

math

NEWS

Volume 97, Issue 2

Friday, February 4th, 2005



T.BENNA '05

"DUE TO THE RECENT THEFTS AT THE UNIVERSITY, WE HAVE HIRED EXTRA SECURITY TO PATROL THE CAMPUS!"

lookAHEAD**mathNEWS**

February 4	Issue #2 creeps through the MC
February 14	Issue #3 Production Night 6:30 PM, MathSoc (MC 3038)
February 18	Issue #3 tells tales of heartbreak

Math Faculty

February 4	Nomination deadline for the Distinguished Teacher Awards
February 11	Nomination deadline for the Award for Distinguished Teaching by a Student
February 21	Last day to withdraw with 50% refund
February 24, 25	Reading days
February 28	Last day to withdraw from courses without penalty
February 28	'Planning your Second Year' sessions
February 28	Pick your plan week begins

MathSoc

February 10	Last day for orientation leader interviews
February 18	Super Smash Bros. Melee tournament, 4:00 PM, MC 2038
Thursdays	Movie Nights, 7:00PM, MC 2066, two movies for \$2, MC

MGC

Wednesdays	Pizza for sale, 3 rd floor MC
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CSC

February 4	Halo 2 Tournament
February 8	GCC - The GNU Compiler Collection a talk by James Morrison
February 14-18	Linux Awareness Week
February 16	UW-DIG Installfest: bring your computer by the Fishbowl, install Linux and Open Source Software (help provided)

Co-op

February	Career Services Workshops, see www.careerservices.uwaterloo.ca
February 17	Last day of employer interviews
February 22	Daily postings begin Job match results available at 11:00 AM
February 28	Meeting for students not matched, 4:30 PM, various locations

Misc

February 6	Superbowl XXXIX
February 9	First day of the Chinese Year of the Rooster
February 12-13	Waterloo Public Library's used book sale Main branch, 10-3 Sat. and 1-4 Sun.
February 14	Valentine's Day
February 20-26	Freedom to Read week
February 27	77 th Annual Academy Awards

"None of my examples are ever random, and I'm not going to apologize for that."

Goulden, MATH 239

(looking for board space) "Now, what can I erase? Oh, let's get rid of the School of Computer Science altogether!"

Malton, CS 246

Missing Math Student*Found in MathSoc Lost and Found*

Earlier this week, a second year CS student was found in the MathSoc Office lost and found. It has been now discovered that she had apparently fallen into the depths when looking for an umbrella in early October of last year. Also of note is that the student had not actually been reported missing during the four months she was trapped in the box.

"I thought she was on co-op term," said a close friend. "We all thought she was dead," added a random group of CS nerds.

In order to avoid such situations in the future, the MathSoc lost and found is to be emptied on Friday the 18th of February (two weeks from today). If you think you may have unclaimed belongings (or absent companions) in the box, you should come by MC 3038 to retrieve them before the contents are removed (contents are currently facing charges of abduction and forcible detainment of an undergrad). We are also asked to encourage CS students to get more friends, preferably ones that know where they are...

Val
Co-King of the Office

mastHEAD*Where the subtitle doesn't relate to the article*

So, the second issue of *mathNEWS* this term. Things have been going a bit rocky so far, like missing articles, and a generally lazy web editor, but he promises to get this issue online somewhat sooner. I should know, I beat him myself.

ANYHOO, we've got a great issue here; most of the lost articles have been found and are either here in the issue, or added as a bonus to the online version, so look around! It's like an online quest for discovery, even though there's only 5% new content.

And in keeping with the weirdness, we asked our loyal production staff, "Why are you wearing pants?" And they replied: Kaitlyn "Half-pint" (try wearing a skirt in subzero temperatures and you'll have your answer), π (who says I am?), Andrew Fransen (my pantaloons were in the laundry), Math.Random() (society (shakes fist)), Val (crap, I thought the walk to school was cold), RainWater (butt floss), Movies Guy (because I'm not the entertainment on Thursday nights), DanS (I lost my shorts), J.Y. (the labs are disgusting enough as they are), Ellie (they're sexy).

BeatleEd ((pleads the fifth))/*I think it's to hide his paddle marks*
— SheepNinEd/

SheepNinEd (because shrinkage is worse)
StatsEd (average temp of -5.5°C, with a SD of 2.9°)

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The editor(s): Mark Toivanen, Emerald Kushnier, Chris MacGregor

Prez Sez

Well the election is over and almost everything is said and done except for this: Oh man, more work... What was I thinking? :P

I'm Michael Tersigni, the newly elected President of the Mathematics Society. I would like to first thank those who voted for coming out, those who did so for electing me to this position, and last, but by no means least, my campaign team. I couldn't have gotten here without your help and will be forever grateful. I promise to never let any of you down, and to do the best job I can.



Now, on to what's happening on the wide world of the campus, and that's quite a few things. In no particular order:

- There is \$8000 still in the FEDs special funding project. Anyone who has an idea as to how to spend this money or has an idea for a special project can let me know and I'll give you more information on who to talk to.
- Russell Peters is coming to campus. The date of the performance I've heard through the grapevine is March 7.
- Michael Moore almost came to campus for February but had to cancel. FEDs is trying to get him to come in again sometime in the fall term.
- I've begun working on improving the lighting for the C&D and comfy lounges. Should anyone have comments, concerns, or questions, please feel free to tell me by e-mail, in person, by sky writing, or any other way you can think of.
- MathSoc passed its budget. We hope to run all the social events planned. Should you have any events you would like to run please let us know and we'll see what we can do to make them a reality.

That's about all for now. You'll all hear from me again in the next installment of Prez Sez, or hopefully sooner if you stop by MC 3039.

Michael A. Tersigni
President W05/F05

Don't spend Valentine's Day Alone

Come write for mathNEWS!

Why wallow in loneliness and heartbreak when you can spend the evening with us? Come out to production night, February 14th at 6:30 PM, MC 3038.

VPF Sez

I now have the dubious honour of being permitted to write pretty much anything in *mathNEWS* and be guaranteed a 3rd page layout. This naturally begs the question of how to properly abuse this privilege. I've decided that to avoid being tossed onto the proverbial street corner by my *mathNEWS* colleagues, I will have two sections in my column: what I do as VPF, and a section I will call "Potent Potables". Some of you may have seen that phrase before. You're wrong. And ugly. Anywho, onto my section as VPF:

BUUUDDGGEEETTTT... How do cartoonists make words look scarier by making them longer? Mine just look stupid. Which is a perfect segue into the second section:

Will Farrell is a funny guy. And I bring that up for no reason whatsoever. And if you believe that, I have some lovely islands in the tropics for sale. Then again... I could probably buy a Pacific island through MathSoc, then sell it back to one of you suckers for a profit, and buy this place some cool chattels. That means stuffs for you ignorant types. And if you're one of the few people who know what ELSE it has come to mean, that's not what I meant. At least... not unless that island is from the right part of the world. So, in order to get back to the point, I'm going to have to give you a little background information. It all began back in 1672 when a pilgram dressed in a funny hat approached a much handsomer and taller man named "Chief Runs with Scissors". The pilgram pointed out that scissors hand't been invented yet, and was promptly [VPFED: edited for length]

David Wheatley
VPF Mathematic Society W05

VPA Sez

OK yeah, I'm the new VPA. That's Vice President Academic (speaking of academics, I have a PSYCH 207 midterm tomorrow morning, a STAT 230 test on Wednesday, and a MATH 239 and CS 241 assignment due Friday — shit). What does a VPA do? Basically, a VPA represents mathies in regards to academic issues. So if you want to complain about labs not being open, co-op stuff, or other stuff like that, come to my office hour and yell at me. I won't go on listing the stuff I do, you can find out more on the MathSoc website or by emailing me (the email address is on the MathSoc website). One of the things I want to do for fall is have 2nd year review sessions in addition to the first year ones we run now.



Oh yeah, FROSH, are you sitting around yelling "VECTORS CAN GO TO HELL"? Listen for your first year rep's announcements about a review session on Sunday for that crazy lin-alg midterm on Monday. There'll be free pop. For the rest of the term, I'll use this column thing to tell you guys what's going on with classes, if they're making new programs, new courses, if they're doing stuff to the coop process, and other important stuff. OK I gotta go study now. LATEZ.

Andrew Lo

VPAS Sez

It's better to read this than to take notes in class on a Friday morning

So, I'm about to pass out and it's not even 11pm. I guess it either comes with being VPAS, or I just enjoy napping. School's gotten busy, and everyone is stressed out. What a better time than to enjoy the finer things in life, like candy! Come by the Exec office during my office hours (Monday, Wednesday 3:30 - 4:30), and I'll give you some or get you a cookie from the C&D (offer only valid to those whose names I don't know).

Tons of stuff has been happening this term so far, with tons more to come. Cove Night was a great success, Cotton Candy Day as well. This month, MathSoc wants to sell you candygrams for Valentine's Day (the booth goes up today!), give you a Super Smash Brothers Tournament (Feb. 18th), a dance at Waterloo Memorial (sometime between Feb. 22 - 28th), a ski trip to Blue Mountain (sometime near the end of Feb,) , and an Academy Awards contest. Yes, we're packing February with tons of stuff to battle your midterm blues.

As always, despite common belief, my directors can't do this alone. Come and help Mathsoc out by being a volunteer. Whether you're keeping the Mathsoc office open for all math students by holding an office hour to becoming a SWAT team member (a Mathsoc volunteer that comes out and helps at events), it's a great chance to meet new people, listen to some music and enjoy free food. If you're interested, please e-mail me at vpas@mathsoc.uwaterloo.ca. Or just show up to the Mathsoc Office (MC 3038), and sit down behind the desk and say "hi" to the person to beside you. They won't bite... hard.

If you get bored check out <http://cahierdephotos.net/mathsoc/weekreport.html>, as it's the best place to get updates about what's happening on the VPAS side of Mathsoc.

Elaine Wong

Super Smash Brothers Melee

Tournament Sign Up

- Who? You and so many more!
- What? Super Smash Brothes Melee Tournament!
- Where? MC 2038
- When? Friday, February 18, 2005: 4:00pm
- Why? You get to beat up your friends in a safe, non-violent way. What other reason do you need (besides the fact that SSBM is a kick-ass game)?
- How? Sign up at <http://www.mathsoc.uwaterloo.ca>

Other random details:

- The tournament style has yet to be determined, it will depend largely on the number of people attending.
- All participants have the option of paying \$5 into a pot which will be divided up among the top four placing fee payers. Anyone may participate without putting any money in at all (i.e. it is free to participate), but only those who pay into the pot will be eligible to take from it at the end.
- Free food will be provided at the tournament
- The winner will be receiving a small prize from MathSoc in addition to their share of the pot

Scot Nyback

MathSoc Movie Night

It's Oscar Time...

So for those of you who have been living under a rock recently, the nominees for the 77th annual Academy Awards have been released. So in a tribute to the Golden Statuette, I have cleverly decided to hold an Oscars Contest. Here's how it's going to work:

- You come to the MathSoc office, look outside the door, and look for Oscars.com forms.
- You pick one up, fill out your choices for each of the categories, and return the form to the MathSoc office.
- If the forms are not outside the door, check inside the office — ask the office worker for a form from the movies box.
- There will be prizes. I don't know what they are yet, but I may when this issue is released upon the world. Check the big yellow board for details.

Now, there are some rules that are going to apply. They mainly concern eligibility, and how it works. 1. This contest is open to any person at the University of Waterloo. Some restric-

tions may apply. You can ask for a full copy of rules and eligibility from the MathSoc office; they will be posted.

2. Each entrant is given one ballot. Contestants are to fill out the ballot, clearly marking choices for each category. If markings are unclear, the ballot does not count for that category.
3. The winner is determined by the most hits. If there is a tie, the contestant with the highest number of points will win. Points will be assigned to each category. For point breakdowns, consult the full rules outside the MathSoc office.
4. On the ballot, each contestant must submit their name, ID number, and uwuserid.
5. Forms are due to the MathSoc office, c/o the Movies Director no later than Wednesday, February 23, 2005.

So that would be the end of my random ranting for this issue. See you at the movies!

MathSoc Movies Guy

gradNEWS

The Pink Tie Pledge

Hello one and all. It's that time of year again (no, not *that* time... the *other* time). That's right, it's time to start what we in the MGC like to call "The Pink Tie Pledge". Now there will be those of you reading this thinking "Yeah, sure, I haven't worn that pink tie in a while. I may as well recycle it by giving it back to the MGC". I'm afraid that's not quite what this pledge drive is about.

Instead, we're looking for you, namely the graduating students, to give something back to the community that has been your home and/or place of incarceration for the past n years, where $n = \{3, 4, 5, \text{ or more}\}$. Now one may surmise that money from the pink tie pledge funnels back into the Mathematics Faculty, and, in a way, it does. In another more important way, it doesn't. In fact, you can decide how your pledge is utilized by picking one of four or more categories to put the money into.

So where does the money go? Well, you can ask it to be given to MEF, which has helped in the past to fund students in all sorts of endeavors. With a growing bank account, they can continue to offer up "moolah" for worthy student projects in the future.

Remember those first few terms of math, struggling over derivatives, matrices, and proofs? Well, another alternative for your pledge is to put it towards funding the Math Tutorial Centre where it can be used on improvements like helping more students pass those math classes, spiffing up the tutorial centers or hiring more tutors.

Find you were having trouble paying off the last few terms? Not enough spending cash? The MGC puts up a \$1500 dollars each year for students entering their last year of school. They provide up to 3 awards of \$500 each and your money can be put towards keeping this wonderful scholarship alive.

Not interested in the above? You can help contribute to something like the Descartes Scholarship Endowment. It helps bright kids to pay for their schooling so they can someday help contribute back to this fund through the Pink Tie Pledge!

If none those options even remotely interests you, you can even choose to pledge to your own area of the Math Faculty. For instance, you could pledge to the Orientation Committee, or to your favourite Math department. You could give back to the Student Societies or even the Computing Facilities. Just use your imagination!

So, you may wonder "Besides the satisfaction of helping some-

one else, what's in it for me?" Well, first of all, it's a tax write-off and, as all your smart business-student friends will tell you, that's a good thing. Secondly, there's a whole whack of benefits to pledging, like receptions and dinners with the Dean. These, of course, are reserved for higher pledges but you can find out more about it from the MGC website (<http://www.student.math.uwaterloo.ca/~mgc/>) or you can email us at pinktie.pledge@gmail.com. Thirdly, we need to beat last year's class. They raised just under \$83,000! We've set the bar this year to \$85,000 and I know that you all want to surpass that number! Come on... DO IT! If that's not enough, just think of the warm feeling you'll get from knowing you've given something back to the community that's nurtured you or turned a blind eye to your academic mischief.

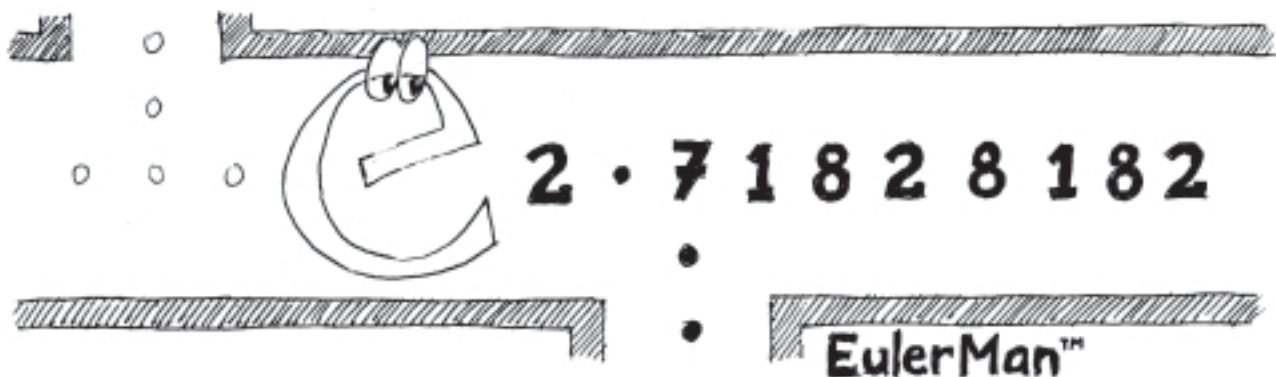
Now that I've got you hooked through peer-pressure, you should know that your pledge doesn't have to be payed off right away. Your pledge is usually collected over the course of a few years and it doesn't matter how small your pledge amount is. Every penny counts! So do you really have any reason not to help out with this great cause?

As well, I'll be running a plethora of "goal-oriented" events that will slowly unveil as time goes by. Next week, February 9th (that's a Wednesday), will be the official kick off of the Pink Tie Pledge. Our first goal oriented event starts that day with the "Pink Tie Mystery Photo". We'll have pledge goals and as they're met, we'll uncover more of the picture. Trust me, you want in on this! The largest donation by the end of the term will receive a whole (instead of butchered) version of this photo to hang on their wall. In order to meet certain goals Jim and I may even shave our heads as incentive. Email any suggestions you have to us!

Also, from that day on, you'll be able to recognize us by the pink ties that we wear. I'll be wearing one every day until the end of the term because that's how long we'll be accepting pledges (if you're lucky, Jim will do the same). Feel free to stop Jim or myself in the hall to ask more about it!

Look to your *mathNEWS*, and the MGC website for more information on the Pink Tie Pledge. Remember, this year's goal is to reach \$85,000 in pledges. Let's all show our support for this great cause!

@Calvin Mok and Jim Morrison
The Pink Tie Pledge Guys



!Stats Club!

Attention all mathies! For too long, Statistics has been rejected by the student body as a discipline unworthy of representation. But despite everything you've learned from STAT 231, stats is a very interesting and useful subject (and not just for gambling)! There are MathSoc clubs for nearly every other program, yet stats is a core Math Faculty department with no undergraduate student organization. It is time to end the madness!

I propose that we create a Stats Club, to officially represent our stats majors and anyone with a passion for probability, statistics, and related fields. The purpose of this club would be to promote academic learning and awareness for of discipline in our undergraduate community. It would also provide a social environment for anyone interested in statistics or who wishes to learn more about it.

The Stats Club would not just be useful for Stats majors; if you have any interest in algorithms, measure theory, bioinformatics, business & finance, machine learning, actuarial science, quantum computing, or ANYthing else, this is for you!

More reasons why a Stats Club would be nifty:

- Encourage students (pre-frosh, frosh, and undeclared) to consider Stats in their academic plan
- Provide academic resources for all Stats classes
- Promote *enriched* learning, through specialized talks and events
- Develop student/prof relationships within the Stats and ActSci dept.
- Provide a safe environment for students with the spontaneous need to act like their favourite probability distribution!

If you would like to help create a Stats Club or would like more information, please contact me (mbiggs@student.cs.uwaterloo.ca). I will be running a dis-Org meeting for all interested parties within the next few weeks, so stay tuned!

Michael Biggs

CSCF Server OS Found to be Huge Mutated Virus

CSCF technicians have found the reason why the student accounts are so slow, and why people are getting so much spam in their course accounts: it turns out the CSCF servers are being driven by a giant virus, rather than the Linux OS they were originally thought to be running. The server logs reveal that about three years ago, an email trojan arrived in the system, nestled in, and made a home. Over time, the virus claimed more and more resources, until eventually, the OS was resource-starved and shut itself down. By a freak occurrence of code evolution, however, the trojan took over the OS's responsibilities, so no one took notice that the OS had been co-opted. TrojOS probably wouldn't have been noticed at all, except that it has recently taken on its old responsibility of spreading itself and generally making the system stop working. CSCF plans to leave the virus as it is, however, because frankly, it takes less maintenance to keep running than a standard OS.

SheepNine

The Cool CSC

Cognitive Science Club

That's right: there's another CSC. They're fun, they're interesting, they're in DC 2306C at 4:30 on Wednesday, and they sometimes have timbits. What else could you possibly want? The CSC hosts talks by both faculty and students of Waterloo as well as talks from learned people from other universities. If you're interested in anything related to cognitive science or even philosophy, then you should give it a chance. It's at least worth a shot, eh? [*I sure do like timbits!* — *SheepNinEd*]

This week our own Peter Jansen was speaking. Here's the abstract:

EuroWordNet is a multilingual lexical database constructed in the wake of WordNet. The ontological structure of EuroWordNet's language-independent layers, analagous to individual WordNets, through the semantic space of the interlingual index and abstract framework of the top level ontologies will be examined. The semantic nature of the interlingual lexicon will be discussed, and the overall ontological design will be evaluated in light of Gruber's principals for the design of ontologies. The talk will include an introduction to knowledge representation from psychological and computational perspectives, and an introduction to WordNet itself, so that everyone should be able to understand it. This talk is inspired by a paper of mine that was recently published, titled *Lexicography in an Interlingual Ontology: An Introduction to EuroWordNet*. The paper can be found online at the Canadian Undergraduate Journal of Cognitive Science's website: <http://www.sfu.ca/cognitive-science/journal/>

Val

Signs your Co-op Term Lasted Too Long

1. The extra large teas at the C&D look too small to get you through the morning, but the price is LAUGHABLE
2. You get up before the sun thinking you have to commute but instead get to school 45 minutes early after your 15 minute walk
3. 50 minute classes are a joke after sitting attentively for 2 hour meetings all last term
4. You start every sentence (verbal or msn) with "msg <username>"
5. You email people questions even if they are sitting in the next room [*I do that now, and I wasn't employed last term* — *SheepNinEd*]
6. You have to eat at 12 noon or your entire day is thrown into chaos
7. You wear a tie or heels to school
8. Upon reaching for the door of the MC your initial thought is, "Crap! Did I forget my ID badge?"
9. You can only work on assignments at school because you automatically veg evenings and weekends
10. You have any urge to watch TV
11. You get excited about reading *mathNEWS* every second Friday instead of "whenever the hell it's put online"
12. You have to re-acquire the taste for Campus Pizza

Half-pint

Walkthrough for *JobMine: Cancelled Employment*

Caution: contains spoilers

The new gaming craze sweeping the University is a highly addictive and time consuming web-based real-time multiplayer game called *JobMine: Cancelled Employment*. For \$450 a term, a gamer can immerse himself in the world of JobMine, guide his character through the treacherous realms of postings and applications in the elusive quest for Employment, and, along the way, gain interviews, rankings, glory, and the admiration of lesser mortals. The gameplay is intense and challenging and success requires skills, charisma, a certain capacity for deception, and a substantial commitment of free (or otherwise available) time.

I admit, I, too, have allowed my weakness for JobMine to consume the precious effort and scant free time in many an academic term, but all this waste was committed before I discovered the secret to mastering JobMine. The remainder of this article contains plot spoilers and sensitive information; true gamers who crave the unmitigated challenge of JobMine are advised not to continue.

The mastery of JobMine can be accomplished by making an innocuous and seemingly trivial decision at the very beginning of the game.

Step 1. Just before the academic term is about to start, your employer will ask you into his office to review a "Work Term Evaluation." Towards the end, he will ask,

"I have offered to re-employ you for the next work term; do you accept?"

- "Accept"
- "Decline"

The newbie might be reluctant to accept a quest so early in the game, choosing instead to decline and eventually to spend the entirety of his academic term slogging his way through the barren landscape of postings, but the adventurous who accept this offer so early on will find that they have beaten JobMine before it's even started.

That's what I did.

Now, my body is rested and my mind is clear for the eventual endeavour of beating the much-awaited sequel - *JobMine II: Interview Conflicts*.

Peiran

Cuba Holds Election

Fidel Castro announced that for the first time since anyone can remember, Cubans will be eligible to go to the polls and vote for the new leader of the country. It seems that the names on the ballot will be those of two of Castro's sons, Emanuel Castro and Hector Castro.

Castro was reported as saying that he was unsure as to which of his sons was most fit to run the country, so he would put it to a vote by the people. In order to vote, citizens need only walk 30 miles to a polling station, avoid American soldiers trying to sabotage the election, and bribe a polling worker.

Democrats praised the move as groundbreaking and "another sign Cuba is miles ahead of Iraq". Micheal Moore could not be reached for comment.

BYOB Jr.

Five perfect submissions, congrats go to Adam Weatherhead, Catherine Hicks, Frogg, MGAJ, and Will Chen for being better than everyone else. Coin-flipology (whereby each round a coin is flipped for each remaining person, and anyone who gets a particular side goes to the next round, this week a Shekel was used) results in MGAJ being our winner, come on down to MC3038 (MathSoc Detention Center) to pickup your C&D gift certificate. Meanwhile, here is last issue's solution.

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

A					
	B				
		E			
			D		
				E	
					F

Fun Fact about BYOB Jr: Graeco-Latin Squares (A derivation of Latin Squares, and explained in BYOB this issue) were also studied by Euler, he believed that there was no valid Graeco-latin square of size $2 + 4n$. He apparently didn't check much, as it is true for 2 ($n=0$) and 6 ($n=1$), but wrong otherwise, in fact, they exist for every

size except 2 and 6). Turns out these squares are very useful for solving certain problems.

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

Itsy-Bitsy Snuggles

Six Signs You're Here for the Winter Term

1. You can skate to school, since this crazy city has never heard of salt [See the *City of Waterloo By-law 82-12* if you're interested in why — StatsEd]
2. Your roommates hibernate more than usual.
3. Your guy friends are using the "it's too cold" excuse to keep from showering.
4. You're a regular student and half your friends have disappeared.
5. No groggy realtime students.
6. Lino is wearing pants. Occasionally.

Half-pint

helped out by other writers on the first production night

UWAFT

The Quest for Sustainable Mobility

Whether you're a tree-hugging environmentalist or a rich Texan oil-tycoon, there's no denying that the world's oil supply will not last forever. Clearly, alternative sources of fuel must be sought after before the inevitable happens.

Fortunately, Waterloo has its own team looking into this problem. The University of Waterloo Alternative Fuels Team (UWAFT) has been around since 1996. It is a student run organization that "researches, designs and implements vehicle designs for use with alternative fuels." UWAFT not only tries to make alternative fuels a reality, but they also attempt to integrate them into practical solutions.

One of their earliest alternative fuels was propane, a low-emissions by-product from the refinement of natural gas and oil. You may have seen a black decaled Silverado driving around. The aptly named Al C. O'Holic is UWAFT's truck that runs on E-85 (a fuel mixture that is 85% ethanol and 15% gasoline). *[Fun fact: It's pet name is the "sloshed Silverado" — SheepNinEd]*

Currently, UWAFT is participating in a continent-wide three-year competition known as Challenge X. Participating schools must modify a GM Equinox, a sports utility vehicle, to minimize energy consumption and harmful emissions. At the same time, teams must meet or exceed the car's performance. Teams are permitted to use a number of fuels such as biodiesel (a fuel manufactured vegetable oils and animal fats which can be used in conventional diesel engines), ethanol and hydrogen.

There are a number of participating universities who have opted to use hydrogen in a combustion process to drive the engine. Waterloo, on the other hand, is the only team that is attempting to implement a hydrogen fuel cell, a device that mixes hydrogen

fuel with oxygen from the air to form water and electricity. This system has the advantage of being more efficient and completely clean. The downside with this system is that the technologies involved are relatively new as well as extremely expensive.

Fortunately, UWAFT has many sponsors. The major ones include GM, for the use of their vehicle, the US Department of Energy, Natural Resources Canada (NRC) and Hydrogenics, a Mississauga-based corporation focused on producing hydrogen fuel cell technologies.

Another major part of UWAFT's mandate is to educate the public about alternative fuels. After all, making the people aware of the need for alternative fuels is important if society is going to make the transition away from fossil fuels. UWAFT's Outreach program is geared towards public education through events and media coverage.

On Friday, January 21 of this year UWAFT had representation at the Canadian Undergraduate Technology Conference (CUTC) TechExpo where Outreach had a chance to inform undergraduate students about alternative fuels. On February 10th UWAFT will be at the Centennial School Science Fair to talk to middle schoolers.

UWAFT is always looking for new and excited volunteers to help out. For more information on the team and on how you can join, please visit their official website at www.uwaft.uwaterloo.ca. Or you can email any inquiries to them at uwaft@engmail.uwaterloo.ca. To find out more about the *Challenge X* competition visit www.challengex.org. You can also visit the business team homepage to view an informative video about UWAFT's participation in *Challenge X* at www.eng.uwaterloo.ca/~tjmali.

Huy

Math Team Wins Scunt

Where Win = Second Place

So, you came out to Scunt last week... or maybe you didn't. Well, I didn't make it out for early events because I was at home waiting for the Math team's head chef, Raymond, to show up so we could complete our wonderous 5 course meal. The gods told us that we had an outstanding house visit, which is really to be expected. When you get 5 mathies in a kitchen, well, you usually get a good outcome (especially when all 5 of them can cook).

I also took advantage of three outstandingly well organized events:

1. Name That Tune: The fun-filled event where one hears a snippet of music and must use it to identify the song
2. Risk: Castle Risk — Math finished 1st, 3rd and 5th.
3. Family Feud: Basic Family Feud, except instead of asking a random sample, it was the Mech gods. Interestingly enough, they agree with me in terms of favorite movies.

I'm sure all the other events were equally well organized and run (oh, and fun), I just didn't make it out to anything in the afternoon due to cooking.

In the end, the only thing that mattered is that Math won, with Chem losing (i.e. they have to run Fall term's Scunt and we don't — but we beat the Softies).

Mark "Beatlemaniac"

First Year Electives

High School 101

I'm in forth year now. I'm taking some upper year courses in C&O and Pure Math. I'm also taking elective of the first year variety. In order to get this Honours Math degree, they tell me I have to take ten courses that aren't math courses. So I say to myself, "I should take chemistry. I did that in high school. It should be easy."

So I took Chem 120, and boy was I wrong. It was beyond easy. We spent 8 weeks learning multiplication! Multipli-freakin-cation. They even threw some division in there for good measure. So after an experience like that, what do I do? Why, take Chem 123 this term!

We're learning about cubes. Cubes! The three dimensional platonic solid. What's the volume of the cube? What's the mass? Now remember that division from last term — find the density!

I highly recommend that all mathies take Chem 120 and Chem 123 as electives in upper year to help take a load off of your other courses. The best part are the on-line quizzes they have. You get five chances at each quiz. Yes, five, and the quiz doesn't change between attempts and they tell you which of your answers were correct!

Take it early, take it often.

Top n Reasons Why NOT to Write for *mathNEWS*

So we got suckered into witting for MathNews. Here is why you should not repeat this mistake:

- n. Mathies can't read, so why write?
- n-1. They'll make you climb 5 flights of stairs.
- n-2. You have to hang out with the editors.
- n-3. They tell you there will be food, but there's a 2.5 hr wait to get it.
- n-4. They tell you there will be food, but there's only pizza.
- n-5. The MathNeWSSS file system rejects your login, and gives error msgs that have nothing to do with the error.
- n-6. You can write articles, but they're not going to print them anyway.
- n-7. You spend time writing when you should be in class/studying for midterms/preparing for interviews.
- n-8. More people read Imprint.
- n-9. No one will date anyone who writes for MATHneWS (why do you think we use nicknames at the bottom?)

After reading over our work, we realized that we should be done. Bye! (Oh, we feel it's only fair to note that if you do write for MATHnews, you get to poke the editors [*Beware though, the editors poke back!* — StatsEd])

DisgruntledEd and Robbert Affingar

Top 10 Reasons TO Write for *mathNEWS*

1. There are many reasons you aren't getting any. I assure you, *mathNEWS* has nothing to do with it.
2. Sure it sucks the first day, but after that, YOU get to ride the new guy around the MC like a pony.
3. Having a terminal open to the school to write articles is more fun than coding Java, but looks the same to your boss.
4. You don't have to deal with the petty things that Imprint writers do like format, grammar, and accuracy.
5. If you write articles and they don't get published, that's because they suck and would waste trees, not because people hate you. However, the constantly getting kicked in your junk has to do with people hating you.
6. *mathNEWS* feeds its writers pizza. If you need more than pizza to get you motivated, then you will ultimately do nothing of any importance and the only people at your funeral will be those who attend by mistake.
7. You get to put it on your resume, and thus you will have more accomplishments than "I was one of those dorks who is already lined up for Star Wars tickets".
8. *mathNEWS* groupies. Ok, more like a *mathNEWS* groupie. Ok, more like a *mathNEWS* reader whom several writers are stalking.
9. *mathNEWS*'s production interface will help you develop your UNIX skills. Of course, if you can't find your own ass with two hands, you're probably screwed from the get-go.
10. If you get too whiny for your own good, there is always an off-stream editor on co-op willing to break out the padle.

Ian W. MacKinnon
Using My Own Name. Wimps.

2A Student Recovering After Hoodie Removal Surgery

Local 2A mathie Clonie McStudent is recovering at home after being released from Red River Hospital after a rare but relatively safe hoodie-removal procedure.

The proud Waterloo student rejected *mathNEWS* reporters' requests for interviews, but we were able to contact her roommate for information.

"As soon as she arrived in town three weeks ago, she put on her favourite Waterloo hoodie. At first, I wasn't concerned, and bought her story that she just wanted to wear it after a co-op term of not being able to."

The roommate told us that after a few days, he became concerned for Clonie's public image. "She started to smell pretty bad in that thing... I think she was wearing it to school and to sleep everyday. After the first week I tried to steal it to wash while she was in the shower, but she had brought it into the bathroom and locked the door."

As the stench increased, a concerned prof, worried about attendance in his lecture, contacted the MUO and asked them to intervene.

A special unit of Campus Police officers, trained for quarentening smelly laundry (usually caused by engineers and mathies during exam periods) stormed the Comfy Lounge the following day and took Clonie to the Village 1 laundry room where they hoped to wash the offending garment.

Female officers were delayed when unable to remove the sweater. However, this special unit was prepared even for the worst of cases and contacted Red River to announce they had a "code Black and Gold".

Clonie had come out of her school-pride stupor at the shock of her arms being attached to her sweater. She agreed to be transported by Campus Police to Red River's ER, where a team of four cosmetic surgeons spent three hours removing the cotton/polyester blended fabric from the skin of her arms and neck.

"We're just lucky she was wearing a t-shirt underneath," the head doctor commented to *mathNEWS* staff by phone following the operation. "Otherwise she'd be a lot worse for wear."

Half-pint

Secret Sex Excuses

So you wanna get away with having lots of sex, but don't want to be labeled as a sexfiend. Well here are some good excuses to tell people to explain your whereabouts for hours (ok, for some guys, minutes) at a time:

- the gym (it explains why you are all sweaty)
- class (you know that no one is going to go to class to check — night class works even better)
- co-op interview (both getting a job and sex require you get on your knees)
- *mathNEWS* production night (or you could actually come out, it's a fun way to meet people... and there is free pizza)
- just say you are going to see a girl (if you are a guy in math, everyone will know how impossible seeing a girl is)

Now you know how to secretly indulge your passion for lots of sex. Trust me, these excuses are tried, tested and true. All you mathie guys have to do now is find a girl and you're set.

Heather "Rain Water" Perry

Proposed Solution to the Issue of Same-Sex Marriage

Over the past week, it's been practically impossible to open up a news publication without seeing some reference being made to the issue of same-sex marriage (*mathNEWS* is not be considered a news publication). Harper claims to be protecting the "integrity of marriage." Martin accuses Harper of being "intellectually dishonest." The issue might even force a snap election.

Let me propose a libertarian solution to the issue: get rid of marriage altogether. More precisely, the solution calls for getting rid of the government's meddling in the definition and implementation of marriage.

Here's a sketch of the solution. The government would:

- Replace all references to marriages by "civil union" (or similar terminology) for legal and administration purposes.
- Refrain from legislating laws governing marriages.

As a result of implementing this solution, the government would play no part in deciding what a marriage means and what it does not. Each individual or private organization can decide for themselves their own definition of marriage.

This solution should satisfy those supporting the same-sex marriage legislation on the ground that denying marriage to same-sex couples is systematic discrimination on the basis of sexual orientation. This proposed solution treats both same-sex and opposite-sex couples equally. The solution should also satisfy those opposing the legislation on the ground that the government recognition of same-sex marriages destroys the traditional significance of marriage. The government would not recognize any marriage at all under this solution. Furthermore, this solution would cause no practical impact on law enforcement and government administration.

J.Y.

Mathie Sex Tips 101

As many of you readers may have noticed, the imprint is printing a column about sex again. Now I know many of you male mathies out there are single and still like to pound the meat every once in a while. I've taken the liberty of doing some research for you in order to enhance your experience.

1. Sit on your hand for 10 minutes beforehand. It gets numb and feels like someone else is doing it. Some people call this 'the stranger'.
2. Turn your hand upside down and pull away from your body. Apparently this is good.
3. Switch hands. All the best baseball players are switch hitters, you should be too.
4. Get a fleshlight. These things simulate the female vagina and are apparently the closest thing you can get to the real thing.
5. Get drunk. Apparently drunken orgasms are better than sober ones. Who knows, maybe you'll enjoy it.
6. Forget you're a mathie and meet some people. There's nothing better for your sex life than a partner.
7. Stop reading this column. It isn't actually helping you get any.
8. Alright, let's just face it, you're hopeless. Take the Paris Hilton sex tape off of loop and get some fresh air.

New cancer study released

In a groundbreaking announcement from cancer researchers, a new paper has been published that summarizes a decade of research. At the conference, head researchers summarized the paper in just a few words: "We have found that everything, yes, EVERYTHING, causes cancer. Fortunately, however, everything also CURES cancer."

The research comes from studying popular trends in cancer scapegoating: eggs cause cancer, orange juice prevents/cures cancer, so the two statements were condensed into, "Food causes and cures cancer." Similarly, everyone that has ever had cancer has been breathing air, but everyone that has ever NOT developed cancer has ALSO been breathing air, so, "Air causes and cures cancer."

The paper, a hefty 1376-page notebook, cites some 346,000 such postulates, along with simple, one-line proofs for them. Some of the more interesting ones are, "Apple trees cause and cure cancer," and "Christmas lights cause and cure cancer."

"This is a fantastic achievement for cancer research," said one of the senior researchers on the project. "It means we no longer have to search for a cure for cancer, since EVERYTHING is a cure for cancer! Sadly, we can't get them past Health Canada, since they all also cause cancer." Talks with Health Canada are currently in the works to get some things, like chicken and doors, cleared for human use.

"Scientists have searched for years for unified theories, like the Unified Theory of Physics. What we have here is the Unified Theory of Cancer. The only thing I'm sad about is that we don't have any more work to do."

The theory beats out previous theories such as, "Nothing causes cancer, stop being a baby," and "There's a magical fountain of cancer located somewhere in Florida," both of which were criticized for not fitting available data. The everything theory has only one known flaw that scientists were unable to account for: all tests have revealed that monkeys are only causes of cancers, not cures. This is, however, further evidence for the "Monkeys suck, let's kill them all because..." theory.

SheepNine



Finally, The FINAL Fantasy Game

Not Burning the House Down: Adventures from a first apartment

Week 1: Tips for move-in day / the first few weeks

Back from my first co-op term, it's time to move into my apartment. Of course residence has readied me for this moment... right?

This term, I'm living off campus in a "real" apartment (real as opposed to student housing/a room in a house) with a male friend (yes, just friend).

So, I'm hoping to offer some advice for any 4-stream frosh for this term, 8-stream frosh for next term, or anyone who would like to laugh at my misfortunes. Again. A new column; here we go!

1) Communicate with the person you are replacing

If you do know who you are replacing in your future dwelling, make sure that you don't assume the communication is taking place between a mutual friend. It's imperative in most cases for you to have room to put your stuff down at your new place before your ride leaves. To ensure this, put a one day gap between you and the former inhabitant. Especially if you are working around the holidays.

2) Pack so that unpacking makes sense

Don't put your egg poacher on the top. Pack kitchen stuff with dishes and cutlery closer to the top and gadgets closer to the bottom. You can heat up quick things for the first few days this way.

Meanwhile, pack a few days changes the top of your clothes instead of facing twelve pairs of socks but no pants on your first morning.

Along this theme, label boxes. Trust me. Then, if friends want to help you unpack your kitchen stuff, you can conveniently not pass them a box full of unmentionables by accident.

3) Plan to eat out for the first three nights

You won't get all settled into your kitchen in the first day or even two or three, especially if you have to wash everything before using it. So make sure you've located good restaurants within walking distance of your apartment, and that you have

some sort of cash or credit handy to pay an arm and a leg for it.

4) Make sure you get your free meal with your parents

Along the lines of the above point, your parents will probably buy you a meal (either dinner or breakfast, or if you are lucky enough, both) if they help move you in. Make sure you remember to drop a hint before they leave town again.

5) If you want a clean apartment, start right away.

This only applies if you *care* about the state of your apartment.

Once classes start, you won't really care about scrubbing the place down. So in those first couple of days, do really deep cleaning right away. After this first deep clean you can do lighter jobs every week - eg, hand scrub the kitchen floor once, mop every week after that.

With hardly any ongoing effort you can have a really nice home to show off should Mom and Dad come to visit.

6) Don't overdo stocking the fridge.

Sure, it's a great idea to have all kinds of things stocked in the fridge to facilitate cooking for yourself (which will save so much money). And it's even better if you buy the makings of lunch stuffs, you'll be rolling in the saved dough.

But keep space in mind, *especially if you share a fridge with someone*. Freezers are never as big as they look, no matter how cheap ground beef is this week.

I've written a tonne of words this week, so I'd best lay off. Besides, the food is here.

- Half-pint, at home on the third floor again, reaquiring the taste for campus pizza

Due to a miscommunication, this was not printed in the first issue of mathNEWS[Our apologies... sometimes the system doesn't accept articles; that's why it sends out confirmation emails when articles are recieved — BeateEd]. If interested, seek out Week 2 ALSO IN THIS ISSUE.

Week 2: Preparing for the parent's (or parents') first visit

So you get the email with about 48 hours advance. Mom's passing through town and she's going to stop by. When are your classes so she can work around them? What are you making for dinner?

How about asking: "How many assignments do you have to finish this week dear?" or "How many nervous breakdowns are you averaging every day?" or "Can I bring your sanity with me, hon?"

So, if you are like me (and I understand that these aren't very student-like qualities), it's time to clean the apartment, go grocery shopping, look up a couple of recipes and hide evidence that the significant other is living with you as a *really* illegal sublet (as he's not really paying rent to anyone), *all while taking care of 5 courses*.

Here are some multi-tasking hints that may come in handy:

- **Have that significant other read your readings for your arts elective out loud while you are doing dishes.** Chances are, if you can afford your apartment, there isn't room for two people in the kitchen at the same time, enough to make it a time-saving effort. You can still learn about Freudian

symbolism in football while wiping away all that grease.

- **Duress.** Target 'YOU' chooses and discards an assignment. That's right, sacrifice one for the sake of your other work and your sanity. Preferably choose one from a course where only n-1 assignments count.
- **Go ahead, spoil yourself, ORDER IN.** You don't have time to cook. You can literally buy time by ordering something in. I don't recommend ordering in from Swiss Chalet though - it's usually cold, and if you're really unlucky, feathered.
- **Continue your lack of social life.** Yeah, it sucks when your only social event is a *mathNEWS* production night and you don't even get printed, but you need to keep up with these things called classes.
- **Don't sleep.** Sleep is for the weak. And the tired. Good luck... As long as you *haven't* burned the apartment down, they should be impressed. Just wish me luck after-the-fact. Tuesday is fast approaching now, and long gone by the time this is read again.

Half-pint
who had slightly more than 48 hours advance warning

profQUOTES

“These blanks are virgin blanks, they haven’t been looked at before... [giggles] I’m... not going to go any further with that analogy... [laughs] and then the head goes... oh dear.”

Radge, CS 365

“Some dogs are poodles and not all poodles are dogs... Is that right?”

Muir, CO 487

[pseudocode on a slide] “return BS”

Lubiw, CS 240

“In many parts of the world, people butt in line at the ski hill. In Canada, this doesn’t happen because people are polite. In the U.S., this doesn’t happen because people carry guns.”

Brecht, CS 350

“Points with zero amplitude in standing waves are called nerds. I mean nodes!”

Jayasundera, PHYS 125

Prof: “Name me some good amps...”

Mech Student: “Kenwood, Pioneer...”

Software Student: “Winamp!”

Jayasundera, PHYS 125

Student: “Wil the exams be like last term’s?”

Prof: “Yes. 70% of the exam will be from the assignments, and the other 30% will be nearly impossible to do.”

DeSterck, MATH 119

“Okay, that’s great. Does anyone here really know what’s going on?”

DeSterck, MATH 119

“Answering that question took longer than I thought[...] When the next chap comes by, can someone go out and tell him to go away?”

Jackson, MATH 239

“We need different kinds of exceptions... ArrayIndexOutOfBounds, NullPointerException, CPUOnFire...”

Buhr, CS 343

“...even George Bush could do this.”

Collins, MATH 237

(a loud thud at the back of the class) “Somebody pass out back there?”

Buhr, CS 343

“I’m going to show you the stupidest piece of code you’ve ever seen.”

Buhr, CS 343

[on repaint command causing the screen to flicker] “There’s a higher level word for it. It’s called ‘excessively annoying’.”

Cowan, SE 382

“I should read the book before I try to teach.”

Young, SE 362

“Have you guys ever heard of Apple Lisa? It was a big Mac.”

Young, SE 362

“I hope I’ve made my point, because I’m losing coherence.”

Young, SE 362

“Communication network (in the undergrad environment) is slow because the damn first-years are sending video valentines to their boyfriends and girlfriends... You all used to do that when you were in first-year.”

Cowan, SE 382

Prof: “Is everyone ready to do something more difficult?”

Students: “No.”

Prof: “Good. That’s what we’re going to do.”

Buhr, CS 343

“The way to find out (geeky friends)... You go in the dark with them, and they glow in the dark.”

Cowan, SE 382

(on how geeky some people can be) “They glow in the dark in the light.”

Cowan, SE 382

“Please use your uwaterloo account to send me questions. If my wife sees one more ‘sweet_baby_girlz_69@hotmail.com’, she is going to start thinking I’m dabbling in porn.”

Kline, RS 101

“Don’t cheat. When I write the Dean my weekly letter, ‘Hey Dean, how’s it going? How’re the kids? By the way—’... you don’t want the ‘by the way’.”

Metzger, STAT 230

“Has anyone visited the tutorial centre yet? *No one?* Well, it’s your funeral.”

Collins, MATH 237

Prof: “Hey, the prof before me didn’t clear the boards... if any of you are ever teachers, remember that the polite thing to do is clear the boards.”

Student: “You didn’t yesterday!”

Prof: “Yeah, I never do.”

Kline, RS 101

“I shouldn’t tell you the entire course in one lecture, but...”

Younger, MATH 235

“...and then I can tell you lies and you’ll never know!”

Goulden, MATH 239

“Might as while get Maple to go and warm up your room a bit.”

Goulden, MATH 239

“Now, that was not *just* put there to confuse the hell out of you...”

Goulden, MATH 239

“Pretend that $n=7$, and don’t tell anyone!”

Goulden, MATH 239

mathNEWS BYOB #2

Break Your Own Brain - Twin Lobes of Utopia?

Round 2, FIGHT! Or, um... Think?! Do something, quick. Welcome back to BYOB, where we give you the opportunity to display your giant brain to get the respect you deserve. Or something like that anyway. Here are the answers from last issue:

$34 = P$ in TP

1. 1=Horn on a Unicorn
2. 1=Wheel on a Unicycle
3. 2=Number it Takes to Tango
4. 3=Blind Mice (See How They Run)
5. 4=Cups in a Liter
6. 6=Degrees of Separation
7. 6=Characters in a Postal Code
8. 7=Days of the Week
9. 8=Sides on a Stop Sign
10. 9=Planets in the Solar System
11. 9=Justices on the Supreme Court
12. 11=Players on a Football Team
13. 12=Signs of the Zodiac
14. 13=Stripes on the American Flag
15. 18=Holes on a Golf Course
16. 21=Dots on a Die
17. 24=Hours in a Day
18. 26=Letters of the Alphabet
19. 29=Days in February in a Leap Year
20. 32=Degrees Fahrenheit at which Water Freezes
21. 40=Days and Nights of Great Flood
22. 50=Ways to Leave Your Lover
23. 54=Cards in a Deck (with the Jokers)
24. 57=Heinz Varieties
25. 64=Squares on a Checkerboard
26. 80=Days to Go Around the World
27. 88=Piano Keys
28. 90=Degrees in a right Angle
29. 99=Bottles of Beer on the Wall
30. 101=Dalmations
31. 200=Dollars for Passing Go in Monopoly
32. 1000=Words that a Picture is Worth
33. 1001=Arabian Nights
34. 20000=Leagues Under The Sea

Fire Up Top

Simply list out all the possible sets of three integers whose product is 36 (there are only 8), eliminate those with unique sums (since knowing the sum didn't produce an answer), and you are left with 9, 2, 2 and 6, 6, 1. Once you know there *is* an eldest child, you know the answer must be 9, 2, 2. Any information could have been presented about the eldest child, maybe it's just that I have a thing for red hair.

A Tribute to Albert

In case you missed my pun there, I called the problem "A Tribute to Albert" and then mentioned that it is a-t(tributed) to Albert Einstein, get it now? Anyway, the German owns the fish, probably swimming in green coffee with some golf balls, which is

quite disturbing actually. Full solution from first to fifth house: Norwegian/Yellow/Water/Chess/Cats, Dane/Blue/Tea/Poker/Horses, Brit/Red/Milk/Tennis/Birds, German/Green/Coffee/Golf/Fish, Swede/White/Beer/Billiards/Dogs.

Six submissions this week, keep up the good work. Adam Weatherhead returned with his devious "submit to only one problem" paradigm, and gets 1/3 for it, as did Michael Cicconi, Frogg missed some of the number statements and gets 2.85/3. Scot Nyback, MGAJ and Catherine Hicks all aced last issue's puzzlers and gets the BYOB thumb of approval (which in reality isn't a thumb, you think about that). So it goes to tie breakers, and although Scot's made me laugh, it wasn't actually a problem. It seems Catherine's tiebreaker edges out MGAJ's (check out the winning tiebreaker for yourself in this week's problems) so Ms. Hicks, come on down to MC3038 (Mathie Rehab Center) to pick up your C&D gift certificate.

Since we often have ties (and I'm not talking about the kind tied to your bedposts) we need a tiebreaker. So: 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 that we might use your puzzle, which means you'll be a real published author (appearing in the National Archives of Canada and everything). And the added added benefit of saving MY brain a little. So don't forget those tiebreakers!

Answers must be in by 6pm on Valentines day, so put down your significant other (gently) and get your answers in, then pick your significant other back up and perhaps replace the word put with go and add an on in there. You can submit to them or to me, your choice; be safe, submit to both. Drop off those answers at the BLACK BOX, between the C&D and Comfy, or email us at mathNEWS@student.math.uwaterloo.ca, or play the ever fun game of Find the Snuggles to submit in person (tops optional). If you don't submit, I'll find someone who will! Now that I think about it, I'll do that anyway.

Hicks Insanity

Using all the numbers from 0 to 9 exactly once, create an equation in which two 3-digit numbers sum to a 4-digit number. (E.g.: $246 + 789 = 1035$) For full marks give at least 10 more equations that satisfy those conditions. (there are 48 in total).

Phun with Fuzzics (It's like Physics, but better)

Please briefly explain why as well for each answer:

1. A man is in a canoe with some iron. He is floating in a lock and decides to throw the iron out of the canoe, into the water. What happens to the water level?
2. A van that is sitting on a giant scale contains some pigeons on perches. Then the evil clown of your nightmares scares the pigeons and they all begin flying inside the van. What happens to the total weight of the van?
3. The van manages to clean out all the pigeon leavings and decides to replace them with helium balloons painted grey. What happens to the freak pigeon-esque balloons when the van accelerates. (All windows are closed).

(continued on next page)

mathNEWS BYOB #2

(continued)

Word Play / Play Word

Each clue leads to two words (or phrases) that are phonetic reverses of each other. That is, flipping the syllables of the word phonetically gets you the second word. (E.g. Impertinent and Teeter totter become Saucy / Seesaw).

1. A clock and Period between wars (2 words)
2. Fabulous and Chase after
3. Have faith in and Not disturb
4. Mass measurement, informally and Understated (2 words-ish)
5. Student in a summer office job and Goto bed (2 words)
6. Fundamental and McCoy's room
7. Government assistance and Goodbye
8. Worst test score and Optimistic
9. Relevant and Plastic jesu's' hangout
10. Sofa and Cups, Saucers, Sugar Bowl, etc (2 words)

That's it folks, enjoy the problems, don't forget to submit, and please, solve responsibly.

Mayor of Snuggles-town

wordJUMBLE

Thanks for your submissions last issue! It seems that this was more popular than I expected. But, I suppose it's quick, at least! In any case, the solution to the last (despite the distinct lack of clues for the end-jumble) are Snail, Coven, Corporate, Alberta, and finally...What do the GridMaster, WordMaster, and SquizMaster have in common? They're all ONE PERSON. Thanks to those who submitted! Here's another for those bored in class!

R	T	A	H	C
	○	○		

L	A	C	K	H
○			○	○

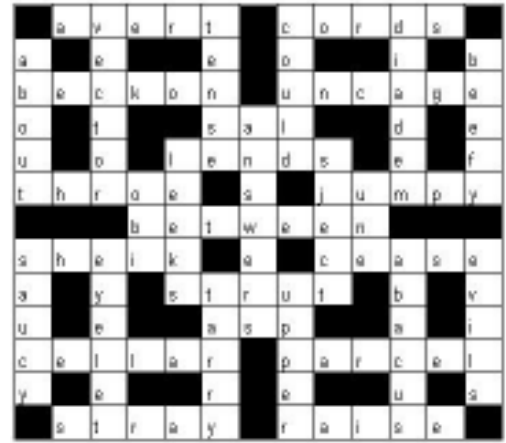
D	I	B	E	N	R
		○			○

E	N	N	A	S	I
			○		○

Why Darth Vader felt like a teenager all the time

He had a

○	○	○	○	○	○	○	○	○
---	---	---	---	---	---	---	---	---



Grid Clues (Conventional)

ACROSS

1. without faults
9. relating to the eye
10. forearm bones
11. extension of information
12. neck part
13. outdoor meal
15. November's flower
18. poisonous
19. consumed
20. army trainer

DOWN

2. frequent child's cry while playing games
3. lacking liveliness
4. strength or vigor
5. mild state of nausea
6. boredom
7. train for human use
8. dramatic replay of events
14. national song
16. 1337-speak for "I rock": "I _____"
17. dull finish

