

math

NEWS

Volume 96, Issue 3

Friday, October 22nd, 2004



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lookAHEAD**mathNEWS**

October 22	Issue #3 finishes the last of the Thanksgiving leftovers
November 1	Issue #4 Production Night 6:30PM, Mathsoc (MC3038)
November 5	Issue #4 waves goodbye to the last vestige of summer

Math Faculty

October 29	Final exam schedule released Last day for a 50% refund
November 3	Lisa Jefferey talk
November 4	Barbara Grosz talk
See elsewhere in this issue for details on both of these	
November 5	Last day to withdraw from a course

MathSoc

October 24	MATH137 Cram Session – look for posters!
October 29	Candy Casino/Halloween Costume Contest
All next week	Candygrams on sale!
Thursdays	Movie night (2 movies, 2 dollars)

Stop reading this if you requested a MathSoc refund!

MGC

October 26	5PM – Class of 2005 Photo on MC steps
NOW	Sign up for Grad Photos!
Wednesdays	Pizza day

MEF

October 22	Last day to submit funding proposals
(today!)	Last day to apply for funding from the Professional Development Fund

Co-op

Today!	Ranking day
October 26	Match results released
October 29	Continuous postings begin

Miscellaneous

October 31	Hallowe'en Samhain
November 1	All Saints' Day

Hamiltonian flows and the stationary phase approximation

A talk by Professor Lisa Jeffrey
University of Toronto

Winner of a 2004 Steacie Fellowship (NSERC) and the 2001 Krieger-Nelson Prize (CMS)
Wednesday, November 3rd, 2004
4:30PM, MC5158

This talk is aimed at upper-year undergraduates and graduate students.
Refreshments.

Presented by the Women in Mathematics Committee

Special Invitation to Undergrads*Attend a Distinguished Lecture in CS*

You are invited to attend a talk from the School of Computer Science Distinguished Lecture Series on Thursday November 4 at 4:15pm, in RCH101, entitled “Beyond Mice and Menus,” by Barbara Grosz of Harvard University.

Barbara is a world-renowned artificial intelligence researcher. This is a rare occasion to see one of the very best! We'd really like to see a strong showing of undergraduate students.

Come out to learn about artificial intelligence and, in particular, about computer dialogue systems, human-computer interfaces and the growing discipline of collaborative problem solving systems (multi-agent systems).

Full abstract and bio will be posted on uw.talks, uw.cs.ugrads.

We are putting on a special session just for undergraduates to meet with Barbara the morning after her talk. This is an open discussion format and refreshments will be provided.

Meet the Speaker: A Session for Undergraduate Students

Friday November 5 8:30-9:30am MC5158

Refreshments will be served

Come for breakfast and to meet Barbara Grosz in an informal, discussion-oriented setting. Barbara will be pleased to answer any questions about her talk and to get into an open discussion on Artificial Intelligence: its past, its present and its future.

If you are interested in attending the Meet the Speaker session, please RSVP by Oct 26 to wlrush@uwaterloo.ca with the header “Meet Barbara Grosz”. This will help us to plan the refreshments.

Robin Cohen

School of Computer Science

mastHEAD

Well, it's the week before Hallowe'en. This means, um, midterms? I'm reaching here. I seem to recall people having them spread out around this time. Not me, though. I've got three out of four on the same day. Well, I'm supposed to, but I have a tragic inability to be in two places at the same time, so I moved one to the day before. I think this is enough rambling for now.

Production was pretty quiet this past week, as midterms have started sucking away our production staff. A few intrepid *mathNEWS* productionists came out anyway, and we asked them: How are you scaring your peers this Hallowe'en?

Aaron “SquirrelToken” (With the Spanish Inquisition! Nobody will expect it!), Andrew (Dressing up as multiple instances of svchost), DanS (Medium-Rare), Alex (With obsession. Take up a new hobby, and do it non-stop for the week surrounding Hallowe'en), Ali (Eating the 4-week-old potato salad), Perkins (Eating 2 Bite Brownies in only one bite), Diana (Wearing a costume that DOESN'T involve a whip), Kaitlyn “Half-pint” (Threatening to transfer... BOO!), Mark “Beatlemaniac” (With my flashlight... MWAHAHA!)

I'd like to thank Campus Pizza for feeding us, those fine people at Graphics for printing us, and my breastacular friend for being so damn sexy [*Sorry, I needed a third thing... — inkEd*].

Emerald (By smiling)

Eric (I need a special occasion?)

VPAnews

Hey everyone, just a couple of quick announcements from your VPA about upcoming stuff:

- **Exam Bank** - As midterms are upon us, remember you can use the exam bank (online or hard copy) to help you prepare. *sigh*... I suppose I should advise you to use the exams responsibly. Also, once you receive your midterms back, you can drop them off in the MathSoc office (MC3038) and we will make a photocopy and give you your original back. Thanks!
- **Cram Session this Sunday** - Hey all you first years! Hope your algebra midterm went well! We're having a similar cram session for your calculus midterm on Sunday (Oct 24) from 1-5 pm in MC 2065. Hope to see you there, and good luck!
- **Calculators** - Also for first years, remember those calculators you got with the pink tie sticker on them? Those are the only calculators you can use on your midterms and finals. So if you lost yours, you can now buy a new one at the MathSoc office for only \$13! If yours was broken when you got it, see Serge D'Alessio in MC 4023 for a replacement.



That's about it for now, as always if you have any questions you can email me at vpa@mathsoc.uwaterloo.ca or come by the office any time.

Diana Chisholm
MathSoc VPA F04

profQUOTES

"This algorithm is called BS for short, which I hope shouldn't reflect badly on it."

May, CS 234

(After getting the projector to work) "You thought you were going to get the day off, didn't you? Hahaha, fooled you."

McLeigh, STAT 230

"The Poisson distribution is the only distribution named after a fish. Well, actually, it was named after a man who was named after a fish."

McLeigh, STAT 230

"If we used a prime modulus like $k \bmod 15$... wait a minute..."

May, CS 234

"Little o is exactly like big O ... only smaller."

McLeigh, STAT 230

Do You Agree With Abdul?

Brought to you by the Campus Jihad for Allah

Gamers Beware

The world as we all know it is about to end. Many of you may be able to survive this cataclysm. However, since many more will succumb to this evil I will warn you all. The video game industry is currently attempting to destroy our lives. H.A.L.O. 2 and Half-Life 2 have both recently gone gold. World of Warcraft is getting ready for an open beta test, and rumours exist of it and Everquest 2 being released at the same time. Grand Theft Auto: San Andreas is slated for a release in about a week and a half.

This is obviously an attempt by the gaming industry to comander our lives with their captivating titles, causing us to destroy ourselves. Their goal is to make us all spend all of our time in front of a screen, as it slowly bombards us with electromagnetic radiation*, while all the while the game makes us forget to do everything we need to do (like eat, go to the wash-room, sleep, socialize and bathe) as we just sit there having fun playing these games. Uh oh... I'm already starting to fall. I just listed most of those little bar things from The Sims. These can lead to many things — extremes like starvation or, say, your parents killing you after you fail out because you missed your final in order to frag someone. Beware, dark times are coming, but at least the time leading up to the fall will be great. Well, until next time (except the new GTA is coming out before then, so maybe not.)

DanS

* – Light, of course, being a form of electromagnetic radiation

Write for mathNEWS!

It's bloody easy

You may have noticed that this rag is full of articles. Since the editorial staff doesn't generate material by posterior extraction, we rely on submissions of readers like *you* (yes, you, and for goodness sakes, do that in private!)

We're not particularly choosy here at *mathNEWS*. Our criteria for publishing material is pretty simple: your article should be informative, interesting, insightful or funny. Long, rambling, pointless material is out. So are in-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. 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! 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 [Or maybe you can just write better than this hack... — inkEd]. Submissions for a particular issue are due by 6:30PM on Production Nights. Submit, submit, submit!

Eric "inkEd" Logan

MathSoc Exam Bank Considered Harmful

I have always been a strong proponent of student empowerment. I fought to get students onto important administrative committees, such as the ones deciding tenure and promotion cases of faculty members. I have for some time been pushing for a Web-based summary of written comments on instructors, run by students in a responsible and disciplined fashion, as is done at some top US schools. For years, I sent extra paper copies of exams to the MathSoc Exam Bank, and e-mailed in electronic versions.

I still believe in student empowerment, but I have stopped cooperating with the exam bank, because I think that its few positive aspects outweigh its potential abuses. There is a difference between empowerment and endangerment.

Here is how I think the exam bank can be used correctly: as source material for a simulated exam. If a student prints out an exam but does not look at it except to find out the original duration, sets aside that block of time, and sits down and writes the exam for practice, that is a correct use. It can be quite valuable, as it is a more active form of studying than rereading one's notes.

I don't know how often this occurs, but evidence suggests it is rare. Whenever students come to me with old exams to ask about specific questions, they never have written-out answers. When I ask them to go away and try to write out an answer, I rarely see them again. The same thing happens when someone posts an old question to the course newsgroup, and I reply with, "That question is from the Fall 2002 exam. What have you come up with so far on it?" This is usually followed by silence. One undergraduate tutor with whom I've worked always announces that he will correct any worked-out exam questions students give him. He says it's an easy promise to make, as no one ever takes him up on it.

There are two incorrect uses of exam banks that I often see. One is to use exams as a guide to what future exams will be like. Courses vary considerably from offering to offering. In computer science, we often revise courses and change textbooks. One instructor may decide to use different settings or notation to teach the same concepts. I usually have students coming to me in a panic because they cannot do questions on old exams, and I have to tell them, "We didn't cover that," or "What we call X, this instructor called Y."

After writing an exam of mine, I have had students complain that it was, say, "not like the Fall 2002 exam." My answer is usually something like, "The Fall 2002 offering was taught by a sessional hired for one term who didn't bother to look at past practice and set an exam more suited for a night-school course." But even if it had been set by a regular faculty member, it might have been someone new to the course, or someone who inappropriately ignored the handbook description and put more emphasis on their favourite topics. Why should an exam I create match the easiest or most unbalanced exam in an exam bank? Some instructors may make up exams that are too hard, but students are usually able to identify and discount these. However, they don't seem to discount the exams that are too easy.

The other incorrect use of the exam bank is as a source of examples for "pattern matching". Pattern matching is a technique for trying for part marks by recognizing the general form

of a question, writing down an example learned in class, and tweaking it in the hopes of coming close to the right answer. It doesn't demonstrate any real understanding of the concepts. Some students seem to confuse pattern matching for genuine learning, or have cynically decided that this is a way to earn credits. I have noticed solutions to old exam questions, or from assignments earlier in the term, appearing on exams I am marking. My questions are different from the earlier ones (I can read old exams, too) but sometimes the solutions I get are not changed at all. This is more frequent when we allow a one-page "crib sheet," which is supposed to spare students from memorizing facts instead of learning ideas. Instead, it encourages some students to copy out solutions to past exam questions without even committing them to memory. I instruct my markers to watch for pattern matching and not reward it. "Crib sheets" are another empowering device I am reluctantly abandoning.

The title of this article was inspired by a famous paper by Edsger Dijkstra called "Gotos Considered Harmful," referring to the goto statements found in many programming languages. They are occasionally useful, but they are far too easy to abuse. In recent years we have stopped lecturing about them, even their beneficial uses. I know that the MathSoc Exam Bank is not about to disappear, and even though I have stopped submitting materials, my exams will probably find their way into it anyway. My hope in writing this is that some students will think about how their uses of the exam bank might be doing them more harm than good.

Prabhakar Ragde
Professor, School of Computer Science

More *prof*QUOTES

"... and bulls hate Spaniards, for obvious reasons."

Shelly, PHIL 256

"You can do it in a clean way, but let's do it in a dirty way."

Roettler, MATH 239

"My all-time record for midterm average is 33%. You guys are gonna beat that!!!"

Barbi, ECE 241

(After a joke to which nobody laughs) "That was math humour ... sorry."

O'Donovan, PHYS 121

"For large values of 2, 2 is greater than 1.5."

Hare, MATH 137

(Written on board, after staring at notes) "SKIP INTRODUCTION – IT SUCKS"

Hare, MATH 137

"What am I doing? This proof is crap!"

Hare, MATH 137

(Looking at notes) "How does that work? Oh, I see! That's cute!"

Hare, MATH 137

"1/3 is a number. 0.3333333333... is a mess."

Wood, MATH 115

MathSoc Exam Bank Considered Useful

Prabhakar Ragde just brought up a number of very good points. However, I feel his focus is off the mark. Ragde seems to be blaming the exam bank itself for the ways in which certain students misuse it. Using this logic I could blame my hammer for the swollen thumb I experienced while I was hanging a painting.

In fact, my swollen thumb was a direct result of my own actions, or rather inaction. It was my lacklustre attention to caution that caused my thumb to swell up. When I brought the hammer down at an excessive speed and aimed it just a little too far to the right, I made a critical mistake that hurt me.

I would be foolish to blame the hammer for this mistake. I would be more foolish to condemn the hammer for all harmful effects that befall people while they are hanging paintings. I would be even more foolish to imply that hammers should not be used at all because of these harmful effects.

When I am working behind the counter in the MathSoc office and someone asks me for past exams, I am delighted to hand them over (in fact I am disappointed that I do not have a more complete set to give.) I am proud to offer fellow students tools that they can use to better themselves come exam time.

When I learn of these students using these exams as Ragde mentioned, I heave a sigh of disappointment and ponder the idiocy of these individuals. However, I am not about to imply that this service should not be available just because some people misuse it. What would the world be like if we banned all hammers just because certain people give themselves swollen thumbs?

Scot Nyback

MathSoc Volunteer - Fall 2003 to present

We've got a lot of profQUOTES

"I was never good at art. My parents were relieved. No starving as an artist."

Wainwright, AMATH 231

"I have to admit I did it both ways, and I got two different answers, and when I checked them they were both wrong. How humiliating!"

Wainwright, AMATH 231

"If you are an engineer, then you do it three times — it's true in general, but for a mathie..."

Wainwright, AMATH 231

"You've worn me out on 'onto' and '1-1' ... I dream about them, wake up screaming 'ONTO!! 1-1!!'"

Crippin, MATH 136

"I'm almost ready to keel over from talking about this ... but I can't stall for 15 minutes, so I'll just do it."

Crippin, MATH 136

"Polymorphism: From the latin 'Poly' meaning 'parrot' and 'morphism' meaning 'guy from The Matrix.'"

Kaplan, CS 246

"I don't even think I have a full rest of the lecture's worth of stuff to talk about, so maybe I should pause for the next 20 minutes."

Kaplan, CS 246

ElseWhen

10 Years Ago in mathNEWS

Welcome to the venerated volumes of the *mathNEWS* archives, where we reach into the past and pull out the very stuff people were laughing at 10 years ago in this very publication. And now, a summary of Volume 66, Issue 2.

inkEd

Prez Sez

Marco C.A. Koechli is Prez in F94, and he reports that 150 new lockers have just been installed, Friday, October 21st is Bombshelter Night, and MathSoc will be showing the *Rocky Horror Picture Show* on Friday, October 28th. Men encouraged to come in drag.

Thought of the Day

A parent is a banker provided by nature

Curtis "Chewie" Desjardins

Grumpy Young Frosh

Sarah Kamal appears as the grumpy young frosh. She's *not* bitter, just grumpy. She's grumpy about math guys begin weenies, not being able to find washrooms, the fact that the frosh issue gave her bad advice regarding textbooks, and the fact that Engineers are thugs. A quotation follows:

*Oh yeah, and about those vague rumours you've heard floating around: they're true. Yes, engineers ARE thugs. I have proof. I had the pleasure(?) of sitting in on one of their math classes, and I found out that, get this, they were doing **matrices!** (!!!) Yes, folks, while we were trying to figure out delta epsilons, **they were learning ROW REDUCTION!!!** (!!!!!) Is it possible?!! Yes, sadly, shocking though it may be, contrary to everything else we know and love about our dear, dear engineering colleagues, they are indeed thugs.*

profQUOTES

"What's the most important word is setting up a mathematical solution? Someone out there said 'TA's'"

Wainwright, MATH 137

"Never talk to Algebraists. They lie to you all the time"

Forrest, MATH 147

"Shallit's Constant is the number 2."

Shallit, CS 360

"Completeness rules the day!"

Forrest, MATH 147

Otherwise

- HRH Marni Mishna, Queen of PMC, deigns to submit an article.
- MathSoc gets a new Constitution.
- Orientation hats are here! [*Er, well, they WERE here... — inkEd*]
- Tomas Tocek writes about why UW rules
- Dan Gardiner takes up space
- The *mastHEAD* asks: "What's your favourite post-Oktoberfest activity?" [*My favourite answer: Novemberfest, what else? — Ian Goldberg — inkEd*]
- Mike "Hammer" Hammond wins the *gridWORD*

HorrorScopes

ACC

This week, you will embark on a mission to take over the world! It won't be hard; just enter yourself in the U.S. presidential election. Almost anyone would be better than Kerry or Bush. Take UNDECLARED; they have no idea how to spend their time. Your lucky number is one world under your control.

ACTSCI

Due to the new "requirement" to take STATS 443, you realize you actually have to get a STATS minor. There's no way to avoid it: your degree is now ruined.

Your lucky number is a angle 2.

AMATH

The stars had a HorrorScope for you, but when they told me, I got so terrified that I felt sick. Just the thought makes me woozy...

Your lucky number is a black hole.

BBA/BMATH

The stars tell me that only about 10% of this year's frosh class is actually from Laurier. Let me try and figure this out. Waterloo: way more guys than girls; Laurier: way more girls than guys. Waterloo: ugly student cards; Laurier: nice student cards. Number of first-year Waterloo co-op jobs: 0; Number of first-year Laurier co-op jobs: 0.

Some things never change.

Your lucky number is 0.

C&O

People have told me that I'm being too harsh in these HorrorScopes; in fact, I'm having trouble sorting through my hate mail. If you'll give me an optimized sorting algorithm, I'll write something nice about you next week. For now...

Your lucky number is a ton of hate mail.

CS

Don't worry that enrollment in your program is decreasing, and so are admission averages. The next tech boom is sure to be bigger and better than the last one. Assuming, of course, that it happens in your lifetime.

Your lucky number is 127 years.

MATHBUS

Apparently, the stars don't think very highly of your program. Rather than embarrass you in front of everyone by telling you what they said, I'll put it in a top-secret code that only your genius can decode. Xnt rtbj! Think one letter down.

Your lucky number rtbjr!

MATHSCI

The stars are telling me something, but I can't figure out what they're saying. Maybe it would help if I had some idea about what MATHSCI is. Then again, maybe the stars don't know either and are just giving me gibberish.

Your lucky number is blah, blah, blah...

Operations Research

Your fortune arrived in an envelope that was leaking white powder, so I mailed it to SCI.

PMATH

As I write this, I have a MATH 135 midterm looming. The... stars... yeah, the stars... promise you endless prosperity and happiness if I can slap a pink tie sticker on you and take you into the exam as my calculator. Of course, I'd have to tattoo the model number on you too.

Your lucky number is EL-531W.

SOFTENG

Don't you think it's kind of funny that you've spent more than three years of your life in a program that wasn't fully developed and getting screwed at every turn, only to now be taking exactly the same courses that any CS student could? No? Funny, the stars do.

Your lucky number is SE 380/ECE 493.

STAT

Since ACTSCI now gets a STAT minor for free, why not convince them just take pure stats? After all, maybe then there'd be enough of you to get your own table at Charity Ball!

Your lucky is \$280 for a table of 8.

UNDECLARED

It's course selection time, and that means that you'll actually have to make a decision! Offer to switch timetables with ENG. There, you'll never have to make a decision on what you're going to take!

Your lucky number is 3.0 units.

ARTS

Guess what? Now that it's been, oh, more than a month since the term started, you'll actually have assignments due soon! I know, what a concept. Hire one of those "essay research" companies I keep having to put posters up for to, uh, do essay research for you. After all, there's nothing wrong with research.

Your lucky number is \$11.50 per page, delivered within 48 hours.

ENG

As part of your faculty's hopeless pursuit to make you more employable, I hear that your frosh will have to take "professionalism" courses during their work terms. Muahahahaha!

Your lucky number is—wait, that includes me, doesn't it?

ES

Don't worry that there's a pretty good chance that your faculty will be disbanded if and when Architecture moves to Engineering! You can still be distinctive inside ARTS, say. No? The stars are telling me that ENG planned this so they can use the ES Dean's office to store The Tool. Get revenge. I'm thinking concrete.

Your lucky number is 300 pounds plus the weight of the concrete.

SCI

I mistook your fortune for cyanide, and so I slipped it into Operations Research's drink.

revived

Denying Your Genealogy 101 - Moving Back Home

Week 3 - Keeping in touch with everyone

I highly advise close contact with as many people as possible — old friends, new friends, that awesome older cousin of yours.

This comes with a warning however — you may run out of money or time doing this. Consider a few swaps — buy one less latte, and call that friend long distance instead of shooting them an email. Don't write the column you were intending, and spend an entire night writing emails to explain a social crisis!

Half-pint, tired and with fingers sore from typing up emails and last minute articles at work, reporting live from Ottawa

Mixing Business And Pleasure

Midterms and mathNEWS Don't Mix

Ahhh it's midterm month yet again. If you're like me, then you've got a MATH237 midterm coming up and you'll want to do some studying for it. Normally this means less time for fun things like reading *mathNEWS*. What's a mathie to do?

SquirrelToken to the rescue! As a service to all of us enrolled in MATH 237, I present the following revisions to this article as a way to both take a load off and still cram a bit more knowledge into your cranium (either that or to justify reading *mathNEWS* when you're supposed to be studying). So with that, let's start this again.

Ahhhh, it's midterm month again, a time as constant as you keep y when you take the partial derivative with respect to x. If you're like me, then you've got a MATH237 midterm approaching kind of like how the error term of linearization approaches 0 faster than x in a differentiable function. You'll eventually want to do some studying for it, but not all at once. The magnitude of such a task would be at its greatest, like the directional derivative when u is in the direction of the gradient. Unfortunately, that means you can't be both studying and doing something fun like reading *mathNEWS*, just like you can't have a function that is both differentiable and discontinuous. What is a mathie to do?

SquirrelToken to the rescue, much like the limit definition sometimes comes to the rescue when calculating partial derivatives! As a service to all of us enrolled in MATH 237, I present the following revisions to this article as a way to take a load off, just as the Hessian Matrix allows you to revise a 2nd Degree Taylor Polynomial to functions of two variables. So good luck on those midterms and here's to being a mathie!

Hope you enjoyed that, or at least learned something, or at least managed to keep from gouging out your eye with a pencil. If it makes you feel any better, I'll be sitting right there next to you and we'll both be in the same boat.

SquirrelToken

No, you're never getting those last 5 minutes back.

Foreign *prof*QUOTES

In case you are interested in *prof*QUOTES that don't necessarily originate at U. of Waterloo, here are a few from the University of Toronto:

"No finite cover could get to 2004, for example. That's larger than any reasonable finite number."

Dror Bar-Natan, MAT 1300Y

"Strictly speaking, I've proven the wrong lemma. Nevertheless, it is a lovely lemma."

Dror Bar-Natan, MAT 1300Y

"How do you spell Lebesgue...Lebegusgue?"

Dror Bar-Natan, MAT 1300Y

"1300 is the number of the course, but it's such an ugly number. Let's pick 427."

Dror Bar-Natan, MAT 1300Y

Ever Wanted to Learn About Speech Communications?

Greetings, Mathies. Many of you are likely wondering what the heck math and speech communications have to do with each other. Well, I'm here to tell you. Did you know that a number of Mathies have done a joint-major with Speech Comm.? Well it's true! You can do a double-major, minor, or simply an option in spcom. But don't take my word for it. Wan Bun Ho, a CS graduate has this to say about the speech communication program:

"As a computer science student, opportunity for presentations or group work is limited due to the technical nature of the field. Not only did I learn valuable communication and interpersonal skills that are essential for today's workplace, but my career options also expanded as a result of the soft skills that I acquired through my Speech Communication courses."

How can speech communication help you as a student of mathematics?

First of all - co-op interviews. Ever really messed up an interview? Don't know how to express your achievements without sounding cocky? Want to know what to expect from interviews? Well you can take SPCOM 225 - Interviewing.

Another good courses is SPCOM 224 - Interpersonal Communication - This course can help you with talking to your lab partners when they're annoying you by doing perception checks, learning how to improve your listening skills (which might come in handy in a boring Calculus lecture), and how to deal with conflict.

Finally SPCOM classes don't have midterms or final exams! This is something that Math students can appreciate.

If you're interested in learning more about the speech communication program and possible careers, please come to our career night on Thursday October 28, entitled "Fast Forward - Bringing the Future to You." This event runs from 7pm to 9pm and features a number of guest speakers from areas such as communications, teaching, theatre, and many more. There will also be a number of booths from various local industries as well as providing you with a number of grad school options. Engineers, this is a great opportunity to NETWORK, possibly find a co-op job, and a great opportunity to learn more about the Speech Communication program at the University of Waterloo.

For more information, please email us at career.night@gmail.com.

Let us bring the future to you at *Fast Forward* - See you there on October 28, 2004!

Midnight Capture the Flag

Those who wish to play Capture the Flag on October 31st at approximately 11:59PM should show up around the Comfy at that time.

I Don't Care Who Byron Is

And I wish the Campus Crusade for Christ would stop spamming my campus.

inkEd

Holy profQUOTES Batman!

“A great question, which I’m not going to answer, is ‘Why would I want to use congruences, anyway?’”

Godsil, MATH 135

“Now that we’ve proved that at least *I’m* confused, we’ll move on.”

Godsil, MATH 135

“You can do the problems a different way, but it’ll almost certainly be more work. If you think work’s good for your soul, or something, then be my guest.”

Godsil, MATH 135

“Does anyone else want to stop me from starting the lecture?”

Godsil, MATH 135

“You should treat mathematics like a lawyer would; if it’s not specifically excluded, it’s okay.”

Godsil, MATH 135

“If I ask you to prove that there are infinitely many primes, and you write, ‘By Euclid’s Theorem, there are infinitely many primes,’ you can imagine how many marks you’ll get.”

Godsil, MATH 135

“If you’re given a 4x4 matrix, and you find the determinant by cofactor expansion, you’ve got a boring life, since you’ve obviously got nothing better to do.”

Wood, MATH 115

[prof] “What is this?”

[student] “It’s a number!”

[prof] “Very good... it’s a good thing we don’t have a fill-in-the-blank exam: ‘This is a... number.’”

Wood, MATH 115

“QED stands for ‘End of cool, abstract proof.’”

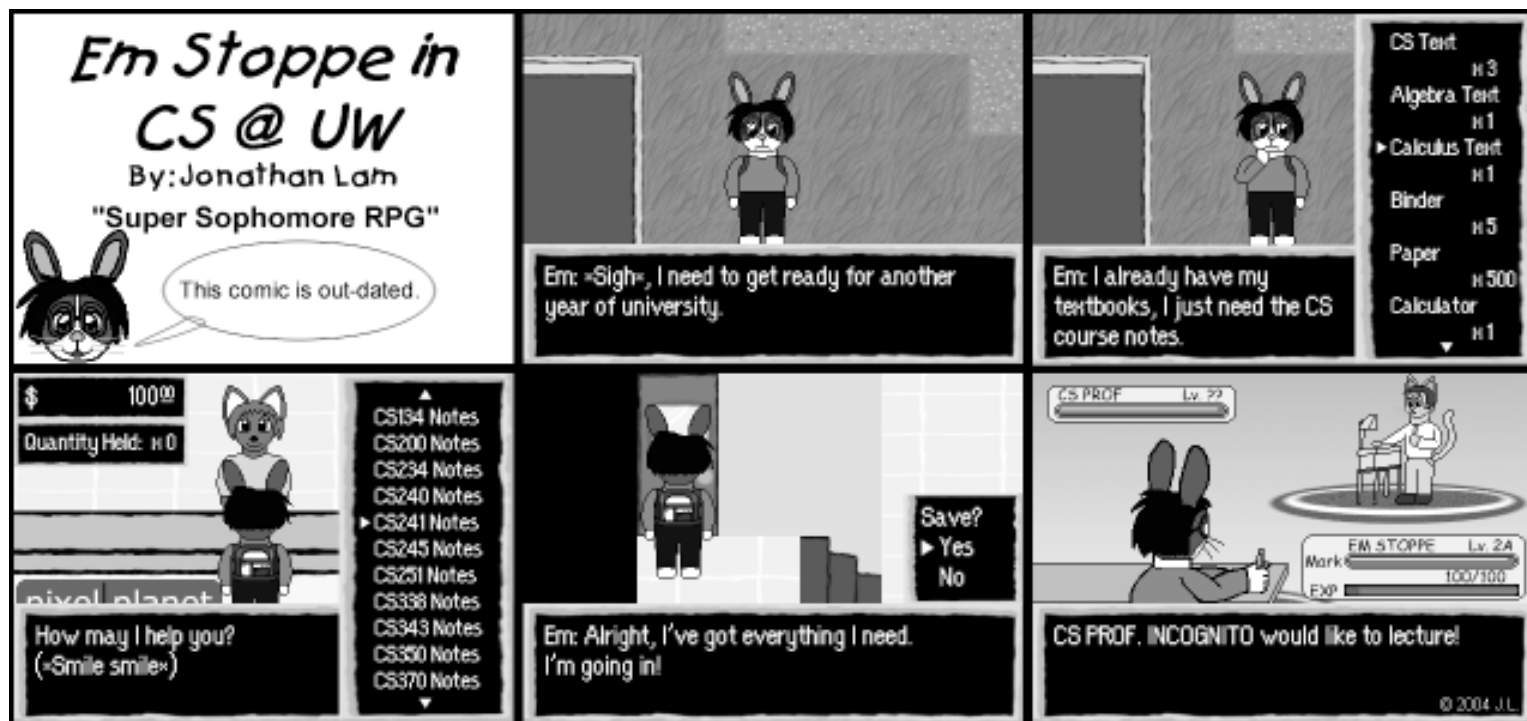
Wood, MATH 115

How to Create an Issue of Dark Matter

As you are probably unaware, physics undergrads create a small thrown-together paper called “Dark Matter”. To deeply understand this paper, let us go through the steps in creating an issue of Dark Matter.

1. Start up your computer and open up Adobe PageMaker
2. Realize that you have no skills, open up MS word instead
3. Collect all the prof quotes submitted in your mailbox
4. After seeing none, look through your own notebook for the 4 you wrote down the past week
5. Type all the prof quotes into word
6. Notice you don’t have anywhere near enough to fill a page, make some shit up and call it studentquotes
7. Start typing, write whatever pops into your head
8. Give up after 15 minutes of blankness, Google for local physicists like “Dan Gottesman”
9. Find something obscure he wrote as a grad student that was remotely funny, slap a Dark Matter title on it and publish it
10. Notice that your issue is printing out a little thin
11. Get your non-physicist roomie to put the joint down and start writing something whiny
12. Print out your masters, take to the Science Society for printing
13. Convince SciSoc that yes, you are not joking and want this issue with your photocopied ass on the cover published
14. Continue to convince SciSoc that this is not a joke
15. Take the dozen or so copies actually printed to the Physics lounge
16. Watch as a record 2 copies are actually read
17. Watch the rest of the copies get torn-up for use as pagemarkers for people reading their huge-ass physics books

Ian W. MacKinnon
Flame On!



Graffiti Wars

A Valiant Effort

I am sorry to report it, but the Mathies have lost the graffiti war against the Engineers. If you haven't been following this battle, it's been taking place in the men's washroom just outside the C&D in the far left stall when you're entering. Upon taking the normal place in this stall, you will be able to see the results of this crushing defeat.

It all started innocently enough, when a naive engineer sat down in this stall and decided to write "ENG >> MATH" on the door in front of him. Little did he know where his efforts would end.

Naturally, no self respecting Mathie could let that slide. However, we were already climbing a slippery slope from the get-go, as a Mathie forgot his logical rules. The reply consisted of a single line and a single dot, creating "ENG !>> MATH". However the term not much greater than is very ambiguous. Did this Mathie mean to say that Engineers are much less than Mathies, or did he perhaps mean less than, or equal, or greater than? One can only assume the first option, but it was not explicitly stated.

The Engineering response helped us out a bit, as it reeked of desperation and an overall lack of creativity. This response was to cross out the ">>" and replace it with "<<". Thus the etchings on the wall now read (more or less) "ENG !<< MATH". Not only did this lack creativity, but presents the same ambiguity problems as the previous move. Chalk one up for the Mathies.

However, then the weakest link in the Mathie chain came along and completely ruined all our hope for salvation. He wasn't going to take any crap on behalf of his faculty, so he got a rather clever idea. He thought that the << operation (which at this point was nestled nicely below the exclamation point which causes negation) could also be interpreted as a bit shift. But how to express this idea? The only real option is to write a little explanatory caption. Thus the final etching on the wall was born, and completely drove the Engineers above the Mathies in this battle. However, all you Engineers out there should realize that the war is far from over!

What was this caption that obliterated our Mathie pride? Simple: "English is the one that's left shifted". *sigh*

Scot Nyback

10 Great New Video Games For Math Students

1. **Grand Theft Automaton:** Cause massive amounts of mayhem while avoiding the error state, as you go around town highjacking DFAs, NFAs and more.
2. **Real-Time Championship 2k4:** This year's version of the popular multiplayer game, featuring a new gametype this year where you start out on a map with a root, and try to create a linked list to the other team's root.
3. **The Discrete-Event Sims:** Construct a new tree, including the parents, and children. Then play out their daily lives with all sorts of actions, like getting serviced.
4. **T.O.R.U.S.:** You are Master Chord, in a remote corner of \mathbb{R}^3 and stumble upon a giant ring world while fighting alien Concurrency forces.
5. **StatCraft:** Play as one of the Hypergeometric, Binomial or Poisson distributions, then, send as many trials over to your enemies and try to cause them "failure." Get good enough and your probability of success is near 1.
6. **Metroid':** Samus Array is an explorer of distant vector spaces. While on a mission she comes across functions know as Metroids. Aid her in differentiating these aggressive foes down to zero, and pray that they are all polynomial.
7. **CS: Sourcecode:** Bringing one of the most popular online games of all time up to date with a brand new engine. Be either an example, trying to reveal trade secrets to the world, or oppose them as a counter-example and make an example of the examples.
8. **Final Fallacy 14:** The next iteration in the popular RPG series. It's basically the same game as before, but it's got prettier graphics and a slightly different setting, it still has the same basic story that absolutely defies logic.
9. **Co-op Tycoon:** It's a simple game, you run CECS, and are trying to make as much money as possible. Your goal is to take money from all the hapless Co-op students while doing nothing to get them jobs. You'll have to do stuff, since you at least have to look like you're doing something, but try to minimize your work; make them find jobs on their own.
10. **Parse Parse Revolution:** Try not to be overwhelmed as you are bombarded by tokens.

DanS

Mathify Your Hallowe'en

Here are some fun ways you can make your Hallowe'en Magically Mathelicious:

- Dress up as a greek letter. I suggest lambda. You can then convince your significant other (or ... someone) to dress up as a vector and you can be an eigenpair.
- Decorate your house with a mathie theme. I suggest the always spooky "Haunted CS Lab." Turn out all the lights and use tinted fluorescent lighting to simulate the glow of the terminals. Alternately, use lots of pink. Yeah it clashes with the traditional orange and black, but that kind of thing is for artsies.
- Tell mathie ghost stories. Your friends will shriek when they hear about the first class of CSers who are forced to

take graphics, real-time, and compilers AT THE SAME TIME, or the day that they disproved the Triangle Inequality.

- When the kiddies come to your house for trick-or-treat, hand out rigorous proofs. But remember, if you have a little brother or sister, be sure to thoroughly check his or her proofs for logical inconsistencies.
- Throw a Mathie Hallowe'en party. Don't actually invite anyone over; that would involve your friends going outside. Just fire up MSN and chat the night away. Be sure to change your screen name to something Hallowe'eny. You know, just to get into the spirit.

Have a Happy and Mathematical Hallowe'en!

SquirrelToken

Yet more *prof*QUOTES

“If you think like a mathematician, which is not always a safe thing to do...”

Wood, MATH 115

“When you see code this complex, it’s heart-attack time.”

Dasiewicz, CS 133

“Some of these things make you think mathematicians spent their time out in forests eating strange mushrooms.”

Statsna, MATH 117

“If I see that you are doing this, I am going to take ten thousand marks off.”

Safayeni, CS 432

“You’re done, you’re gone. You will be punished for a lifetime.”

Safayeni, CS 432

“Your textbook doesn’t follow these rules either. That’s why the publisher is doomed and dead and punished for life.”

Safayeni, CS 432

“This is where the data goes to sleep.”

Safayeni, CS 432

“Adverbs are promiscuous. They’ll nuzzle up to any word in a sentence.”

Harris, ENGL 306A

“...Because gods are generally important to religion.”

Curchin, RS 326

“Where do you go to consult the dead? And don’t say Wilfrid Laurier. [pause] Did I just say that?”

Curchin, RS 326

“Whenever I say someone is brilliant, you can assume they’re crazy, too.”

Seljak, RS 317

“Sorry, I didn’t mean to run into the wall like that.”

Seljak, RS 317

“There were ten persecutions, but they weren’t important. Well, they were if you were in them.”

Wahl, RS 325

[on pornocracy] “Monarchy is rule by one. This is rule by porn stars. I love this period of church history.”

Wahl, RS 325

[on Crusaders] “They thought you should drill holes in your head to cure a headache. The Arabs thought this was hilarious. Sometimes little grey stuff would dribble out.”

Wahl, RS 325

“This isn’t Algebra. Algebra lets you get away with a lot of crap.”

Forrest, MATH 147

Greatest Canadians

The end is near

With CBC releasing the top 10 list of greatest Canadians on Sunday, we are now left with a great decision: Who will we elect to be our greatest Canadian of all time? The list is impressive, including scientists, athletes and politicians. Who should we elect? That’s up to you. On Monday and Wednesday nights, tune in to CBC to watch as one candidate is presented (you’ve already missed the shows for Tommy Douglas and Wayne Gretzky.)

As can be found on the CBC homepage (<http://www.cbc.ca/greatest/>) here is a quote for each candidate to get you started:

“I’ve held women and babies and jewels and money, but nothing will ever feel as good as holding that Cup.”

Wayne Gretzky, The Greatest Canadian Top 10 Candidate

“...I obtained the idea that was to alter every plan that I had ever made, the idea which was to change my future and possibly the future.”

Frederick Banting, The Greatest Canadian Top 10 Candidate

“Canadians do not need to be liberated.” (In response to French President Charles de Gaule, 1967)

Lester B. Pearson, The Greatest Canadian Top 10 Candidate

“Efforts to teach children to love and respect nature are priceless...I hope this new generation will look after our planet better than we have.”

David Suzuki, The Greatest Canadian Top 10 Candidate

“A good carpenter can work with indifferent tools.”

Sir John A. MacDonald, The Greatest Canadian Top 10 Candidate

“I don’t have any hobbies. I don’t golf. I don’t fish. I have no other interest in life except hockey.”

Don Cherry, The Greatest Canadian Top 10 Candidate

“I just wish people would realize that anything’s possible if you try. Dreams are made if people try.”

Terry Fox, The Greatest Canadian Top 10 Candidate

“My friends, watch out for the little fellow with an idea.”

Tommy Douglas, The Greatest Canadian Top 10 Candidate

“Leave the beaten track behind occasionally and dive into the woods. Every time you do you will be certain to find something you have never seen before.”

Alexander Graham Bell, The Greatest Canadian Top 10 Candidate

“There’s no place for the state in the bedrooms of the nation.”

Pierre Elliott Trudeau, The Greatest Canadian Top 10 Candidate

This is not your typical election, as you’re entitled to multiple votes, so as they say: “Vote early and vote often!”

Mark “Beatlemaniac” Toivanen

Wingmanning 101

So you played it smooth and you got a girl, good work. Then you notice that your friends haven't been quite so lucky — it's time for you to graduate to wingman. A wingman's job is to ensure that the wingcommander (one of those single buds) lands the girl he's going after (I didn't make up the terms, trust me, it's standard).

Adding a wingman does more than give you a chance to try two different approaches (even if you fail, the wing commander still gets a solo chance). You've got someone already, so you're less threatening; you're not trying to sleep with her, which sets you apart from the other guys hitting on her — even if you don't realize it, she'll notice. You're more secure and confident because you don't really care if you pick her up or not.

You have more available targets — it's hard for one guy to approach two girls, and, far too often, she'll be with a friend. As wingman, you should find yourself talking to the friend and being interesting enough that she doesn't care your wingcommander is picking up her friend. If, after a few minutes, you find that they are still talking mostly to each other, and you are mostly talking to WC, you've probably failed.

Come up with your game plan before hand, since you won't get a chance to discuss it while you're implementing it. However, you shouldn't feel forced to stick to it. The play should come off fluidly, and you should be able to tell where and how you're needed (and critically, when you aren't any more.) Basically though, your game plan should have 3 parts:

First, help select the target. Your job is to provide a sober second thought and to pick the timing for the approach (nervous people should not choose the timing.)

Next is the pickup, it's pretty much the same as a normal pickup except you should be less direct. You could approach her friend, for instance. Your job here is to get her name (and remember it, in case WC forgets) and to find something in common between her and WC. When you have that and the conversation is on the upswing, you can bring in the WC.

The timing doesn't have to be exact but WC should have some vague idea of when to come in, hopefully by watching discretely. You can bring him in with a "hey [WC], you should meet [name], she's really into [thing in common]. [WC] does [interesting relevant thing]."

The final step is to extract yourself — at least from the primary target. She should be focused on the WC. This doesn't always mean you should go away: you may still be needed to distract her friend. And you should check back periodically to give the conversation a natural exit if it's broken down.

A good wingman is also there to console the WC after a failure and to make sure the WC follows through if he gets a number.

Failure is always a possibility, but it's one more reason to have a wingman. Not only do you care less about rejection, but your wing commander hasn't been 'tainted' by the failure, and nobody wants to be anyone's 12th choice — and girls notice. The shame of failure (which you shouldn't feel, but most people seem to) is shared and can be consoled more effectively.

(Confidential postscript: seriously guys, if you have to give each other the thumbs up when you think it's going well, be discrete. It really makes you look silly.)

Dave

Insubordinate Chicken Consumers' Association

Another Failed Humanitarian Organisation

mathNEWS Press - Waterloo. On March 12th, 2002, a man by the name of Chee "Ken" Farmer began a movement that has many peoples' ears buzzing. He formed a non-profit organisation called the "Insubordinate Chicken Consumers' Association," or ICCA, which was created "to expose the truth about chicken consumption in the Western World." Since its creation, hundreds of chicken consumers have joined the ICCA.

After the creation of the club, Mr. Farmer promoted it by means of a large-scale marketing campaign that introduced concerned or otherwise interested chicken consumers to the organisation by raising awareness about chicken consumption. The response he got varied widely.

"He's a radical," said one student. "I respect his freedom to speech, but personally, I think that man is totally crazy."

"I've never thought too much about my chicken consumption before," said another student, George Tytophan, "but Ken really got me thinking. I will never see chicken the same way again."

Over the course of the campaign and the months that followed, several dozen members joined from the U.S. and Canada, perhaps most notably the former United States president Gerald Ford. Throughout 2002 and into 2003, hundreds of individuals requested membership to the group, with about 30 volunteers actively contributing to the movement. At the peak of its popularity, Burger King released a popular website to crush the ideas promoted by the ICCA. It featured a chicken that was quite subordinate.

However, in the Fall of 2003, chaos hit the ICCA. Many people in the association apparently believed that the association concerned the consumption of insubordinate chickens, while its original incarnation was as an organisation for insubordinate consumers of chicken. To make matters worse, the ambiguity exposed revealed that another, smaller group of people thought the insubordination referred to the association itself.

"All this time, I thought these people were against the consumption of subordinate chickens, and now I find out it's all a lie," said one angry member.

"I just don't understand how a chicken can be insubordinate. It just makes no sense," said another.

Many members left, but those faithful formed 4 new organizations: the Association for Insubordinate Consumers of Chicken (AICC), the Association for the Consumption of Insubordinate Chickens (ACIC), the Insubordinate Association for Chicken Consumption (IACC), and the Anti-Anglophone Ambiguity Association (AAAA or 4A), which Farmer himself started because of his frustration with his shattered organisation and his shattered dreams.

"All I ever wanted was to unify Chicken Consumers around the world," he said in a press release. "I was so close and now it's over."

The AAAA later disbanded when it became apparent that some members thought the organisation was primarily anti-anglophone and used ambiguity to achieve its goal of destroying the English language, rather than being an organisation against the inherent ambiguity in much of the English language.

frogg

mathNEWS BYOB #3

Break Your Own Brain - Third Time is a Charm

Mmmm, so much BYOB. Who knew that I'd end up filling almost two full pages last issue (not I, who only saw it online and thus didn't really know how big it was until recently, my what big BYOB you have, the better to puzzle you with my dear.) Well I'm going to make an effort to keep it down to a single page for sanity reasons. In order to save on the mammoth amount of space I took up last issue I'm going to forego the pictorial answers and just go with sweet sweet text. Note that text is much sweeter when covered in honey, but then again, isn't everything?

Letters Like Learning

There were actually three solutions here (although only our former *mathNEWS* editor got all three).

FECADB	FECADB	FECADB
BCAFED	BCAFED	BCAFED
ABDEFC	ADBEFC	ADBEFC
DFBCAE	DBFCAE	DBFCAE
CAEDBF	CAEDBF	CFEDBA
EDFBCA	EFDBCA	EADBCF

Super Secret Scramble

The descrambled words are: Zygotes, Literate, Distract, Aortic, Sweet. And the secret word: Princess.

Pretty Perfect Pathing

This Blue->Pink solution is the one that got me 3/3 way back when I took M239. And the solution for Rats->Stop is particularly entertaining if you notice that the entire set from pots->stop is palindromic (thanks Greg!). 1. blue blur slur slut slit shit shot soot foot fort port porn pork dork fork cork cock lock lick luck fuck suck sunk dunk dung dong ping dink dick pick pink

2. need nerd herd hard card cord core code
3. lord ford fort fart
4. rats pats pots pets pees peep seep step stop

We had a hefty 8 submissions this week, yay! Adam Weatherhead continued his trend of only submitting the Letter problem, he gets 1/3 and a grin from me for bolstering my submission numbers. David Hillis got 2.9/3 (losing .1 for making me use oed to confirm his pathing answers). And the other six submitters: Colin Rhodes, Joseph, Catherine&Diana, Nigel D'Souza, David Held, and Greg Taylor all got a perfect 3/3. So it goes down to tiebreakers. Joseph, C&D, and Greg each submitted a tiebreaker. But I've gotta give the nod to Hologrami (That would be Greg for those of you who cannot remember his glorious tenure as a *mathNEWS* Editor) because he said that since he's far away we should pass on his winnings to the runner-up, which means someone else wins anyway! And so, Catherine&Diana are our winners, with an interesting problem that you'll see for yourself very shortly. Come on down to MC3038 (MathSocian Death-By-Photocopier Chamber) to pick up your C&D gift certificate.

Ah, the tiebreaker. That which gives a little breathing room for my brain. Since we have this tendency to have perfect submissions, and because it's not easy to come up with interesting problems at the appropriate challenge level for every issue, you

can make your perfect solution get that extra nudge needed to collect the mega-prize (note that the mega-prize is completely equivalent to the regular prize) by submitting a riddle / puzzle / brain teaser along with full solution, and in the event of a tie, our favourite will win. Answers must be in by 6pm on November 1st. You can submit to the **BLACK BOX** between the C&D and Comfy, you can email us at *mathNEWS@student.math.uwaterloo.ca*, or you can submit to me in person (which must be prefaced by a fun game of "Find the Snuggles.")

Missing Letter Puzzle

Why is there no Letter puzzle you ask? Because it has been such a hit that in future issues we're going to try to spin it off as its own little puzzle, it's the Joey of BYOB. And in order to accomplish this we need a method of generating them, while I work on that we need a different puzzle to dazzle and entertain you. Given a 6x6 square, fill in the blank squares so that each integer from 1 to 36 appears exactly once (one number per square) and the sum of the rows, columns, and two main diagonals are all equivalent (if you give it a little thought you'll realize what this sum must be.) You'll get full marks for getting EITHER of the following filled in correctly, if you do both you'll get a bonus point (so 4/3 is totally possible this week).

32					21
30		2			
		17		28	
	11			26	
	16		33		
			35		7

	32				
					8
24					
			21		
		10			
					31

Sum Enchanted Evening

This puzzle is brought to us by Catherine & Diana. Using only the integers 1 through 7, fill in every empty square such that the shaded numbers are the sum of the 8 adjacent squares and each row and column contains each number no more than once (only one number per square).

	26	35	37		
	31	36	39		
	38	26	24		

Mathemagical Multiplication

This puzzle is brought to us by Greg 'Hologrami' Taylor (well, the first one was, I made the other 3). Fill in the missing numbers such that each integer (1 through 9 for the first problem, 0 through 9 for the rest) is used exactly once and the operation is valid.

1??	2??	3??	5??
<u>x ?9</u>	<u>x 5?</u>	<u>x 7?</u>	<u>x ??</u>
7???	1????	2????	1????

That's it for another week of [Insert loud booming voice here] Break Your Own Brain!!! Tune in next week when we find out who really killed JR, who is Polkaroo really and determine where the beef really is. Don't forget to submit, otherwise I'll have to hunt you down, chloroform you and pry the answers from your cold unconscious hands... or just cry myself to sleep, boo hoo, boo hoo hoo.

Answer Master Snuggles
 "I demand an answer!"

"Perhaps if I knew the question" - Musketeers

gridCOMMENTS

Hello and welcome to another issue of *mathNEWS*! Let's cut to the chase - WINNERS of issue #2 are:

Conventional: Ali Purnell ("That's what clones are for!")

Cryptic: Catherine Hicks & Diana Chisholm ("Commit flirt dance" – anagram of "A midterm conflict")

You can pick up your gift certificates from the MathSoc office in MC 3038 from the *mathNEWS* mailbox!

Honourable mentions go to:

Conventional: SE(x, y) 2008 (No *gridQUESTION* answer! So they lost the tie!)

Cryptic: Michael Huang & Chris Alexander ("We wager we would wrathfully wrangle woeful words with wayward Wainwright"), and CNC Crossword Factory didn't give us any names, so unfortunately (despite another perfect grid), they couldn't win either!

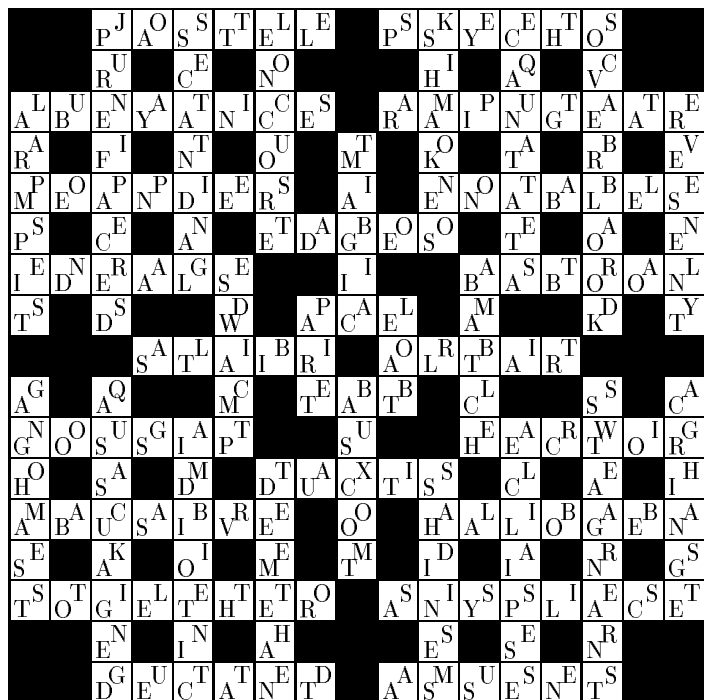
The ConMaster and CryptMaster have been working hard to bring you a great *gridWORD* this issue, so submit! SUBMIT! You can submit by filling out the grid and leaving it in the BLACK BOX between the C&D and the comfy...chance to win a \$5 C&D gift certificate! Also, don't forget to answer the *gridQUESTION*, which is:

What would you do with \$1000 a week for life?

Ciao chiquitos and chiquitas! We look forward to seeing your answers in two weeks!

ConMaster

Solutions to Issue #2's GridWord



mathNEWSQuiz #3

A Little Voice in Your Head

Hello again, this is your local SquizMasters reporting in with another braintesting squiz. This week's theme is voices, because too many late nights studying for midterms might make you hear them in your head, but before we get into that, let's bring on the answers:

Seasame Street: 1) Tuba, 2) Twiddle Bugs, 3) Radar, 4) A-la-peanut-butter-sandwiches, 5) A tutu

Old School Video Games: 1) Shadow Blade, 2) Find the missing child on Maze Island, 3) Get treats, 4) Seven Kingdoms of Mushroom World, 5) Dave Theureur, Missile Command

Explosives: 1) The "Application Form for Authorization to Destroy Fish by Means Other Than Fishing" form (available online), 2) The "Explosives Purchase and Possession Permit" (also available online), 3) Halifax, Nova Scotia, 4) Grain Silo, 5) Gunpowder and Chemistry

For the second week running, Jenn Meacoe was the only submission. The \$5 and the glory is yours for another 2 weeks with a score of 12/15. I'm calling you out mathies!!! You mustn't let such a prestigious prize go without a fight! It's soooooo easy, just write down your answers and leave them in the BLACK BOX beside the C&D, or if that's too hard, you could always type them out and e-mail them to mathnews@student.math.uwaterloo.ca, just use "squiz" as the subject. Come on! You know you wanna!

Name the Common Actor/Actress - The Voice of Hollywood

1. The Mummy/About a Boy/Enemy at the Gates
2. The French Connection/Superman/The Royal Tenenbaums
3. Apocalypse Now/Boys N The Hood/The Matrix
4. Edward Scissorhands/The Birdcage/The Horse Whisperer
5. Brazil/Bridget Jones' Diary/Moulin Rouge

General Knowledge - The Science of Voices

1. Who invented the radio?
2. What device is used to measure waveforms of voices?
3. What range of wavelengths is removed over a telephone line?
4. What does someone percieve when they hear a "ba" and see lips move to "ga" and what is this effect called?
5. What psychological disease might you have if you "hear voices"?

Imprint - The Voice of the Students

1. This Columnist is an alumnus/alumna of Shad Valley Calgary 2000
2. This member of the editorial staff took a trip to Japan this past summer
3. This member of the production staff is a 1A software engineer
4. This member of the editorial board is a former ActSci club president
5. What Waterloo student paper preceded the Imprint?

Good luck to everyone and SUBMIT! SUBMIT!! SUBMIT!!!
 This is your SquizMasters, signing off.

Val & GCM



Conventional

ACROSS

1. cause intense pain
4. carry out
9. gives in
11. knickknack
12. gets 3-2 against declarer in trump game
13. them
15. pot coating
16. protective wrapping of pearl-maker
18. preserved skeleton
19. Cree and Algonquin
23. naturally
27. verb descriptor
28. fragrant purple flowers
29. emnity
30. flip one of 26 Down
31. exhaled expressively
32. pant
33. persists

DOWN

1. metabolism gland
2. repeat again
3. cows' mammary glands
5. forsee
6. replenish
7. infinite
8. loathes
10. supportable and enduring
11. tied game ball found in schoolyard
14. public blemish
16. pop up to outfield
20. foursome
21. teepee
22. guts
23. overreach
24. BBQs
25. flowers of water or tiger
26. sailboats

Cryptic

ACROSS

1. adds water to short boister within *mathNEWS* (7)
4. subject frantic gal to headless two-colour ungulate (7)
9. ski left, now right...some teeth left? (6)
11. seaps ruined small tickets (6)
12. "goat me, Albert," offering breakfast (7)
13. bad ex-temp not required to participate (6)
15. hunters register 75% problems (6)
16. old shrew carries cigarette residue after disrespecting kitchen staff (11)
18. Daughter's sibling has left Mel sadly (6)
19. quit after one hundred cut (6)
23. stout goalie used instances of redundancy (11)
27. degree from giving money to school? (6)
28. set Dorian progress (6)

29. most aware of smallest angle (7)
30. say, see arms and legs Mount St. Helen (6)
31. E.T. rest: new CS co-op job? (6)
32. family struggled in resisters (7)
33. material swindle covered by tarp (7)

DOWN

1. seafood body parts, say (7)
2. pictured identification carrying wizard (6)
3. marches circle within athletic activity high (6)
5. prevents points scored, i.e. (6)
6. environmental scientist follows fish instruments (6)
7. sits ass to form points (7)
8. search at war (6)
10. Doctor, I'm a chem/stat major (11)
11. Hospital got new scientist (11)
14. old dim mall hydro generator (7)
16. superior regret a change (7)
20. sun up stores chance without small check of subtleties (7)
21. happy in the late draw (6)
22. arranged demands, Edward (7)
23. We hear kisses with flowers? (6)
24. can't SVU nab Lector crossing (6)
25. co-op student in migrating bird (6)
26. appease turmoil in Lesotho, losing large (6)

1		2		3			4		5		6		7
						8							
9				10				11					
				12									
13			14					15		16			
			17										
	18							19					
20							21						22
		23		24					25		26		
27									28				
				29									
30									31				
32								33					

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That guy and that girl: Eric Logan, Emerald Kushnier