on Thursday afternoon when nobody could have seen it coming.

DanS

Some spare profQUOTES

Assume you are an automaton...no. Assume you are a student at the University of Western Ontario.

Willard, MATH 145

[student] When will Cramer's Rule be useful?

[prof] Well, it will be particularly useful on assignments.

Wollan, MATH 115

Arguments based on artwork won't cut it.

Zorzitto, MATH 147

[About ranges:] I got this out of my son's chemistry book...they do this in organic chemistry; I don't know why.

Zorzitto, MATH 147

This isn't complicated stuff. It's not epsilon-delta.

Zorzitto, MATH 147

I'll give you some artwork to calm your nerves.

Zorzitto, MATH 147

I meant to cover this on Friday, but someone was talking too much. Either me or you guys.

Zorzitto, MATH 147

You know those wax pads you pull off your legs to take the hair off? The faster you do it, the less it hurts. Proofs are kind of like that.

Zorzitto, MATH 147

Horrorscopes

It's almost Halloween, so I am going to scare you

ACCOUNTING

If you're bored and you don't want to go trick-or-treating (you have my pity if that's the case), something that you can do is go around and figure out how much it costs people to prepare for Halloween. Then you can laugh at them because they are throwing away their money.

Your lucky number: \$5 on decorations, \$10 on costuming...

AMATH

All of the Halloween-based problems that you will have (if not on assignments then for your own mathie pleasure) will likely cause you to be superstitious. At all costs, you should avoid black cats, copy cats, and artsie cats.

Your lucky number: 13.

BBA/BMATH

You may think that just because you study on two different campuses, you are going to get twice as much candy as everyone else. If that were the case, I would have switched over by now. But seriously, you can only get onto one floor of one residence on one campus, so you are not getting any more candy.

Your lucky number: no matter what it is, you're still not getting more candy, so why bother?

C&O

You may wonder how you can apply C and O to this Halloween, and it's simple. When carving your jack-o-lantern, just remember: two Os for the eyes, one O for the nose, and one C for the mouth. A very simple use of C and O.

Your lucky number: 53% of people forgetting to put the C on its side.

CS

You can help those of us who can't do costume design by developing a program that will simulate a costume. Since our only other option would be artsies (and seriously, who wants help from them?), you can make good money off of this idea. So what are you waiting for?

Your lucky number: 0 satisfied customers (who was I kidding? You can't design a costume either).

MATHBUS

It may be worth considering selling Halloween costumes this week. However, since you don't know how to distinguish a good costume from a bad one, you will need to hire (or enslave) an artsie to help you. They need something to do anyway.

Your lucky number: finally, we found 1 use for artsies.

MATHSCI

Your future looks bleak. Although I can't exactly figure out why, what I remember seeing is something about being kidnapped by political science students. You can prevent this by not telling them that polisci is not a real science (even though polisci really isn't a real science).

Your lucky number: 75 angry polisci students.

PMATH

Like artsies, you are going to be swarmed with costuming opinion requests. However, not knowing how to do anything but pure math, your opinions will not be worth anything. So simply put, stick to your pure math and have someone else make the costuming opinions.

Your lucky number: a costuming opinion worth $\ln(0)$.

SOFTENG

Wanting to compete with the CS majors, you are going to make your costume design program better by talking to an artsie about costume design. However, this will not guarantee success and bragging rights over CSers. You have to ensure that they are not successful with their program.

Your lucky number: whatever causes them to `System.exit(0)`

STAT

Your costuming ideas have become more or less average this year, so what we need to do is deviate from any and all ideas that you have. If you really want to go out, why not go out as yourself? This costume will be not only economical but also scary.

Your lucky number: \$0 spent on costuming.

UNDECLARED

Walking down the aisles in the costume store, you will see very many that you will like. However, being as indecisive as you are, you will be unable to decide what you are going to wear trick-or-treating. Might as well buy them all and wear them all in shifts.

Your lucky number: ¥ costumes hanging around your room.

AHS

You are going to feel the temptation to provide healthy snacks to trick-or-treaters this year. However, do not forget that it should still be wrapped, since one can easily transfer E-coli onto said snack. Good luck finding such a snack.

Your lucky number: 1? tubes of Press'n'Seal wrap.

ARTS

Since apparently no one else knows what a good costume looks like (much less how to design one), you are going to be inundated by demands for costuming opinion. This is, unfortunately, going to interfere with the 12 hours of sleep you get every day. Now you know how we mathies feel.

Your lucky number: 11 hours of sleep every day (well, it's a start).

ENG

You could use the methods of design to come up with the perfect costume. And by perfect, I mean resistant to wear and tear; I can almost guarantee that it will turn out ugly as hell. So don't wear it around or you will look ugly as hell.

Your lucky number: 2 pieces of ugly-as-hell costuming.

ES

Continuously being concerned with the nature of our forests (no pun intended), you see dressing up as a tree as a means to get your environmental message across. Not only will that not help your case, but it will make you look like a real idiot.

Your lucky number: 1 costume that will never make it to Single and Sexy (or anything else for that matter).

SCI

If you really want to scare people (who am I kidding, of course you want to scare people), then just mix various DNAs, let them regenerate, and create a very scary monster. If it doesn't turn out all cute and fluffy, then your monster can scare unsuspecting artsies, giving you more candy while trick-or-treating.

Your lucky number: 100% of the candy eaten by your monster, so probably not a good idea.

softEYE
(mathEYE is writing a midterm)

Defensive Driving School

Here is my humorous attempt at describing Dominican driving. Enjoy.

First of all, some things that are actually different about the roads here, to give some background:

- Every intersection with traffic lights has two sets of traffic lights, on the left and right side. The right side is for going straight, while the left side is the left turn signal. This eliminates the need for flashing green. Instead...
- Flashing green comes after green, but before yellow. There is no break between the lights turning red in one direction, and green in another. So, in terms of timing, flashing green is like our yellow, yellow is like our red.
- Stop signs are rare. Uncontrolled intersections (side streets) abound.
- The gutters are designed extra large, because of freak rainstorms.
- The roads are not in very good condition.

Without further ado...

When driving along...

- In Canada, please stay within the lanes marked by the dotted white lines. One car per lane.
- In the DR, those dotted white lines are merely suggestions. It is a better idea to stay within the area the cars around you have graciously provided.
- In Canada, before changing lanes, check your mirrors, blind spot, signal, check again, then change lanes slowly.
- In the DR, change lanes, then make a hand signal.
- In Canada, be aware of cars that may pass you or change lanes suddenly.
- In the DR, be aware of cars/motorcycles/bikes/pedestrians/carriages/donkeys that may pass you or change lanes suddenly or stop suddenly or veer out from the right suddenly or veer out from the left suddenly or fall from the sky or...
- In Canada, when passing, do so only when there is a dotted yellow line and only when it is safe to do so.
- In the DR, pass whenever you damn well please, especially when going around a corner on a hill with gorges on either side in the rain because oncoming traffic had damn well better yield.
- In Canada, the right of way goes to the car going slower, or not changing lanes, or merging. Otherwise, use common sense.
- in the DR, the right of way goes to the bigger car, then the car with more structural damage, and finally to the car in front. Small cars in running condition better get the hell out of the way!
- In Canada, do not drive on the paved shoulder.
- In the DR, the UNpaved shoulder is the official passing lane. Use it whenever convenient, especially at high speeds in heavy traffic.
- In Canada, DO NOT drive the wrong way on a one way street. It is dangerous and will get you a traffic ticket.
- In the DR, no one notices those signs anyway. It is still dangerous, but oncoming traffic might be the ones going the wrong way. Let's see who wins this game of chicken.
- In Canada, DEFINITELY DO NOT drive the wrong way on a divided highway.

- In the DR, use the other side of the highway to access buildings and houses on the other side of the street. Especially clever drivers can pass traffic jams by going around them on the other side of the road. Suckers!
- In Canada, use caution when driving in the rain or snow. Roads can be slippery when wet.
- In the DR, use caution when driving in or *after* the rain. Holes can be invisible when wet.

While approaching an Intersection...

- In Canada, if the light is yellow, the light is about to turn red, and you should slow to a stop.
- In the DR, speed up!
- In Canada, if the light is red, slow to a complete stop. Do not enter the intersection!
- In the DR, proceed. If the car in front of you is waiting for the green light, honk your horn. He'll soon get going.
- In Canada, if the light is green, proceed (with caution). Don't forget your left-right check!
- In the DR, proceed, and pray someone with a red light hasn't read this.
- In Canada, if there is a stop sign, slow to a complete stop, yield the right of way, then proceed slowly. Don't forget the left-right check!
- In the DR, some jokester probably put it there, so treat it like an uncontrolled intersection. After all, how do they expect me to stop this heap of junk I call a car?
- In Canada, if the intersection is uncontrolled, treat it like there is a 4-way stop.
- In the DR, slow down only enough so that your car isn't swallowed by the gutter. In many cases, this creates a natural 4-way stop, but some cars are not to be deterred. First one into the intersection wins right of way!
- In Canada, if you wish to turn left or right, get into the appropriate lane, and await the signal/right of way to proceed safely.
- In the DR, get into any lane you please, and turn when you enter the intersection. Buses and trucks will find it easiest to turn right from the left lane. No need to signal...after all, who could miss something that big?
- In Canada, if the traffic lights have been disabled (i.e. due to a power outage), treat the intersection as a 4-way stop.
- In the DR, treat the intersection as an uncontrolled intersection. With no gutters.

Extraordinary situations...

- In Canada, when you are being approached in either direction by an emergency vehicle with lights and/or sirens on, slow down, pull to the right (safely!) and yield to the ERV.
- In the DR, do not yield to any ERV. No one else will, and you are likely to create the need for another ERV. After all, who do you think is driving the ERV? They'll get to where they're going.
- In Canada, when you are signaled to pull over by the police, pull over slowly, and give them your license and registration when prompted.
- In the DR, pull over slowly, and yell at them when they approach. If you haven't scared them off (you probably did nothing wrong in the first place), do NOT give them your information. They're probably hungry, and could use some cash in exchange for your license.

(continued next page...)

ElseWhen

25 Years Ago in mathNEWS

Not a lot of preamble today. I'll be looking at Volume 27, Number 3, originally published October 9, 1981.

Eric Logan

Of Cabbages and Kings

Oh yes, E. Siastes is back, and this week he responds to some of the mail he's been getting:

Evidently someone knows he is a moron (would that 'Steve Reid' could come to the same understanding) for when I arrived home on the Sunday night following the publication of my first article I found it nailed to my door. A strange sight greeted me inside; a plastic liner has been run around the walls of my room and five feet of water pumped in, in the middle of which six volumes of Proust floated. The seventh, volume III, is thinner than the rest and had become waterlogged and sank to the bottom. I am thankful that I purchased the paperback version instead of the more expensive and heavier leatherbound set. At any rate, this only proves that one of the inhabitants of my floor can read words of less than one syllable and the others are capable of understanding them when spoken slowly. I recognized prank as having been reported in the pages of Reader's Digest, which I read as child before discovering it was Communist-controlled.

[Please, don't let my roommates read this and get bad ideas... — DirtyEd]

Otherwise

- Andrew P. Welch, MathSoc President, is proposing a new constitution which contains the radical idea: "[T]his is a constitution that puts someone on-campus at (get this folks) the SAME TIME as when they hold office." Crazy.
- Bill Ince helped to run CSC election by acting as their CRO.
- David Till's Platter Spatter reviews "The Flowers of Romance" by Public Image Limited and "Nick Mason's Fictitious Sports." The verdicts (in order): "One can get sick of atonal synthesizers after a while..." and "it's still not bad."
- Lynn Marshall and Mark C. win the *gridWORD*
- The Galumphing Gourmets review The Knotty Pine, and give it 7 Bunnies. They like the desserts.
- Gerry Wheeler cheers at the death of the slide rule *[Hey, I actually used one in an exam last term! — inkEd]*.
- 81047866 tells us, "I am not a number, I am a free man!!"
- Richard Cleve gives us an introduction to polyhedra.
- And then some other stuff... New BNF Forms, a bunch of feedback for E. Siastes, and the classic proof that $2=1$.

(...continued from previous page)

- In Canada, if you are involved in an accident, collect personal and insurance information, and contact the police if necessary.
- In the DR, quickly determine who got the pointy end of the collision stick. Because there is no car insurance, if you got him better, speedily departing the scene is in your best interest before you discover whether he is one of the 1/3 of the population with a registered hand gun.

David Wheatley

[Change the name DR to the back roads of BC, and you will have my driving style! Way to go! — DirtyEd]

Origin of the Pumping Lemma

Alexander J. Pumping was born on January 23, 1915, in Burton-upon-Trent, Staffordshire, England. During his childhood, those hours he didn't spend tending the needs of the body, or working at the near-by factories of the Marmite Food Extract Company, he spent curled in the foetal position, inside large earthenware jars. It's believed that these hours spent in a dark, cramped container later gave him his unique insight into the classification of languages, although it's anyone's guess how.

Although he enlisted to serve in World War II, his childhood years of arbitrary confinement left him unfit to serve, for both mental and physical reasons. Dejected, he applied to Cambridge University where he was accepted. He did his undergraduate studies in mathematics, and his graduate studies in the topology of compact spaces, before gradually drifting into computation theory.

It was in 1954, however, when he made his eponymous discovery: the Pumping Lemma. The discovery occurred while he was watching a work crew pump water out of the basement of a university building after an exceptionally large rain the night before. Witnesses report that he cried "Eureka!" and then tried to hide under a hedgerow.

It's unclear what happened to Pumping after publishing his lemma. There is no record of his death, and no record of him leaving Cambridge, but there is also no record of his continued employment by the university. It's believed that due to his propensity for doing all his work inside his closet, university officials believed his office to be empty and so gave it to another professor. Rumours state that he still lives in his closet, occasionally sneaking out to steal food, while he labours away, evaluating a Turing machine by hand, trying to reach a halting state.

mdsherry

Awaiting Orders

Nuclear missile ready.

Good day, commander.

Despite tremendous lag, KimIlSung421 of North Korea has built a nuclear missile. His intentions were already known after one of our wraiths detected a Science Facility with attached Covert-Ops Facility, but it was originally thought that he didn't have enough vespeene gas.

The proximity of KimIlSung421's forces to our Command Centre is of concern, so we've deployed Siege Tanks along the DMZ and around key mineral deposits. We have Vultures setting up spider mines along major supply routes but frankly, he would be out of this game if MaoZedong49 hadn't zergling rushed our forces just as we were about to defeat him.

The marines say they're jacked up and good to go.

Dave

How Many Software Engineers does it take to change a lightbulb?

None — it's a hardware problem

Oh, come on. It was funny. And also took up some space I needed to fill.

inkEd

profQUOTES

It's a hint, but it might not be a useful one.

Balogh, PHYS 115

[after a student yawned] I know, it's amazing.

Balogh, PHYS 115

Most people fail the midterms because they mess up the signs. As you can see, I just failed the midterm.

Balogh, PHYS 115

You know what I hate about getting shampoo in my eyes? It means I gotta get conditioner in my eyes or they'll be all frizzy.

Burris, PSYCH 101

[while talking about limits, he approaches an unsuspecting female student]

Let's say I meet you in college, and I approach you like [a robot dance], and my heart goes up.

Chang, MATH 117

[to same student] Now let's say I come from the other way and my heart goes down. This is not a limit.

Chang, MATH 117

There can only be one limit. We never cheat on our boyfriend or girlfriend: only one.

Chang, MATH 117

[prof, during a discussion on continuous functions] So let's say we have a polar bear with a Coca-Cola bottle going off a diving board.

[student] Where are the penguins? You need penguins!

[prof] The penguins are doing pom-pom girls!

Chang, MATH 117

I'm using words from MATH 136! Evil, evil, bad!

Furino, CO 350

[We can] import refugees from Calculus here.

Godsil, MATH 249

It's the Extended Euclidean Algorithm for polynomials. You can relax: I'm not actually going to ask you to do it.

Godsil, MATH 249

What is a weight function? Well, it has no meaning.

Godsil, MATH 249

This set hasn't dropped out of the stars with angels singing.

Godsil, MATH 249

For some reason we have the world's largest supply of coloured chalk.

Godsil, MATH 249

1. If something twiddles itself it doesn't mean it will grow hair on the palms of its hands.

2. Therefore p_1 twiddles q_1 . p_1 enjoys it.

Hoffman, PMATH 334

How many people couldn't care less? How many people are too asleep to raise their hand? One person.

Kennedy, AFM 101

At great personal risk, I'm going to ask you to think.

Kennedy, AFM 101

Blindly applying a formula? That's something even a Laurier student can do.

Kennedy, AFM 101

Good morning! In other words, shut your yaps!

Koeller, MATH 135

If anyone could find a pattern for primes ... you'd be on Oprah in no time.

Koeller, MATH 135

All aboard the Algebra Train! Chugga Chugga Chugga Chugga CHOO CHOO!

Koeller, MATH 135

You can tell [when the assigned reading ends] because formulas will appear, and you'll think to yourself: "I don't want to read this."

Marino, PHIL 359

[Draws a picture] This is my proof. If you want a better proof... prove it yourself!

McLeish, STAT 901

I know this is long and tedious; the next one will be short... and tedious.

McLeish, STAT 901

The best lecture is when you read what you wrote yourself.

Nica, PMATH 351

Claim 2 will be one line, or maybe two if I write big.

Nica, PMATH 351

I have put the Baire in a position where he can claw something.

Nica, PMATH 351

I just use MatLab or Maple and say: please factorize this for me.

Ng, MATH 245

I don't really know anything about this matrix. I don't really care. I'll call it B.

Ng, MATH 245

[For proof "as exercise"] This is just a pedagogical device. I don't really expect you to do this, it's just a game we play.

Wagner, CO 330

I don't know if a picture is worth a thousand words in this case, but it's certainly worth a few hundred.

Wagner, CO 330

In fact, when I assign the bonus questions, I have no idea how to solve them!

Willard, MATH 145

How many of you are actually aware and listening as I'm talking?

Willard, MATH 145

Keep submitting your profQUOTES (but please don't submit ones that have already been printed)!

Dating Advice From The Single Guy

Part 3: The First Date

As promised last issue, this week's topic is the mythical first date. It's also an historic time for this column, it is in fact the first time this dating advice column has actual *dating* advice.

On the day of, there's some stuff you may want to do before picking her up. Some basic personal upkeep. Shower, brush your hair, shave or at least trim your facial hair, put on pants, you know the kind of stuff that you should do more often than you actually do. Oh, also remember tons of deodorant/aftershave/cologne as you're going to be sweating a lot; you don't want to put her off with your smell. As for the kind of clothing to wear, avoid all those free T-shirts you've gotten over the years. Sure I know you like to wear that shirt that Google gave you, but it makes you look needlessly nerdy (try to save the over-the-top nerdiness until date #2). For the same reason you should avoid any shirt you've ordered from websites like thinkgeek or a similar style of humorous saying on a shirt. As I said earlier, pants are a necessity.

Now, what are you actually going to do on this date? If she suggested something, then you can ignore this section it's probably a good idea to do that. Showing her that you can do as she wishes is going to be a valuable way of showing her that this relationship can last. Getting food is always good, at least if the food is good. Don't go for anything too fancy, things will be awkward when it ends up costing too much, and you both have underdressed, and you're a university student and shouldn't be able to afford something like that. The food probably isn't enough though, you need something to do afterward. There's obviously the good old movie date, nothing says "I want to get to know you" better than sitting in a dark room not talking or looking at each other for a couple of hours. You may think that sounds bad but consider this, as long as you're not saying anything you won't say something stupid. There's also at least 3 pool halls close to campus and at least one bowling alley, try those, especially if you're really skilled in one of those. She'll definitely be impressed by your great skills as you pocket ball after ball, or get strike after strike. If she's never played before and seems uninterested, remember to stress that she try harder and get good, otherwise the date will be too short and look bad.

Once the movie ends, or you finish winning all the games, or losing all those games (which is a bad idea: you're now a loser in her eyes), you may want to consider wrapping things up. You don't want to look over-eager. If she's trying to make it last longer, try to get out of it by saying things like "we'll save that for next time." It's a good way to get her to agree to a second date, and she'll respect your chivalry. Anyway, speaking of ending things, this article is getting long, and I think I've given you enough advice for now. If you can't turn this into a successful date you need more help than I can give.

The Single Guy

Q: What kind of bike should a tourist who often gets lost buy?

A: A hamiltonian cycle!

It's a Comeback

of sorts...

I suppose a comeback like this deserves some kind of article, although I still have to find a way to make it funny. But it's actually happened. One minute, I'm happily celebrating my departure from UW's Faculty of Mathematics, after six and a half grueling, painstaking years of working towards a degree. The next minute (where 1 minute = a little over 1 year), I'm applying for readmission to a program I have already graduated from in the hopes of buffing my transcript. What is it that would make a person do such a thing?

A lot of it has to do with the real world. Have you ever experienced the real world? Really and truly? We like to think that co-op is the real world...or summer jobs during our terms off in regular stream are the real world. But they're not. They're really not. Imagine standing on the threshold of a world, clutching a rolled up piece of paper (or in my case, a slightly mangled piece of paper pulled out of an envelope in my mailbox) thinking, "This is it! I can do anything now!" This is very similar to the feeling you understand when you hear schoolchildren on the television singing, "No more teachers, no more books..." Now imagine you have 2 years of work experience, a bucketload of volunteer experience, and a handful of excellent recommendations as well as a flawless work record. Go job hunting: attend career fairs, contact Career Services (yes, you WILL find them useful as an alumnus), polish and repolish your resume, create a contact card as per the recommendation of Tanya Gillert (alumni career counsellor who is awesome) and her Networking seminar. If at this point you're not ready to pound a wall, try this on for size: you've worked hard, you have your degree, you have everything I have told you to imagine and the responses are negative.

"But, I thought I could go anywhere or do anything with a University degree!" you exclaim. Oh, you can. But you're forced to narrow your scope. If you didn't narrow your scope, you have more options available, but you're not focused enough to gain a job. If you changed majors (as I did), you have the wrong work experience (excellent as it is) to match the degree you earned. If you have a narrow educational focus, you are limited in your prospects and it is difficult to venture out of them. Ladies and gentlemen...welcome to the real world!

Well, I digress. I have since come to a few conclusions that I want to share with the world...but will have to settle for sharing with all of you:

1. Not everything will go your way right away.
2. Learn to be thankful when things **do** go your way.
3. Make connections: that's probably how you'll get your job.
4. Don't be afraid to do something daring.

So I found my something daring...I'm going back to school. I, *Terrified Post-Grad*, have applied for readmission to the University of Waterloo's Faculty of Mathematics for further study. I am going back to a place that terrified me, tortured me, made me frantic, made me panic, and made me miserable. I am also going back to a place that made me happy, entertained me, and gave me a chance to learn more about myself. No, I am not a professional student...I am a person on a mission to get back to my roots. I need to find my passion and pursue it. So I will do so.

Damn you, real world! I'll get the best of you yet!

It's good to be back. (I'll try and make the next one funny.)

Terrified PG [Post-Grad]

Java Goes Gangsta

The Abbreviated Version

(A parody of "Drop It Like It's Hot" by Snoop Dogg and Pharell)

C.....S
C.....S

When my stack starts to overflow
Pop it like it's hot
Pop it like it's hot
Pop it like it's hot

When my int needs some methods I
Wrap it like it's hot
Wrap it like it's hot
Wrap it like it's hot

If an artsie steals my workstation
Lock it like it's hot
Lock it like it's hot
Lock it like it's hot

Everybody is gone
But I'm staying logged on
Sitting in the MC 'til it's early in the morn

I'm a nice dude
With CS skills
Staying up late
Because sleep kills

Eligible co-op
Million dollar jobs
Code writer can show up dressed like a slob

I program, start with CS one-three-three
J-A-V-A, I know it fo' sheezy
First year exercises, know I stayed up 'til 3
Give me event sims, you know they always please me

If you still want more, I've made killer apps galore
If I told you they went gold, you'd go running to the store
So don't try to run up on my ear cuz you know your ASCII
codes
Why don't you just go
Ask my mama cuz she'll say I knew them years ago
Don't just think about it, take a second
She's upstairs, I live in her B
I hope I can move out before I turn 30

Stoken

Not actually in CS but loves CSers anyways

**Annoying is when I get to the last
page of layout and run out of
things to put in**

Submit articles! Particularly short ones!

I mean, no one wants to read this. Seriously.

10 Excellently Cheap Costumes for Halloween

1. Arthur Dent — all you need to start is no tea
2. Comfy Native — while admittedly, this requires some preparation beforehand, it's still incredibly simple: sleep in the Comfy the night before Halloween
3. A man/woman without glasses — if you're wearing glasses, remove them
4. A man/woman with glasses — if you don't have glasses, borrow a pair from a mathie trying the above
5. A mummy — start collecting tape off the back of posters; string it all together, and wrap yourself in it
6. A vampire — stay inside until you lose the colour of your skin; puncture yourself with the CSC's Swingline
7. A zombie — help out a real-time student with his or her assignment
8. A werewolf — don't bother shaving, and growl at everyone who passes by
9. A pirate — poke yourself in the eye, and call 911; an eyepatch should be waiting for you in the emergency ward
10. Yourself — this is easy, and incredibly lifelike (unless you're a real-time student)

Richard

Not at all interesting

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin tortor ligula, molestie nec, bibendum ac, facilisis convallis, elit. Duis rutrum. Cras placerat elit. Vestibulum magna nisl, adipiscing nec, condimentum in, tempor at, est. Duis nec velit. Nunc in augue. Sed consectetur, orci id tincidunt tincidunt, orci nunc tristique mi, quis fringilla leo augue sit amet erat. Aliquam erat volutpat. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Nulla pretium vulputate leo. Nulla facilisi. Aenean non lacus nec erat lobortis molestie.

Solutions to Last Issue's Grid

	B		T		V		A		K	I	C	K
M	U	T	I	N	E	E	R		I		H	
	G		P		T		I		W		I	
K	L	E	P	T	O	M	A	N	I	A	C	
	E		L			E		U		W		O
A	S	H	E	S		L		D	E	F	E	R
W		E		P	L	A	N	E		U		G
R	U	L	E	R		N		S	P	L	A	Y
Y		I		I		G			A		N	
	E	X	A	G	G	E	R	A	T	I	O	N
	R		B		A		O		C		I	
	G		U		S	C	A	T	H	I	N	G
T	O	O	T		P		R		Y		T	

Puzzles!

David Hayes prepared these puzzles for *mathNEWS*, a fact for which I am quite grateful. He also told me, "I've been having a lot of trouble getting the right level of difficulty for puzzles (I'm short of testers)." If you have any feedback for David, send it to ilostyourpuppy@gmail.com. Don't forget puzzle submissions may qualify for our **FABULOUS PRIZE!**

inkEd

Drywaller

"Listen up. Our client isn't picky, as long as each square has the right number of walls surrounding it. Sounds a little tricky, but we didn't get to be the #3 drywall outfit in town by being lazy."

Also:

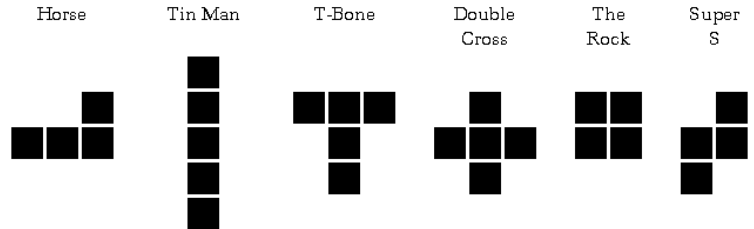
- There's a wall around the outside
- They want exactly 11 rooms

2	1	2	2	2	2	2	2	2	3
1	1	2	3	3	2	2	2	2	2
2	2	1	1	1	1	2	2	2	2
3	1	0	0	0	0	1	3	3	3
3	1	0	0	0	0	1	2	2	3
2	1	0	0	0	0	1	1	1	2
2	1	0	0	0	0	1	1	1	2
2	2	1	1	1	1	2	1	1	3
3	2	1	1	1	1	2	1	1	3
4	2	1	1	1	1	2	2	2	3

SigInt

The precious 8x8 grid we call home has been invaded! Signals intelligence tells us that the following agents are somewhere nearby, all they can tell us about their locations is:

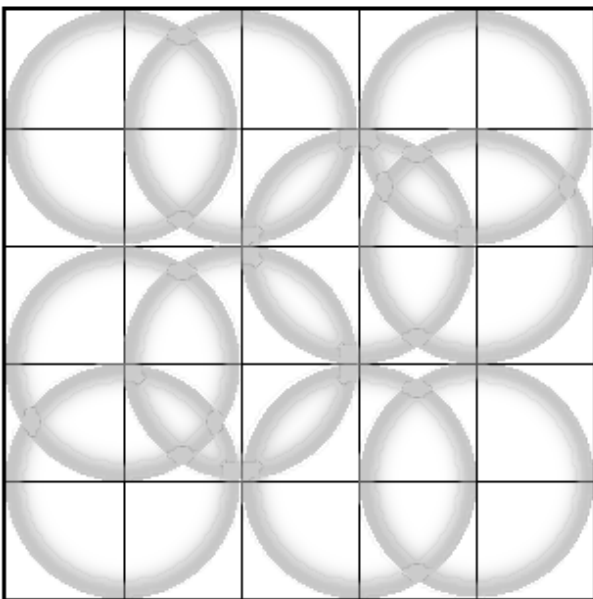
- How many squares in a row or column are occupied
- They've been ordered to disperse so they aren't touching, not even diagonally.
- Remember: they can rotate.



								3
								5
								2
								4
								2
								5
								1
								5
3	5	1	2	4	2	4	6	

Umbrellas

Place the following 10 squares on the 10 circles so that the overlapping numbers match up.



1	9
6	6

9	0
6	6

9	4
0	9

9	8
1	4

3	1
9	8

4	3
4	4

6	2
5	3

5	4
9	4

6	9
3	1

4	6
3	5

*Cryptic***ACROSS**

1. Cuts short insect noises (6)
4. Stoat fur changes in mere (6)
7. Grass reverses casual agreement (3)
8. A tan so bizarre it gives a composition (6)
9. Compressed Rhode Island mail forms counterattack (6)
10. Metal golf accessory in St. Louis, initially (5)
13. Search engine fool (5)
15. Sign up confused loner (5)
17. Red makeup transformed scoundrel (5)
18. Wet thud puts pepper in thin wood strip (5)
20. Object to resistor (5)
23. Sad state? Right, yes, after ache, I hear (5)
26. Hold back twisted flighty movements in southeast direction (6)
27. No, reeve rearranged thin cover (6)
28. I hear ocean realm (3)
29. Finagle strange new lag (6)
30. Flavours in salt as tester (6)

DOWN

1. Young man after mass transit is one who clears tables (6)
2. Buddhist sect at Ithica's beginning opposes nadir (6)
3. Quiet! Nautical rear forms arrow body (5)
4. Eagles nest one year in Great Lake (5)
5. Weather map feature, bizarrely, is boar (6)
6. Add end to require? (6)
10. Arranges varieties (5)
11. Keen find in IKEA Germany (5)
12. Doubtful, yes, after changed fiddle tune (5)
14. Snake turned public service announcement (3)
16. Single within abovementioned (3)
18. Wobble as we changed around Environmental Studies (6)
19. Soothing balm of one litre nitrogen dropped from notion (6)
21. Place second in small part to divide in two (6)
22. Studies ecstasy in warped growl (6)
24. Enlarged obverse throws off very round individuals (5)
25. Veritable beginning changed metal fastener (5)

gridCOMMENTS

I received a whopping **12** submissions to both the Umbrellas puzzle and the crossword this week; that's a lot! There can be only three winners, though (that's why I ask the *gridQUESTION*), so our winners for this week are Graeme Kemkes (who enjoys 5 Down [*My kind of answer!* — *inkEd*]) and Lily Cong (who likes blueberries when field-fresh). And also Adam Amar, who amused me with his answer of "schnozzberry." Congratulations to all our winners. Come to the MathSoc office (MC3038) and claim your prize from an office worker (tell them to look in the *mathNEWS* mailbox for something with your name on it).

This week, there's both a cryptic and conventional, as well as a page full of puzzles. I'm actually really pleased with the Cryptic, since I wrote it myself. Make sure to submit your answers, and not only might I do another one, but you could win our **FABULOUS PRIZE!** *gridQUESTION*: how much is a grid worth?

inkEd

*Conventional***ACROSS**

1. Anger
4. Drywall's made from this
7. Raw material
8. Drank slowly
9. Egg concoction
10. Float
13. To follow
15. Sometimes contains a pimento
17. Narrow roadway
18. Rose pest
20. Insightful
23. Alpine warble
26. Jet engine component
27. A place where work is done
28. Flees sinking ships
29. Spanish 4 Down
30. Riddle

DOWN

1. Steal cattle
2. Italy's "Southern Capital"
3. Cowboy show
4. Hidden beauty
5. Deli meat
6. Endurance
10. Luscious scent
11. Legal
12. Regal
14. Afternoon retirement
16. Dog doc
18. One of the things an accountant does
19. This might happen to an animal at 3 Down
21. Encouraging
22. Aha!
24. Performed in famous Sydney building
25. Act

