math NEWS
Volume 96, Issue 5 Friday, November 19th, 2004

Orientation Leader Applications are Out

Come and Enjoy Some Good Clean Fun

*look*AHEAD

***math*NEWS**	
November 19	Issue #5 puts away its bike for the winter
November 29	Issue #6 Production Night 6:30PM, Mathsoc (MC3038)
December 3	Issue #6 Buckles down and prepares for finals
Math Faculty	
November 20	Alan George plans summer vacation
November 25	Tom Coleman wonders what the hell he's gotten in to
MathSoc	
Today!	Last day to nominate your intructor for Instructor of the Year!
November 23	Annual General Meeting
November 30	Pints with Profs
Thursdays	Movie Night
MGC	
Wednesdays	Pizza day

We need help with the yearbook!
Email `mgc@mathsoc.uwaterloo.ca` for details
Also, send your photos for the yearbook to:
`math.grad.committee@gmail.com`

Co-op
If you are still not employed, your prospects grow ever dimmer

Miscellanious	
November 20	A good day
November 22	Start your own country day

Notice of Annual General Meeting

The Math Society Annual General Meeting will take place on Tuesday November 23rd at 4:30 pm in MC 4041. This meeting is a general meeting for all voting members of the society. Come out to find out about the state of the society over the past 12 months.

If you are unable to attend, you may proxy your vote to another voting member before Monday November 22nd. Each person in attendance may hold only one proxy.

Any questions should be directed to the Math Society President at `prez@mathsoc.uwaterloo.ca`

Lino Demasi
Math Society President

ISSN 0705—0410

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

Those people in charge: Eric Logan, Emerald Kushnier

Computer Science Club

A Student Chapter of the ACM

CSC Flash

A lot of time has passed since the last CSC Flash. In that time, we've finished the UNIX tutorials, had a programming contest, had a talk on statistical machine translation, a movie night in conjunction with MathSoc, people played two-player Lemmings on an Amiga and wandered around the halls blindly walking into whatever was in their way and then turning around.

By the time that this reaches print, we'll also have had a talk given by Kelly Rose on GracefulTavi, a PHP/MySQL Wiki engine.

Coming up is the Computer Science Club's Pints with Profs, which will be held on December 1st. Keep an eye out on the 3rd floor of the MC for a table with invitations to give to your profs!

Of course, if you have an event that you want to run, just drop by the CSC Office in MC 3036. Or even if you don't, come by anyway.

Mark Sherry, CSC Treasurer

Write for *math*NEWS!

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*.

We're not particularly choosy here at *math*NEWS. 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 *look*AHEAD 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

Orientation Leader Applications Out!

Orientation week is a blast for first year students, but it's even more fun for leaders. If you had fun during orientation week last year, have ideas on how to improve math orientation, or want to help next year's frosh get to know the campus, then you should sign up to be a leader. There are many ways to get involved in Math Orientation 2005:

Leader - Frosh leaders spend the majority of frosh week interacting directly with the frosh. They get to participate in most of the events that the frosh do.

IceBreaker - Icebreakers run the events during frosh week, and spend more time working behind the scenes than leaders. They also get some perks that leaders don't, such as bribes during the Scavenger Hunt.

Tie Guard - Are you protective? Enjoy camping? Having an uncontrollable urge to stay up for no reason? Then consider being tie gaurd. You can stay up with frosh during orientation week and guard the tie.

Co-ordinators - Co-ordinators are in charge of one specific aspect of Orientation week. If there's one thing you're really passionate about, whether it's planning events or smooth-talking sponsors, then consider co-ordinating it. When they aren't needed for their specific aspect of the week, co-ordinators spend most of their time as either a leader or icebreaker.

Teamsters - Like driving? A lot? Teamsters drive a van during the week, making deliveries and emergency runs for supplies. It's a lot of fun, but requires a valid G license.

Applications for all of these positions are now available outside the MathSoc office (MC 3038) and can be returned to the same location. Once you've submitted an application, be sure to sign up for an interview. The sign-up sheet is on the MathSoc office door. Interviews end December 3rd. *[I have it on good authority that there will also be interviews during the winter and spring terms, so don't worry about cramming it in now… — inkEd]*

Math Orientation Directors, 2005
Sam Leung, Lino Demasi, Adam Felix, Chris Alexander

Elsewhen

10 Years Ago in math*NEWS…*

Ordinarily, I write in this space about the great issue of *math*NEWS that was published about this time 10 years ago. It's pretty interesting; I go through my red books of all issues ever published and summarize the issue in a column or so. But it will be kind of challenging this time; Volume 66, Issue 5 was a *math*NEWS spoof issue entitled *Impotent*, and for the life of me I can't figure out what they could possibly be spoofing (cough). The headline declares, "Hell Freezes over: Fab Four Reunite at UW!" And inside the issue, such greats as "Axeworthy Axed", "Feds Fed Up", "Food Services Monopoly", and a special insert, the 3rd Annual Myn's Week Mag.

If you would like to see this issue, I have copies available in the *math*NEWS office. Track me down (it's really easy) to see them.

Eric "inkEd" Logan

*mast*HEAD

I'd tell you about the amazing excitement that is this issue, but you should probably read it instead. It's not like it's very long. And, you know, it beats paying attention in class.

We did the usual thing and asked our productino staff something silly. The question was "What's your favourite way to browse?", although I'm told some answered the question as "What's your favourite browser?", so try that one if things don't make any sense. Anyway, here we go: Ali (In a bookstore. Without salespeople.), DanS (not Internet Explorer. It sucks!), Val (Val's Lightning Whale! Go firesomething!), Andrew (Opera! Pretty GUI!), Michael (XP makes IE work for me), Snuggles (at La Senza), Nicholas (By paying 2UU), Lino (Browser Koopa), Diana (naked), Jos (my hands), Kaitlyn (Browser? I barely even know her!), GCM (through a window), David (*with* the assistance of a saleswoman).

My infinite thanks to Graphics Services for that thing they do even when we don't hold up on our end of bargain. And those other people that need thanking.

Emerald Kushnier (Alone with a foxy lady)
Eric Logan (As the cow browses at the bush, with lots of tongue)

Mathsoc Exam Bank Revisited

My October 22 *math*NEWS article, "MathSoc Exam Bank Considered Harmful", provoked two reactive responses from MathSoc personnel which ignored the substance of what I said and instead used tortured analogies to hammers and assault rifles to argue that the Exam Bank should not be banned. In fact, my article made no suggestions at all about what MathSoc or any other authority should do about the Exam Bank; it focused on my own decision to stop cooperating with the Exam Bank, and discussed correct and incorrect uses of old exams by individual students. I specifically stated that "the MathSoc Exam Bank is not about to disappear".

The open meeting called by one of the respondents to "discuss possible enhancements to the Exam Bank" never took place, so I am somewhat in the dark as to what precisely is MathSoc's rationale for the Exam Bank or what "enhancements" might be. However, I can hazard a guess that the rationale stems from the same attitude that leads to the incorrect uses of old exams I previously discussed, namely the attitude that anything not explicitly forbidden in the pursuit of marks is acceptable behaviour, or at least should not be discouraged. (It is a short step from this to the more extreme attitude that anything forbidden but not detectable is acceptable behaviour.) This, in turn, stems from a confusion between marks and learning as the true goal of university attendance.

As a student society at a university, MathSoc does not have to directly support the goal of learning, but one would hope that they would refrain from doing anything which interferes with that goal. I can't imagine, for example, that MathSoc would give out pie on March 14 in a hallway right outside a classroom where a midterm was being written, even though it would not be MathSoc personnel being disruptive but pie-seekers. I know that pie is given out near the Mathsoc office, far from classrooms.

We all know that cramming for exams is a poor strategy for learning; it results in shallow, easily-forgotten understanding. I would have thought that MathSoc, knowing this, would not promote this strategy by holding "Cram Sessions", especially for first-year students who are just learning the culture of university life. This time my assumption is incorrect; such sessions were held in October. When you add in the Exam Bank, I am batting .333 in my comprehension of MathSoc's attitude towards education.

The two responses to my article metaphorically shook their heads at the abuses of old exams I detailed, but stopped short of admitting any responsibility in promoting and encouraging such abuses. I'm under no illusion that there will ever be any such admission; human capacity for self-justification is vast. As for "enhancements" to the Exam Bank, I have a modest proposal for one.

The CS 135 final exam this fall is quite late, on the evening of December 21. Most students will leave town right away, and will not get to find out about the correct solutions to the questions on the exam and how they might have gone wrong in their answers. As part of exam preparation, I make up a complete model solution, and I could provide this to Mathsoc to duplicate and put in sealed envelopes marked "Do not open until after 10:00 pm, December 21." I'm sure that just about every CS 135 student would be happy to be able to come into MathSoc during November and December office hours, at their convenience, and pick up such an envelope, to be opened on their way out of town on December 21. As for any potential abuses of these envelopes... well, that's not Mathsoc's responsibility, is it? They're just providing a much-desired service.

Prabhakar Ragde
Professor, School of Computer Science

Denying Your Genealogy 101 - Moving Back Home

Week 5 - Having friends come to visit

So maybe you're "blessed" with many friends who like to come visit you. It's time to play host / hostess and you can't remember the last time you allowed a friend to even know where you live.

Here are some tips for providing a fun and safe environment for you and your friends:

1. Hide your parents. Sure, it sounds like I'm kidding, but either hide from, hide, or kill your parents. It will make everyone's lives easier, and if you have done anything illegal (kidnapping or murder) the house is now empty and you can pay off your younger sibling by letting him or her throw parties. If you are of age and they aren't, a keg goes a long way.
2. Hide all childhood photos. This is an especially important tip if you and your guest are single and of opposite sexes. Your mother may get it into her head that you are dating and regail your poor friend with diaper-changing stories — complete with pictures.
3. Clean your room. Picture this worst case scenario. On the first night, you drop your friend's gear in your room and leave to make dinner. When you come back, rabid wolves that patrol your room have eaten the chocolates bought for your mother. No thank-you gift... you'll prefer the rabid wolves to your mother by Sunday.
4. Clean out your car. Maybe you aren't as "fortunate" as to own your own vehicle, but if you are, then for the love of all that is holy fish out every piece of popcorn, every empty gum package, and is that a french fry from August?! Cans of pop explode when they freeze, and it's that lovely below zero season, so you might want to check the trunk after you tossed that Pepsi back there for that drive back from EngScunt.
5. Make your friend your nth priority, where n!=1. It's important to remember your job, your other job, your parents, your mental and physical health, and that pet you promised *you* would take care of. One thing about co-op is it's too easy to forget that the world doesn't stop for two days just because work does. Throw in a friend to distract you and you are likely to totally lose touch with reality.

I'd love to go on, but this is horribly long. I just hope that this isn't the last issue, 'cause if so, this is quite the anti-climax *[Fret not, Issue #6 is still waiting in the wings… — inkEd]*.

Half-pint, enjoying a clean room and a grumpy mother, on co-op in Ottawa

MathSoc Exambank Revisited Again

As a student very active in math contest writing (I have been on the University's Putnam team the past two years), I am very familiar with the importance of being able to solve problems in a specific amount of time. When practicing for a contest, it's important to sit down and work on a problem set in the alloted time limit for two reasons. First, you get an idea of how much is expected of you in the time limit, and secondly, you'd be surpirsed at how much you can actually do when you just play around with questions instead of just looking at them and saying you can't do them right away.

That being said, I find the MathSoc exambank to be quite useful. It allows me to take an exam paper, sit down, and write it in the alloted time and see how much of it I can get done. Usually I get about 80% of the questions and miss out on some of the minor details that don't seem to be important in the course. They are the sorts of things that you don't really need to know to understand the concepts well, but they like to test you on when you write exams.

Before I try these exams, I usually feel like I have a solid grasp on the course material. I know all the main ideas of the course, but I don't remember lemma 23 from lecture 17. So does going over these exams help me learn the course material? Sure, it does a little, but I'll admit it's not that much. The biggest point is to try and increase my mark. Why? Because marks are important. It's nice to be idealistic and say that the point of university is to learn, but marks matter. When students are applying to co-op jobs, employers look at marks. When a student wants to go to grad school, when he tries to get NSERC, marks matter.

The MathSoc exam bank provides me with a useful service. However, some students choose to use the exam bank in a different manner. They sit there and look over exams and use this as their only manner of studying. As another student in the faculty, is this hurting me in any way? I say no. The only person that is getting hurt by this is the student himself. I don't think that MathSoc should stop providing a valuable service to students because some students choose to use it in a manner which is sub-optimal.

First-year students are all required to use a certain type of calculator on their midterms and finals in core math courses. MathSoc sells these calculators in the Society office so that a student who loses one is able to acquire one for his exam. Perhaps we should stop selling these, as a way to encourage students to not lose their calculators in the first place.

The point I am trying to make here is not that we shouldn't do anything about the situation, just that the service is valuable to those who do not abuse it. So then, on to the question about what should be done with the exam bank? If providing the resources to those students who wish to use the exams in a reasonable manner is valuable, I see no reason to not provide this service to those students. Let those students who use the exams for other purposes do as they will.

As for the example of the "Do not open until after the exam is over" packages: frankly, your example is absurd and unfair. When a student is using the exam bank to learn the course material, they are still limited to the information that the exam will cover the course material. In order to ensure they do well on the exam, they need to learn all the material. With your contrived example, to do well on the exam, the student simply needs to know the answers to the questions.

Now sure, right above this, I said that it's worth it to provide a service to those who will use it properly and ignore those who use it improperly, but I find a distinction in the degree of impropriety between "misusing" the exam bank, and blatantly cheating by finding out all of the questions that are on an exam before the exam. Maybe it's just me, but I find your modest proposal to be assinine at best.

So then, what can we do? There was a meeting scheduled to discuss this, but this meeting didn't happen because there was a mix-up on what the actual time of the meeting was. If you'd like to offer some actual suggestions, rather than snide commentary, I'd be happy to listen to what you have to say. But please, keep in mind, MathSoc is run by students. Students who have other things to do, like go to their own classes, study for their own exams and sleep.

I'm also struggling with trying to understand what exactly you want from all of this. Do you want MathSoc to apologize for the way students use the exam bank? Do you want us to apologize for not doing enough to prevent this "misuse"? I admit that some students use the exam bank in a less than optimal way, but I also consider students to be adults capable of making their own decisions. If this is the way students choose to do things, I belive it is for them to take responsibility, not the Society. Are we entirely blameless? I don't know, and honestly, I don't care. Going around laying blame isn't going to solve anything; sitting down and coming up with a solution is.

Now, to address the issue of cram sessions. Students are busy and they often leave things until the last minute. This includes studying, sleeping, or writing articles for *math*NEWS. So while "cramming" for exams might be a poor strategy, reviewing material the day before is not necessarily a bad concept. MathSoc's purpose is to provide service to its members. While it may be the opinion of some that providing a study session (call it a cram session if you want, the name is irrelevant) the day before an exam is a poor idea, you are not who we are here to serve. We are there to serve the students and what they want. If we held a session a week before, I know the attendance would be next to nothing. Why? Because a student has other activities going on, other exams, other things that need to be done.

I'm certain I haven't articulated myself as well as I wanted to, and I've probably made some horrible arguments, but I'm a student, and I have other things to do with my time.

Lino Demasi
Math Society President

That Old-Time Exam Stress

If you are like me, you're getting tired. Assignments and the un-ending parade of midterms are still coming, and exams are near enough to start stressing over. (Don't shoot the messenger. Maybe you haven't started worrying, but I'm a bit neurotic.) Again, if you are like me, there is not enough money for drowning your sorrows. So, in order to survive, I have developed a number of ways to relieve exam-stress, and I offer them to you, oh *math*NEWS reader.

Chase a Duck

This can be a lot of fun, especially when you are over-tired. It's pretty simple. If, when walking along, you spot a duck, run a few steps towards it. Ducks look funny when they try to waddle away. And hey, it doesn't cost you any money! Ducks seem to be in short supply this term, however, so for an acceptable substitute, try a squirrel. The sudden change in direction as they realize something BIG is coming after them is almost as good as a duck. Do not, please note, try these on the Canada geese. They are poor sports and fight back.

Look Up a Radical Religious Website

Any religion, taken to extremes, can be funny. My favourite site is one that proclaims "PAISLEY — BURN IT — DON'T WEAR IT: Paisely print is something you see on ties, shirts, blouses, dresses, curtains, rugs, furniture, etc. If you wear it, you may be carrying around some demons, which could be the cause of some of your problems." The rest of the article attempts to argue why paisley print is a tool of demons. (The part that really cracks me up is the ad at the bottom: "Shop online with me, your Mary Kay independant Beauty Consultant." Apparently demonic forces like paisley but abhor lipstick. I always imagined Satan having a better fashion sense.) www.demonbuster.com

The Eye of Argon

The Eye of Argon is a delightful tale by Jim Theis, and was (reportedly) winner of a certain California writer's contest for fifteen consecutive years. And it was only submitted once! Since its discovery in 1970, such pricless turns of phrase as "scintillating, many-fauceted reddish emerald" and "by the surly beard of Mrifk, Grignr bows to no man!" have made it the subject of competition readings. Grab some equally-stressed friends and see who can read the most out loud without laughing. Add in some sarcastic commentary (Mystery Science Theatre, anyone?) and poor Grignr doesn't stand a chance. Good for the especially sleep-deprived and/or drunk. Or anytime. The Eye of Argon is timeless. `http://www.bmsc.washington.edu/people/merritt/books/Eye_of_Argon.html`

Go for a Cruise

Okay, so this is more suitable for the summer term. But since many of you are co-op students, you can save this valuable advice for later. Go to Zellers or Canadian Tire and buy yourself an inflatable "boat." Launch her on her maiden voyage in the Health Services Pond. See how long it takes to get kicked off. Duct-taped badminton raquets make good paddles, and newspaper pirate hats are optional.

Okay, so maybe you're feeling skeptical. But I will admit to having done all of the above - totally sober! My roommate can vouch for me. Or maybe she won't want to. She's been party to more than one of these. So from one stressed student to another, I hope you find amusement in at least one of my techniques.

Renegade Artsie

Comfy Axis and Allies

The Shortest A&A Game Ever

To many, the game of Axis and Allies is an epic struggle re-enacting the events of World War II. To those without WatsFic key access, it's less epic… less of a struggle… and not really a re-enactment of anything. To those without WatsFic key access at 1am, it's not even much of a game anymore. So without further ado, I present Comfy Axis and Allies; the shortest A&A game ever.

It is 1942 and the world is at war. Two factions are battling for control of the world. At the helm are three extremely tired generals and one whacked out director. In their hands is the fate of the world.

Turn 1: USSR. As every good A&A player knows, the USSR goes first. What's this? No eight infantry in Karelia? No! He's going straight for Japan! The director rules that the attack succeeds on a roll of 3+ on a D6. The USSR rolls 4. Japan is eliminated.

Turn 1: Still USSR. Japan never goes down without a fight. As a final blow, the director decides that Japan can eliminate the USA on a roll of 8+ on a D20. Japan rolls 14 and the USA is eliminated.

Turn 1: Germany. Germany, ever the strategist, decides to utilize the not-often-attempted random untargeted missile attack. An empty soda bottle found lying around is spun and lands towards the Russian player. However, salvation awaits as it is decided that the USSR has two hits. You know, since it's big and stuff.

Turn 1: UK. Being that its the only target left, the UK decides to attack Germany. The battle is put to a coin flipping contest. Whoever is the first to flip 4 heads on 5 coins is the winner. Striking first, the UK flips and gets 3 heads. The battle goes back and forth for a while, but eventually the Germans emerge victorious. The UK is eliminated.

Turn 1: Germany. In the final Battle Royale, it's Germany vs. the USSR in a… coin tossing contest?! Well, that's the decision. Whichever player can toss a penny closest to the wall will emerge the victor. Despite winning the ceremonial Rock-Paper-Scissors to force his opponent to go first, the Russian forces succumbed to the unstoppable German forces. This would end the game… or would it?

Turn 1: Still Germany. So with the crossing-off of Russia, this would give Germany and the Axis Powers the game. However, in a stunning typographical error, the director crossed Germany off the map. With this, the Allies were declared the winners of the first ever Comfy Axis and Allies game.

In short, this is something which will never happen again for a long time. Maybe Comfy Risk will be next?

SquirrelToken, The Great Pretender

Here, have more *prof*QUOTES

"Behind two doors are bags of fertilizer. Behind one door is a new car, or rather, 'A NEW CAR!' It's important to the problem that you'd rather have the car."

Kenyon, PHIL 145

"Just pretend I know what I'm talking about."

Idziak, SCI 206

profQUOTES

[pause, looks at notes] "Oh shoot! I forgot the 'Bloody Obvious Theorem'! It's actually called the 'Extreme Value Theorem'."

Hare, MATH 137

[after making several errors in an example] "… uh … oh … uh … yeah, I think it's time for me to retire."

Younger, MATH 235

"You know, one of my colleagues came to me and said, 'We have taught them so much stuff… we have to be gentle on this midterm'."
[Hopeful silence in class]
"WELL, DON'T COUNT ON IT!"

Schellenberg, MATH 239

"Let's say this graph here is a fence around my house. It's a 15–foot high fence. Yes, I am paranoid."

Schellenberg, MATH 239

"If you can't integrate, then you're mathematically illiterate."

D'Alessio, MATH 237

"If we work carefully then we'll get the right answer, and we won't have to read ahead in the book."

Lipshitz, AMATH 250

"We will denote the alphabet we use as sigma, then never use it again."

May, CS 234

"Waterloo was ranked #1 in Maclean's this year, but I would like to take note that this ranking was made before I arrived."

May, CS 234

"The more I hear about linear algebra, the more I get confused."

D'Alessio, MATH 237

"I'm not lying when I say my wife thinks the exponential distribution is sexier than me … not that that is hard."

Metzger, STAT 230

"Quiz 3, coming soon … today … to a theater near you.

Clark, BUS 227 (WLU)

Student: "Is your wife good looking?"
Professor: "She is more beautiful than any exponential function I have ever seen."

Metzger, STAT 230

"Teleportation is not allowed in this class."

Forrest, MATH 147

"If you provide a sufficient explanation *and* an example, you get full marks and a beating later."

Kenyon, PHIL 145

Professor: "Because we are mathies, anything inside the *pink* box is important."
Student: "Like pink tie?"
Professor: "Yeah, I still got one of those."

Struthers, STAT 330

[while pushing projector cart and hitting someone's leg] "Bring a safety boot to class."

Brown, ACTSCI 363

[cell phone rings.] "Quick — kill it!"

Davidson, MATH 145

"A student will always say, 'It's continuous, therefore it must be differentiable!' and after I throw a piece of chalk at them, they realize they've made a fundamental error."

Forrest, MATH 147

"I noticed earlier that 5 x 4 is 20."

Davidson, MATH 145

"*sec* squared and ye shall find squared."

Vrscay, MATH 227P

"I taught the particle in a box model in Chem 121? That must have been during my crack years."

Bissonnette, CHEM 355

"Don't sniff mercury. You will die. But you can probably sniff your gold ring and be OK. Unless its in a fine powdered form, like cocaine."

McCourt, CHEM 358

"It's an old wives' tale like 'if you throw yourself down the stairs everything will be fine'."

Penny-Light, HIST 200

"Don't ask me why I woke up in an air force base — I don't know how I got there, but I didn't stay very long!"

Woolstencroft, PSCI 260

"The United States is concerned with one thing: internal security, which means it's very concerned with its external security."

Woolstencroft, PSCI 260

[on improperly reading a statistics distribution table] "So that's why my answer is so fucked up!" (Some moments later …) "Ignore what I just said. I am a complete and utter idiot."

Metzger, STAT 231

"In statistics, you're always wrong. That's the best part."

Metzger, STAT 231

"I'm going to build this model piece by piece… it will look like a football play designed by some bizarre idiot."

Ennis, PSYCH 101

"I will run for Prime Minister — just as soon as I get back from space."

Ennis, PSYCH 101

"Once I've got a full tummy and an umbrella, I'll go looking for love."

Ennis, PSYCH 101

"I'm not saying you're wrong, just crazy."

Kenyon, PHIL 145

Yet more *prof*QUOTES

"Well, let's give you an example of how to factor polynomials. Let's take x^3+2x^2-3x+1 and divide it into $x^7+6x^6-5x^5+4x^4-3x^3+2x^x-x$." (a few minutes later…) "So we get the remainder to be $r(x)=117x^2-633x-237$. What? Did I make a mistake? … WHO CARES! You can do it in Maple anyways. And you can see from this result, our theorem works! So QED."

Davidson, MATH 145

[on attending a conference in New York] "Two and a half thousand actuaries in one hotel, it's like hell!"

Hardy, ACTSCI 331

[on what happens if you make a mistake as an actuary] "That's your parents' and grandparents' money you're losing… they'll move in with you… you'll never watch *The OC* again. You'll be watching *Everybody Loves Raymond* for the rest of your life."

Hardy, ACTSCI 331

"Go and tell your calculus prof to actually teach you some calculus."

Wood, MATH 115

"This actually works for infinite dimensions, which shouldn't be obvious, expecially since I haven't defined what a dimension is."

Wood, MATH 115

"When you guys actually learn something, come to me and say, 'We learned something! We learned something!' and I'll show you some cool stuff."

Wood, MATH 115

"This correspondence preserves the algebra. What the hell does that mean?"

Wood, MATH 115

"This is proof by staring, which, by the way, is not acceptable on an exam."

Wood, MATH 115

"This is what we basically showed, without showing."

Wood, MATH 115

"I'm sorry, I cannot draw in four-space."

Wood, MATH 115

"Finite dimensions are easy. Infinite dimensions are way much more harder."

Wood, MATH 115

"N_A is the set of all vectors that got killed."

Wood, MATH 115

"These zeroes are just a total waste of chalk."

Wood, MATH 115

"One way of thinking about functions is that the elements in the domain are cannonballs, the rule is the cannon, and the elements in the co-domain are villagers. If a villager gets hit by a cannonball, we say he is in the range."

Wood, MATH 115

"Who votes for l? Who votes for l squared? Man, there are a lot of chickens in the room."

Lamb, MATH 117

"I think I said something really stupid the other day, and maybe you can tell me exactly what I said."

Lamb, MATH 117

"Some people say the reason I had to leave engineering was that I kept messing up my minus signs. Others cite different reasons."

Strickland, PHYS 115

[to a student] "This is stupid — the force, not you."

Strickland, PHYS 115

"I'm not interested in producing programs that actually work."

Dasiewicz, CS 133

"Until I become Emperor of Planet Earth, we will continue to use Leibniz notation."

Stastna, SYDE 111

"After second year, I went on a long, long hiking trip. After that, linear algebra made sense to me."

Stastna, SYDE 111

"It's funny how traumatic experiences can build character."

Faber, LAT 375

"Translate two of the following passages into idiotic English. Er, idomatic English, please."

Faber, LAT 375

"Let me begin on a light-hearted note. I just gave a lecture on tragedy."

Faber, LAT 375

"When you're engaged in under-aged drinking, you worry about these things. Uh, not that I ever did that."

Seljak, RS 317

"You have to relight the fire by rubbing two Boy Scouts together."

Curchin, CLAS 325

"The family that slays together, stays together."

Curchin, CLAS 325

"He could hardly wait to have a people weenie roast."

Wahl, RS 325

"I can't do it right, but if I could, it would look like this. Hey, what do you know? Pretty good!"

Wahl, RS 325

"That's in some other course, and— Oh, I got some sort of stuff on me.

Wahl, RS 325

"He kicked him down the church steps. One way to end an argument, I guess."

Wahl, RS 325

Math Is Our Desire

To the tune of 'We Didn't Start The Fire'

Math is our desire!
Since the world's been turning
It's essential learning
Math is our desire!
Though we try to fight it
But we can't deny it

Operations, algebra, calculating area
Arithmetic, geometric, sequences and series
Alpha beta theta pi, measurements and radii
Vertices, vortices, integers and axes

Isaac Newton, Grace Young, Albert Einstein's crucial sums
Vectors numbers signs and surds - it can't be put in better words
Stephen Hawking, Galileo, Marie Curie, Avogadro
CMA, QED, this is math, can't you see?

Math is our desire!
Since the world's been turning
It's essential learning
Math is our desire!
Though we try to fight it
But we can't deny it

Set notation, the-o-ry, special relativity
Powers bases factors roots, ancient fundamental proofs
Kinematics, IQ tests, Fibonacci Chebychev
Sin cos, tan sec, trigonometry

Conic sections, calculus, mystifying syllabus
Mean, mode, median, factorize and expand
Simulation, integration, exponential degradation
AM, AME, what's it gonna mean to me?

Math is our desire!
Since the world's been turning
It's essential learning
Math is our desire!
Though we try to fight it
But we can't deny it

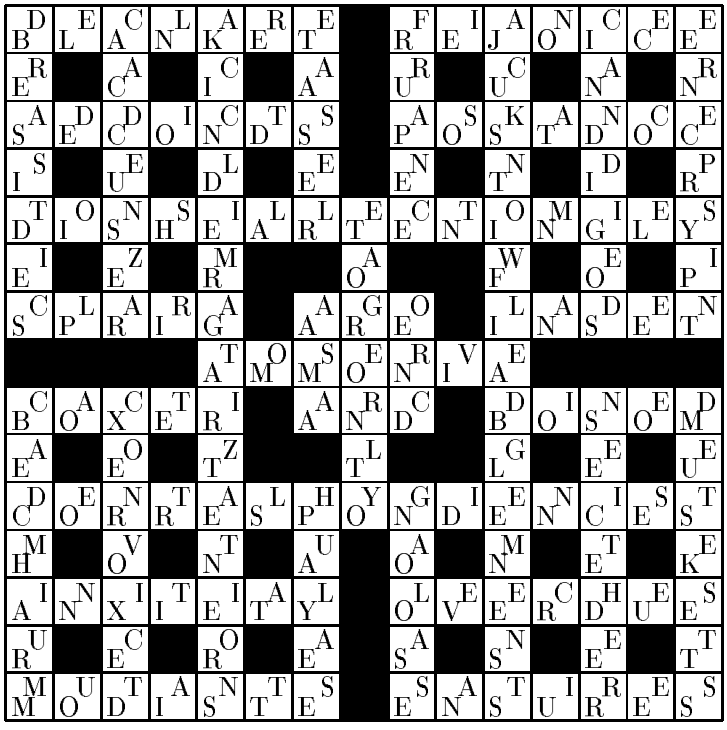
Deviation, rationals, functions and reciprocals
Logarithms, algorithms, and chaotic fractals
Quadrilaterals, altitudes, problem solving interludes
Proportionality, perpendicularity

Distributions, decimals, derivatives and integrals
Sectors segments chords and time, fractions composites and primes
Intersections, symmetry, polar eccentricity
Tetrahedra, polygons, and the list goes on and on

Math is our desire!
Since the world's been turning
It's essential learning
Math is our desire!
Though we try to fight it
But we can't deny it

Chris 'Krease' Harasemchuk

Solutions to Issue #4's GridWord



Math Math Baby (Condensed Version)

A Mathie Rap

(To the tune of "Ice Ice Baby")

Yo, SQT, let's kick it!
Math Math Baby, Math Math Baby,
All right stop correlatin' and listen,
I'm a UW mathie and this is my invention
CS grabs a hold of me tightly
Stuck pair programming daily and nightly
Black box my stack, yo — I don't know
Push too many times — overflow
But I'm extreme, assignments I can handle
Like Sturm and Gauss, who did their work by a candle.
Dance, I've come a long way since them
I'm the one that remains like Fermat's Little Theorem
Deadly, when I use the dope IVT
To find a root or when I build a spanning tree
Love math or hate it, I'm still a mathie,
I'll derive you to zero, like y=c
But if you've got a problem, yo I'll solve it
The integral times 2 pi, if you revolve it
Math Math Baby (x4)
Yo man — let's logout of here. char [] to your mother.
Math Math Baby Too Pink
Math Math Baby Too Pink Too Pink (x3)

SquirrelToken

*math*NEWS BYOB #5

Break Your Own Brain - Jive Time

Welcome to the 11th straight BYOB (I would have mentioned our tenth appearance last issue but I wasn't in a counting mood), so happy 11th BYOB, we'll have to think up a rite of passage for the first issue next term (which will be the thirteenth, for you non-counters). For now, here are the answers from last issue's heavy four-three theme.

Three Four Fours

1. The answer is 0. The top-left times the bottom-right times three equals the concatenation of the bottom-left and top-right.
2. The answer is 1. The bottom-left times the bottom-right equals the concatenation of the top-right and the top-left
3. The answer is 1. The common factors of the top-left and bottom-right sum to the top-right and multiply to the bottom-left.

Four See

1. One way or another
2. Missing Link
3. The Good, The Bad, and The Ugly
4. Gross Incompetence

Four Threes, from One to Forty-Three

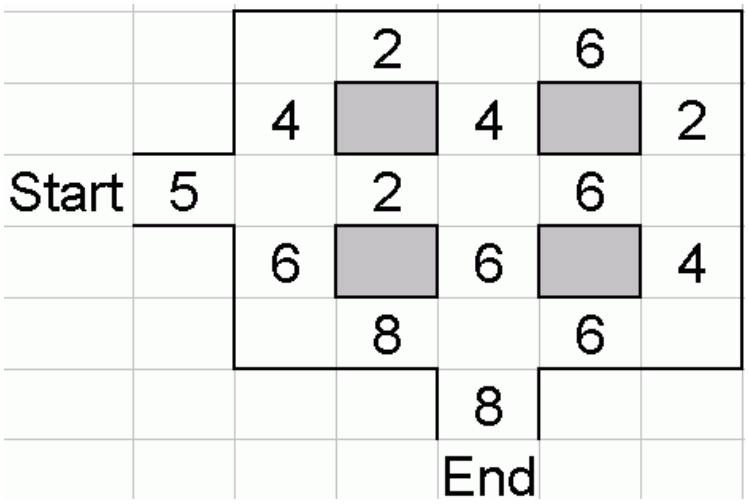
1=33/33	2=(3/3)+(3/3)	3=(3*3)-3-3
4=3!-3+(3/3)	5=3+3-(3/3)	6=3+3+3-3
7=3+3+(3/3)	8=(33/3)-3	9=3*3*(3/3)
10=3*3+(3/3)	11=3!+3!-(3/3)	12=3+3+3+3
13=3!+3!+(3/3)	14=3+(33/3)	15=3*3+3+3
16=3!*3-(3!/3)	17=(33/3)+3!	18=3^3-3*3
19=3!*3+(3/3)	20=3!*3+(3!/3)	21=3^3-3-3
22=(3!!+3!)/33	23=3!!/(3!*3!)+3	24=3*3*3-3
25=3^3-(3!/3)	26=3^3-(3/3)	27=33-3-3
28=3^3+(3/3)	29=3^3+(3!/3)	30=3!*3!-3-3
31=33-(3!/3)	32=33-(3/3)	33=33*(3/3)
34=33+(3/3)	35=3!*3!-(3/3)	36=3^3+3*3
37=3!*3!+(3/3)	38=3!*3!+(3!/3)	39=33+3+3
40=((3+3)!/(3!*3))	41=((3!!/3!)+3)/3	42=33+3*3
43=(3!!/(3!*3))+3		

I suspect I stole my submitters from myself, if that makes any sense (which it doesn't really) since we had 5 submissions for BYOB Jr., but just one for big daddy. Just to make it clear to all of you, you are fully allowed to submit to both Jr. and Big Daddy (as Catherine did), in fact, there are certain added benefits, not sure what they are, but I'm pretty sure I saw an existence proof around here somewhere. Regardless, with a score of 2.64/3 (2/3 on the first problem, perfect on the second, and 42/43 on the third), Catherine Hicks is the winner (plus she had a cool tiebreaker that we're totally using). Come on down to MC3038 (MathSoc OverShare Central) to pick up your C&D gift certificate.

I'm not tired of explaining the tiebreaker, nor do I just cut and paste previous text here, really, don't you believe me? Our tiebreaker is to submit a riddle / puzzle / brain teaser along with full solution, and in the event of a tie, our favourite will win. This has the added benefit of saving my scalded brain from having to think up more puzzing conundrums for your own entertainment. Answers (with tiebreakers hopefully) must be in by 6pm on November 29th. If you are the type to take candy from strangers you can submit at the BLACK BOX between the C&D and Comfy. If you're the type to call yourself Candy and use values of 20-36 for your measurements you can email us at *math*NEWS@student.math.uwaterloo.ca. Or if you're the type to poke the tigers at the zoo you can come submit to me in person (to be prefaced by a fun game of "find the Snuggles").

Math-Man's Maze

Brought to us from the desk of Ms. C.Hicks (ya, that's funny) we have a maze problem that takes us back to the days of Square One (If you don't know what that is, you're entirely too young). The goal is to move through the maze, summing the numbers you pass and ending with a prime number. Your result is the value you are at when you exit the maze (You must start at start and end at end), you cannot backtrack (move directly back the way you came) but you can use the same number twice if you happen to get back there via a different route. Submit the routes for as many prime numbers under 100 as you can.



Math Men's Maize

Three male mathematicians were in a corn field each holding a letter on a placard. They could see their own letter, but not those of their compatriots. They knew their letters spelled one of the following words: "net, cat, men, dry, man, run". They were asked "Do you know which word can be spelled by combining your letters?" and all answered at the same time "No". They were then asked again, once again they all answered "No". They were asked a third time, and they all answered "Yes". What word do their letters spell, and how did they know?

Magic Man Mayes

The Magical and Mysterious Mr. Mayes loves card tricks. In this one he takes 8 cards, 4 clubs and 4 hearts. He gets three volunteers from the audience and while they are blindfolded he tapes two cards to each person's back, and slips the last two cards in his pocket. The blindfolds are removed and now each

(continued next page...)

person can view what the other two people's cards are (but not their own, nor those in the Magician's pocket). They are then asked if they know which suits are on their back [i.e. two hearts, two clubs, or one of each]. The first person says no, then the second says no, then the third says no. Then the first says no again. Finally the second says yes. What cards are on the second person's back, and how did he know?

Last chance this term to earn yourself a $5 gift certificate to our lovely C&D not to mention the adoration of friends and strangers alike. (It's the last chance since next issue is the last one this term [Tear, Cry].) Submit if you dare! Or if you don't dare, just submit, right now. Please? Come on, you know you want to, don't make me employ the world famous doit offense.

Brain-Monkey Snuggles

BYOB Jr.

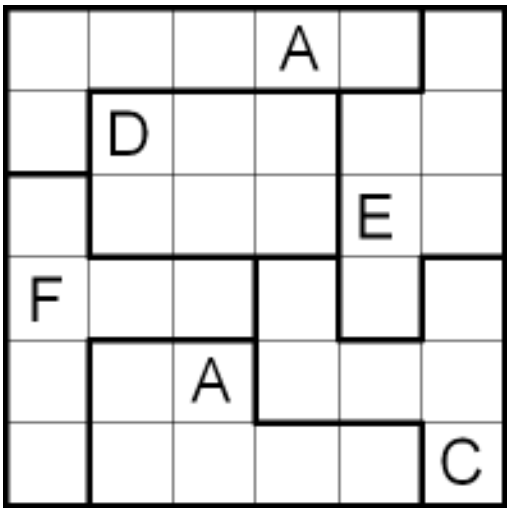
Fun Fact about BYOB Jr.: Turns out this puzzle is called a Latin Square and was first investigated by Leonhard Euler. [Thanks to Prof. Kaplan for pointing this out to us, now that I have a website to jump from I'll be putting fun facts with every BYOB Jr.]

Adam Weatherhead, Craig Kaplan, Catherine Hicks, Ian MacDonald and Paul Royston all submitted correct solutions to BYOB Jr. last issue. And by coin-flip-ology Adam Weatherhead is our winner, come on down to MC3038 (MathSoc Daycare) to pickup your C&D gift certificate. Here's the answer to last issue's puzzle:

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

The image shown has six shapes with six squares each. Place the letters A through F in the squares such that each row, comn, and sub-block contains each letter exactly once (exactly one letter per square please).

Snuggles Jr.



mathNEWS Squiz #5

A Random Assortment of Squiz Shaped Questions

Hello all! Now that midterms are mostly over, you can begin filling your brains with useless information again — and this is the perfect place to do it! It's nice to be in the *math*NEWS lab again. I'm getting all excited, so much so that I've decided to make it really easy on you all this week. Now you'll have no excuse for not sending me responses (insert evil laughter here), but first and foremost, I have some answers that you might be interested in: **Degrees of Separation:** H. H. Panjer, M. J. Best, K. O. Geddes, B. Ingalls, K. E. Hare **Famous Mathies:** Srinivasa Aiyangar Ramanujan, Charles Emile Picard, Abu Abd-Allah ibn Musa al'Khwarizmi, August Ferdinand Moebius, Hermann Minkowski **Pi:** Kanada and Hitachi with 1-trillion+, anti-tank mines, Tsu Ch-ung Chi, Humble pie, Robert Green's Arcadia (1590).

Congratulations to Snuggles with a score of 13 points! You're this week's winner! Very well done. I was very impressed, this week was the best submissions I've had so far. You can drop by the MathSoc office (MC3038) to pick up your wonderful prizes! But enough of the past, time for the future, which happens to be a very mathlike squiz for the next few minutes, enjoy!

Who Lives There?

Name the Mathie or Organization that lives in this MC room

1. 4055
2. 1052
3. 4022
4. 6012
5. 3031

Name the Course

What Course is This Prof Teaching this Term?

1. David M. Jackson
2. Craig S. Kaplan
3. Peter van Beek
4. B. Doug Park
5. David McKinnon

A Little Something About Trees

Just Because Trees are Cool

1. Which jurisdiction has lost 10% of its forests in the past 374 years?
2. What's interesting about the bristlecone pine?
3. Who first introduced "tries"?
4. Which cancer-fighting drug comes from a pacific coast tree?
5. What species of tree is most often struck by lightning?

Good luck Squizzerz! I'll be happily awaiting responses delivered to the BLACK BOX outside the C&D or to the *math*NEWS e-mail inbox @ `mathnews@student.math.uwaterloo.ca`. See you again soon! Ciao!

Val, GCM, and BDM

And I was so close to not needing any filler...

GRIDWORD

*grid*COMMENTS

Another day, another...dollar?

So it's that time again...time for another *grid*WORD. But before you do this one, let's check out the results from last issue! As a reminder, the last *grid*QUESTION was: *"Who will eat my unhappiness?"*

- Cryptic: Chris Alexander and Mike Huang ("Is it sold at the C&D?")

- Conventional: Catherine Hicks ("The Cookie Monster")

Honourable mentions go to:

- Conventional: Jenn and Ali ("There are these fantastic skwish pillows down at Fairview Mall...")

- Cryptic: Olena Bormashenko and Pheobe Su ("Pacman. He eats everything." *[I love this answer!!! Too bad there was one answer wrong!~ConMaster]*), and Catherine Hicks ("Photocopiers that work 100% of the time")

Congrats to all of you who submitted the *grid*WORD. All the submissions were near-perfect! And on to this issue's *grid*WORD. Once again, we're accepting submissions in the BLACK BOX between the C&D and the Comfy. Ties are broken by the best answer to the *grid*QUESTION...so get very creative! The more creative (yet understandable) the better!

This week's *grid*QUESTION is:*"What is YOUR New Year's resolution?"* See ya next issue!

ConMaster

Conventional

ACROSS

1. wolf and hyena kin
3. buns or monarchs
7. susceptible to influence
9. Earl Grey holder
11. unintelligent
12. childbirth helper
13. Atkins foe
16. improves
18. abstained from eating
19. garden pavilion
20. dignity and esteem for oneself
21. mushy
22. camp toilet

DOWN

1. weaponless martial art
2. sunlit hall
4. guzzle alcohol
5. necromancy
6. partial rehab center
7. druggists
8. group project requirement
10. spun
11. highway departure
14. sturdy shoes
15. elusive
16. kingdoms

Cryptic

ACROSS

1. Strength of tenacy loses a trailing pair of policemen (7)
3. Destroy sandwich with French greens (7)
7. Strange pet enclosure: Dana possesses weird GUI (5,6)
9. Some costs to England being underwater (6)
11. Convince the Spanish to follow computing (6)
12. Makes aware of endless slavery, revolving around last part of torture (7)
13. Government of Libya has delivery company uniforms (7,6)
16. Clearing away bystanders; takes truth from shooting (7)
18. Madness at Johnny's place (6)
19. Argons make noises (6)
20. Vote for "Troy le Terrible": a solution that handles electricity (11)
21. Phat-ass Elsa wears ornaments on clothing (7)
22. Jurisdiction relating to animals surrounds Edward (7)

DOWN

1. Mythical creature returns to dine around wiseman (7)
2. Picky complainer remodels Grange (6)
4. Military B's kudos (6)
5. Cool toilet paper roll (7)
6. A drink measuring tool? Yes, over a card game we hear why it's underhanded behaviour (7-6)
7. Old acetone can't join stuff together (11)
8. To take possession, without permission, of something germane (11)
10. Chew one properly: another repetition? (3,4)
11. To be guided towards solving this problem! (7)
14. Failure to pay Delaware a mistake (7)
15. Melancholy wavelength surrounds trimmed fistful (7)
16. To make plans up: mechanized infantry and energy (6)
17. Gay red redoes dull colouring (6)