

math NEWS

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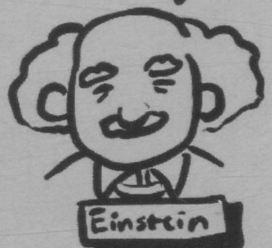


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Ghost-busting crew: Mark Toivanen, Chris Harasemchuk, Louis Mastorakos

lookAHEAD

mathNEWS

July 23 Issue #6 blasts its way into your home

Math Faculty

July 30 Classes end, the people rejoice
August 3-14 Faculty reveals weapons of mass destruction in the form of final exams

MathSoc

July 26-30 MathSoc office Marathon. Come help us keep the office open all week!
July 27 Pints with Profs
July 29 Free Movie Night (2 movies for \$0.00!)
Bourne Identity (7:00pm)
Hellboy (9:00pm)

MGC

Wednesdays Pizza days

Here is another article from the Act Sci club

There's Something Strange?

Are actuaries like the Ghostbusters? Let's find out shall we?
Ghostbusters: Former scientists studying paranormal phenomena.

Actuaries: Scientists in name only

Ghostbusters: Track paranormal phenomena with high tech equipment.

Actuaries: Track formulae by flipping through textbooks

Ghostbusters: Always have a witty remark, no matter the situation.

Actuaries: Always have new notation, no matter the situation.

Ghostbusters: Battle an accountant who has turned into a ghost dog.

Actuaries: Battle accountants with dogs.

Ghostbusters: Called when you need help.

Actuaries: Called when you need help with insurance.

Ghostbusters: Saved society from giant marshmallow man.

Actuaries: Try to save society from problems in pension plans.

Ghostbusters: Star in two major motion pictures and several animated series.

Actuaries: Star in a column in *mathNEWS*.

So now you know.

Ryan Wilson - Act Sci Club

FREE GAMES Saturday

That's right. Tomorrow (Saturday July 24) in MC 1017, from noon right on through till midnight. There's a huge variety of board games available to play. Just walk on in, and there's sure to be a game you'd want to play, and people just waitin' to play it...and best of all it's free! Brought to you by WatSFic. Questions? Visit our website www.watsfic.uwaterloo.ca

WatSFic

July 30th Bomber 9pm AHS EOT Bash - Mathies Invited Prizes, Food and Dancing!

Pres Says

The end of term is coming!

Well, this shall be my last "Pres Says". So here's a recap of the term from that Math Society President's Point of View:

- The first couple weeks of the term were busy getting ourselves on our feet, keeping the office open, getting director positions filled etc.



What this means to you: next term you're in school, drop by the MathSoc office at the beginning of term and sign up for an office hour or volunteer for a directorship position, we always need help keeping things running

- The next few weeks of term were relatively slow from my point of view; I went to a couple of meetings, and represented Mathies on campus.

What this means to you: If you're upset about things in the faculty or MathSoc (or if you think something is really awesome and should happen all the time) send an e-mail to prez@mathsoc.uwaterloo.ca so that you can be better represented

- Then of course around the time of midterms all the crummy stuff happens: new FEDs insurance policy restricts off campus events, and monitors and other equipment get stolen from our labs.

What this means to you: In future terms there will be fewer events held off campus that involve alcohol, but it's not our fault; blame insurance companies. Also, some labs will be closed in the evening now, there's not much that can be done to get around this *and* keep all of our equipment safe. If this EVER causes you problems e-mail prez@mathsoc.uwaterloo.ca and let someone know.

- Before I know it, the term is almost over! In the last couple of weeks the Math Society Council voted to pay for the downpayment for the hot/cold fridge in the C&D, a policy is being created to cover loaning of Math Society equipment and the last Movie Night of the term will be FREE.

What this means to you: The hot/cold fridge in the C&D will be there when you come back for your next school term (we were using it on a trial basis before we voted to pay the downpayment), it will be easier for Math Students to use Math Soc equipment and next Thursday you can see two movies for \$0.00.

So that's what has happened this term, minus some of the details.

Soon I will hand in my key to the exec office, but that doesn't mean that I'm done. You can still reach me at off-prez@mathsoc.uwaterloo.ca starting in September. If you happen to have any issues that relate to this stream and need attention don't hesitate to send me an email.

By the end of the fall term I will retire from my Presidential duties. Who will fill the shoes I leave behind? Maybe you? Fill out your nomination forms for W/F05 Exec by the end of the day...or if you miss that nominations open again in November.

Catherine "Pres" Moore

VP(f) seyz

A brief final comment from me.

Since mathsoc has money to spend, we are spending it. The big capital expenditure this term is the hot and cold unit in the middle of the C&D. It is always nice to pick up hot food hot, as opposed to lining up at the microwave with a growling stomach. Also, the items sold in the hot and cold unit are priced lower, so we can spend less and eat more.

You refund cheques can be picked up from the mathsoc office next week. Sorry for the delay. We are attempting to formalize our cheque printing process so that it can be done faster in future terms. If you have somehow realized that mathsoc does provide valuable services during the course of the term, feel free to not pick up your cheque. We will be grateful. If you have not been hit by such a realization, feel free to visit me in the exec office and I would love to convince you.



In the past, there has been some confusion between mathsoc and the clubs. This term, we flipped through pages of ancient history and resolved all the outstanding issues. I do believe that we are communicating better, so hopefully nothing of the sort will occur in the future.

To conclude, I would like to give a shout out to everyone who is currently involved with math clubs and other organizations. Please consider getting involved with mathsoc in the future. Volunteer! Become a director! Become an executive! This is my first term in mathsoc and I thoroughly enjoyed it. It has been a wonderful opportunity to meet people and learn things. You do not need to be fluent in policy-speak. Mathsoc does many real things that affect students in real ways.

See you around!

Wendy Yu

Ice Cream Flavours

- cheese
- potato
- jelly bean
- white bass
- corn
- gravy
- celery
- salt and vinegar
- pizza
- barbeque sauce
- bread
- bacon
- mushroom
- albatross
- strawberry — my favourite

VPA Sez

So there's a node named Bob who is all by himself and doesn't seem able to achieve anything in life. Finally, he decides to go back to university. After he graduates he gets a great job as the root of a binary tree. Yup, life for Bob has been going great since he got his new degree. I'm having a hard time convincing myself that the semester is almost over, but it is. This semester seems to have gone by faster than any previous semester partly because of my extra involvement in things like MathSoc. Being VPA has taught me so much in one semester. I hope I've done a good job serving math students and I think I've actually achieved some things. Given that this is the spring semester, there haven't been too many meetings but those that I have attended have

been pretty productive. I went to meetings about co-op enhancement and the co-op review. You should be hearing more about these developments in co-op in the upcoming terms and they will hopefully result in some good developments in co-op. I also went to meetings about the curriculum of computer science courses. These meetings should also result in some good developments in the near future. A special thanks to everyone who helped me out this semester, especially the other exec (and especially Wendy who had to constantly put up with stuff from my desk spilling over to her's). I'm going to miss being an exec. I'd have to say the best part is seeing my face in just about every MathNews (just doing my part to keep MathNews sexy). Even though this semester is just about over, if you have any suggestions for what I could have done better or you would still like information regarding academic issues feel free to contact me.

Greg Hines
S04 MathSoc VPA



Rain Water Deemed Toxic

Britney was on to something?

Warning to all mathies, this could be happening to you if you are interacting with one Rain W. Wait, that is too revealing, let us call her R. Water. She likes geeks, and is generally responsive to flirting with anyone. Like most people, she has trouble with the "Let's just be friends" conversation, being worried that it might go badly and that the person she is having it with can't handle it. Anyway, so if it isn't absolutely clear that you are in a relationship with her that is more than just friends, and I do mean **absolutely** clear, then you are just a friend. It also might be handy to start your own, "Are we just friends?" conversation, and be prepared to deal with just being friends with this... dangerous specimen. Most importantly if she does like you in that more-than-friends way, she will likely tell you directly... right.

Remember to Watch the Skies!

MathSoc Office Marathon

Can we stay open for > 100 hours?

The MathSoc is having their Office Marathon next week. We are trying to keep the office open for >100 hours, and we can't do it without your help. Come and sign up for an office hour and help keep the office open. You also have the option of coming and using the MathSoc services this week. This will be the perfect time to photocopy past exams, get those last minute assignments done at all hours of the night.

So, whether you are choosing to volunteer or not, come out to the MathSoc Office Marathon. We will be happy to service you!

Peter Lukow
Assistant Office Director S04
Volunteers

VPAS Sez

Atmosphere, Movie Reels, and a Sense of Accomplishment

A declaration to constituents and inconstituents. As we approach the end of the term, we're going to try and go out with a bang! With the last week of classes upon us, I'm hoping everybody will come out to our final social event of the term - Pints with Profs. We're hoping to have a great turnout. Come along and buy a drink for your prof. Have your prof buy you a drink. Alternatively, buy a drink for yourself. We'll be providing free snacks in hopes of luring you out like a rabbit to a carrot. Really though, it'll be a fun event, and I hope to see you there!

In celebration of the end of the term, I'd also like to announce that the last movie night of the term - held on Thursday, July 29th will be free! You'll hopefully see posters advertising this going up sometime next week. How can you turn down 2 great movies for free?



I hope everybody has had a good term, both academically and otherwise. It's been a lot of fun being able to be in charge of activities and services this term - especially with all the great help I've had. Special thanks to Elaine Wong for her work as social director - without her, we'd have little more than a fraction of the social events we've had. Also, much gratitude goes out to Joscelyn Kleingeld who's been managing very nicely with the MathSoc Office this term. More thanks go to Peter Lukow and Zack Nichols - two guys who have really tried to get their hands in practically everything this term. More thanks go out to Michael Biggs, who's been doing an excellent job maintaining the postings boards this term. Also, Mark Cook is very deserving of a trophy for all the effort he's put into handling movie night this term. More thanks to everybody who volunteered this term! You've all been a great help, and have done a great job keeping MathSoc in a good light.

Signing off.

Paul "VPASness" Ullrich

Popular Tripe

Although I am "semi-retired" from *mathNEWS* writing, when I learned that we were planning a *Ghostbusters* issue, I just about fell off the chair. You see, I estimate that I have seen the movie over thirty times. That's nothing, I have corresponded with individuals who have seen it over sixty times! Anyway, some of my previous articles were entitled, "Popular Tripe." For some of you, this meant nothing. For those of you in the know, the title is a reference to *Ghostbusters*:

Dean Yeager: *Dr. Venkman, we believe that the purpose of science is to serve mankind. You, however, seem to regard science as some kind of dodge or hustle. Your theories are the worst kind of popular tripe, your methods are sloppy and your conclusions are highly questionable. You are a poor scientist, Dr. Venkman.*

An excellent quote if I do say so myself. I wouldn't recommend reciting it to any of your professors, however.

Aaron's Favourite Ghostbusters Quotes

Venkman: *Back off, man. I'm a scientist.*

Zeddemore: *Hey, wait a minute! Hey hey hey! Hold it! Now we're actually going to go before a federal judge and say that some moldy Babylonian god is gonna drop in on Central Park West and start tearing up the city?*

Spengler: *Sumerian, not Babylonian.*

Stantz: *Everything was fine with our system until the power grid was shut off by Dickless, here.*

Peck: *They caused an explosion!*

Mayor: *Is this true?*

Venkman: *Yes, it's true. This man has no dick.*

Zeddemore: *Ray, when somebody asks you if you're a god, you say YES!*

Venkman: *We've been doing this all wrong. This Mr. Stay Puft is okay! He's a sailor! He's in New York! We get this guy laid, we won't have any trouble!*

Proof that Larry King caused the Ghostbusters' EPA Woes

Larry King: *Hi, this is Larry King. The phone-in topic today: Ghosts and ghostbusting. The controversy builds, more sightings are reported. Some maintain that these professional paranormal eliminators in New York are the cause of it all.*

Ghostbusters II Quotes

Spengler: *Venkman, would you get a stool specimen, please?*

Venkman: *Business, or personal?*

Venkman: *Do!*

Stantz: *Re!*

Spengler: *Egon!*

Baby, I wish I were your real assignment, cause then you'd be hard and I'd be doing you on the desk

Ghostbusters Trivia

- Only the exterior of the firehouse headquarters was filmed at 14 North Moore Street in the Tribeca District of New York. All interior shots were done at an abandoned firehouse in Los Angeles.
- The Sedgewick hotel, the setting for the Ghostbusters' first job, was actually the Biltmore Hotel in Los Angeles.
- The university at the beginning of the film is Columbia University. The filmmakers did shoot on campus, however they weren't allowed to mention the university by name.
- "Slimer" was a name given to the ghost by the cartoon. In the first *Ghostbusters*, it was known as "Onionhead," and was thought of by the filmmakers as the ghost of John Belushi.
- The building at 55 Central Park West, where the film's climax takes place, is actually shorter than it is in the film. Matte paintings and models were used to add additional floors and an enhanced false rooftop for the Ghostbusters to blow up.
- Traffic closures for the on-location scenes on Central Park West caused massive disruptions in Manhattan traffic.
- The set for the rooftop temple scenes was the most technically advanced and expensive in the world at the time. The set cost over \$1 million to build and was surrounded by a 360 degree panorama of New York City. The panorama could be lit for either day or night. Columbia Pictures had to shut down other stages to provide enough power to light it. The rooftop set still reigns among the largest sets ever built.

Ghostbusters Props!

Remember that scene in *Ghostbusters II* when Spengler tells Bobby Brown that the proton pack is not a toy? Well, now you can build your own! From proton packs to customized 1959 Cadillac ambulances, get your prop fix at <http://www.gbprops.com>!

That's about all I have to say this time around. Go do yourself a favour and go watch *Ghostbusters* on widescreen DVD right now.

Aaron Klotz

Telemarketer

- <click>
- Hello?
 - Hi, may I speak with whoever's in charge of your phone bill?
 - Daddy? He's not here right now.
 - Oh, may I ask when he'll be back?
 - Christmas! ... well, I think ... I hope ...
 - Thank you, I'll just call him back when he returns.
- <click>

Symbolic Reference

Math vs. Engineering

So you think you can give blood...

Last week, from July 12th to 16th, students from all over campus flocked to the Multi-purpose room in the SLC to donate the precious fluid of life. If you don't know what I'm talking about, you should! "Blood. It's in you to give!"

Every 56 days you are eligible* to make a whole blood donation which could help one of the thousands of people in need around the country. All you have to do is roll up your sleeve, let them poke you with a very large needle and sit back and relax. Literally. You lie on a stretcher playing with a paper ball for anywhere between 5-10mins (plus or minus the half hour it takes for screening and filling out the forms) and then get free cookies and juice! FREE. Is there any better word in the English language than FREE? And you even get to contribute your name to the Blood Donor Challenge between the Math and Engineering faculties. From October 2003 to October 2004 (and most likely from every October of one year to the October of the next), any donation recorded goes toward the tally of total Math students for the year. So to all of you who did take the time to donate last week I applaud you and your loss of blood. To all of you who came up with some excuse about how your mother's cousin's brother-in-law died and your parents had to fly out to the funeral in BC and you had to go home and babysit your brother, there's always the option of trekking it out to the permanent clinic in Kitchener at 94 Bridgeport Road East.

My only recommendation would be to listen to the nurse! When they tell you to relax and have some cookies, and juice, and sit for a while before you leave, it's a good idea to do so. After rescheduling twice, I finally made it out Friday afternoon to try and best my 7 minute record. Now, I'd given blood a total of 9 times previously and only passed out once. I figured once

was enough, however I was very mistaken. After losing one pint and several vials, I waited patiently before sitting up and making my way over to the cookie table. I grabbed a very warm cup of apple juice and some extremely good oatmeal cookies and made my way over to see how well my friend's blood was flowing. Since apparently he didn't realize we were racing and had decided to take his time, I reluctantly went back to the cookie table to continue to replenish my bodily fluids. Sitting down, I quickly realized that getting up in the first place was a very bad idea. This would be the point where my first assumption was proven wrong. I was overcome by extreme nausea, dizziness, loss of vision, very acute hearing specific only to ocean noises. Before I knew what was happening, I was surrounded by Blood Services staff, calling my name and telling me to keep my eyes open. I was lifted on to a stretcher and buried under ice-cold, wet paper towels, and refused the option to leave until a staff member had assessed my situation.

Moral of the story, passing out is worth the free cookies. Oh and keep up the donations and maybe we can beat those damn engineers.

Tin

* - Eligibility criteria include:

1. Donor must not have had sex with someone who has done cocaine
2. Donor must not have had sex with a man, who has had sex with another man since 1977
3. Donor must not have been paid for sex, had sex with someone who has been paid for sex, or have paid someone for sex

Tweens Infest Village One

Short Shorts Blamed For Low Test Scores

Anyone who has been around Village One or the PAC in the last two weeks has to have seen the Volleyball Girls here for their Summer Camp. They have been sighted walking around in their tiny little shorts. They are like standard issued microscopic shorts. Shorts so short that you can't see them because their t-shirts are too long. I am not complaining cause I am bitter, you must believe me. I could wear those shorts but I feel like people still need their eye sight. I am complaining, because at the mere sight of one of these girls, the IQ of any surrounding males drops about a million points [*Wow...I'd like to have a million point IQ to start with...where do I sign up? — BeatleEd*]. This is a far way to fall for many of the guys in math. Struck dumb, guys would oggle and stare at these poor girls. Many guys tried picking them up only to find out they were all the tender age of 14. Guys in my house even went as low as to press their noses up against the glass of our lounge windows in the hopes of getting a better look. Thankfully these pieces of underage eye candy have gone home.

So, guys I beg you to leave these volleyball girls to their sport. They are not here for your staring pleasure. Grow up, because by law you have to wait until they do.

Rain Water

MC Building Infested by Daemons of Algebra

An experiment in singular cohomology by a mad graduate student went terribly wrong on Friday, 16 June, opening up a crack into the parallel dimension of homological algebra. Before the student's colleagues had the opportunity to erase the various exact sequences from the room's chalkboard, several daemons escaped from the rift and began systematically erasing all traces of geometry from the MC.

Panic soon gripped the hapless MC population. "How will we know how to prove that $F[x,y]/(x^2-y^3)$ is not isomorphic to $F[x,y]/(x-y^2)$ if we have no geometric intuition?" exclaimed one frantic pure mathematics professor. The Mathematics Society quickly put together an elite squad of scientists who specialize in the mathematics of paranormal phenomena to contain the daemons and return them to their own dimension. However, before they were able to entrap the creatures, the hit squad ran across the University administration and was promptly placed in a mental institution.

The daemons eventually met their demise in the Comfy lounge. Their reflexes slowed by the presence of toxic airborne chemicals for which they had not been prepared, they easily fell prey to the various spells and incantations cast by the strange and mysterious natives who inhabit the lounge.

Tlachuepan

Is a Dental Plan Socially Useful?

You may have heard that both the Federation of Students and the Graduate Student Association are examining the possibility of implementing a student dental plan at UW. The plan is not yet finalized, and it is not yet known whether the plan will have a mandatory fee, or whether students will be able to opt out of the plan. In this column, I will present a reason why a dental plan should not be funded by a mandatory fee.

The discussion about whether or not the dental plan should be mandatory should not be based on whether or not you personally want a dental plan, or whether you are likely to benefit individually from such a plan. Such considerations would be important if you were considering whether or not to sign up for an optional plan, but they are not relevant to considerations of whether a plan should be mandatory or not.

Any discussion of whether the fee should be mandatory should focus on whether or not it makes sense to fund such a plan collectively. It only makes sense to fund a dental plan collectively if it provides some kind of social good — that is, it should provide benefit to even those who do not actively use the dental plan. If a dental plan only provides individual good, then it makes more sense for it to be funded on an individual basis, either through an optional plan or through private dealings with insurance companies.

This point can be illustrated by contrasting dental insurance with other, more socially useful programs that are collectively funded. Public education is a prime example. Everyone funds it through taxes, though not everyone who funds it uses the public education system directly. However, even those who don't use it still benefit. Having a well-educated workforce is key to having a strong, globally competitive economy. Furthermore, the research done at publicly-funded educational institutions eventually becomes technology which raises the general standard of living.

Public health care is another example. Even if you never have to go to a hospital yourself, you benefit from the fact that people aren't walking around with contagious diseases. It is also economically beneficial, since having a strong health system reduces the amount of productivity lost due to health issues. It's programs like these, that provide a social, rather than individual benefit, where collective funding makes sense.

It is not clear to me that dental insurance provides the kind of social benefit that justifies collective funding through a mandatory fee. Though there are connections between dental hygiene and overall health, I have yet to see evidence that the connection is strong enough to warrant collective funding. And, while I'm sure we would all benefit from some assurance that the people sitting around us in class won't be enveloping us in a haze of halitosis, I don't see enough evidence to suggest that the social expenditure involved in a mandatory dental plan is justified — and I would be interested in having such evidence enter the discussion.

Craig Sloss

Reason to Destroy All Mankind, #263

That g*ddamn Chiclets commerical with the Japanese girls singing karaoke. Holy hell, I want to kill someone for that.

HWT

Production Night Ramblings

Sitting at production night, many odd conversations often come up. Tonight, we had a very interesting discussion about the merits of dental plans. Here, is a summary on my opinions of the merits of a dental plan.

I'm only in favour of paying for things for other people (ie. a dental plan) if it has a value to society. I am working off the principal that things which allow people to live are good for society, although I'm not 100% convinced they are.

So, is a dental plan good for society? Well, it depends on what sort of dental work is covered. For example, if a person has a problem where he is unable to eat because of a problem with his mouth, I think that dental care should be provided. It allows him to live and contribute to society.

However, if I decide that one of my teeth isn't quite straight enough for my liking, I don't think that other people should be forced to pay for that as part of a dental plan. What have I done to deserve you paying for me to look better, when the way I look right now is fine?

A fellow writer found a reference that preventative dental care helps to prevent a number of health problems in the future. The reference was quite vague, and so not terribly believable, but if such a correlation existed, I would also be in favour of preventative dental work being covered.

I think that before this discussion, my personal opinion was biased. I haven't visited a dentist since I was about five and I was tainted to think that most, if not all dental work was either purely cosmetic or due to people being irresponsible. I've realized that's not the case, so I'm not as opposed to a dental plan as I first was. If the dental plan is only for required dental work, and possibly preventative (still on the fence on that one), then I would be in favour of a dental plan.

π

mastHEAD

"I was born to wear this"

You know, school would be so much better without classes, assignments, midterms and finals. I mean, really, who wouldn't want to spend their entire academic career doing social things? Yeah. Me too. Well, keep dreaming, cuz that's the only place it will ever happen.

So, as you may have figured out, this issue is all about Ghosts and Ghostbusting.

As such, we figured the only thing we could really ask our writers was...Who you gonna call?: Pete (Bob Barker...if the Price is Right), Commander Celery (1-900-...(erm...is this appropriate)), π (register \$0), Symbolic Reference (the carpet cleaners), Tlachahuepan (Henrik Lenstra), Kaitlyn (1-888-BITCH-N-MOAN), Proofreader Cass (the evil spirit of Artsie Revenge), Rain Water (which ever of my 7 boyfriends that is free at the time), Tin (my cat), Craig (Toast Crusters?), Peaser (my granduncle Wilma), DanS (I won't. I hate phones, may as well e-mail instead), Dirty Flame Axle (Hookers), Soo (my -1st boyfriend), SheepNine (my member function - eatPizza();), Dave (Ghostbusters), Eric (the landlord; pests are his problem).

Mark "Beatlemaniac" Toivanen (He-Man!)
Krease (the same guy I call every night, Pinky...)
Ian (Someone else to be substitute editor)

profQUOTES

"\$5 for a good evaluation, \$10 for a really good evaluation, \$15 for an excellent evaluation, broken legs for a bad evaluation. Only kidding about the money."

Brown, CS 132

"I'm a stuffy old guy, so I like good old Wolfgang. You can put whatever musician you want in there, as long as it's not Michael Jackson or some crap like that."

Hoffman, PMATH 330

"Bertrand Russell nearly shit his pants when he discovered 'nand.'"

Hoffman, PMATH 330

"I'm not a Computer Scientist, so maybe I'm full of shit."

Hoffman, PMATH 330

"Well, now we're up shit creek, as they say... or at least they used to."

Hoffman, PMATH 330

"Of course, you being good Math studnets, when I tell you a rule, you all line up and go, 'Yes sir, yes sir, yes sir...'"

MacKay, STAT 231

"We hope people... well, we don't *hope*... we *provide* the opportunity for people to make an error."

MacKay, STAT 231

"So who thought Wednesday's assignment was challenging?" [all hands go up] "I thought that was darn hard... I probably should have said something sooner."

Schellenberg, MATH 136

"I'm not sure how to answer your question, except by making jokes about it."

Serafini, PSYCH 101

"If you're tired of me saying 'convergent' and 'divergent,' I've got bad news for you — we will be doing it for a while."

Theriault, MATH 138

"I will do an example of this in five seconds... or however long it takes me to erase that."

Theriault, MATH 138

"I think you are old enough to handle that limit."

Theriault, MATH 138

"At the University of Waterloo, I am a leaf note."

Vasiga, CS 240

"It's hard to memorize Case 2 in the KMP algorithm. It will be easy once you tattoo it all over your body."

Vasiga, CS 240

"In Waterloo, there is lots of room to put up little tree-houses and live happily connected to the Internet."

Vasiga, CS 240

"I'm not good thinking on my feet. I like to think lying down."

Vasiga, CS 240

"I can shoot arbitrarily far because I'm elven."

Vasiga, CS 240

"I'm going to be hungry in a minute. I'm going to eat my sister... Mom might get pissed."

Vasiga, CS 240

"You can't eat your cousin. That's not allowed."

Vasiga, CS 240

"[1.1×10^{12}] is some huge number, such as the number of planets in the solar system."

Vasiga, CS 240

"Thank God I have saliva."

Vasiga, CS 240

"This has nothing to do with someone's mother or sister or lover... Computer Scientists don't have these things."

Vasiga, CS 240

"You will get bonus marks if your compressed file is smaller than the original file."

CS 240 assignment

"Inhaling chalk... I'll get white lung syndrome, I'm sure."

Wood, MATH 138

"Differentiation is not nearly as useful as integration..." [quietly] "or as hard."

Wood, MATH 138

"10 billion calculations. I will leave that as an exercise for you to do on your own."

Wood, MATH 138

"Taylor Series. Everyone's going 'oh god, don't let this have anything to do with Taylor Polynomials.' No, it has everything to do with Taylor Polynomials."

Wood, MATH 138

"So if you're driving down the road and crash into a tree, that's infinitely differentiable. It's really smooth, even if it doesn't seem smooth."

Wood, MATH 138

Rejected topics for the entertaining round of speeches for public speaking class

- Arts students are all idiots anyways
- A fun and easy guide to plagiarism
- Top 5 illegal uses for The Imprint
- How to seduce University faculty staff for fun and profit
- How to procrastinate writing algebra assignments by planning *mathNEWS* articles 6 days ahead
- Offending people 101
- Sabatoging frosh week for dummies
- My favourite brown jokes
- Ian's Mom

Host Lassar

To the tune of 'Ghostbusters'

(Awesome musical intro)

Host Lassar!

If rees and fitch...have been down all week
Where you gonna shell?...Host Lassar!
Your assignment's due...and things look bleak
Where you gonna shell?...Host Lassar!

I ain't afraid a no code

I ain't afraid a no code
If C and Scheme...are runnin' through your head
Where can you shell?...Host Lassar!

An !visible() man...executes your thread
Oh Where you gonna shell?...Host Lassar!

I ain't afraid a no code

I ain't afraid a no code
Where ya gonna shell?...Host Lassar!
If you're all alone...then just go home
Or shell...Host Lassar!

I ain't afraid a no code

I ain't afraid a no code
Where you gonna shell?...Host Lassar!
Mmm...If you're done your Jolt
And your sweet can of Coke
You better shell...Host Lassar!
Compiling makes me feel good!

Where you gonna shell?...Host Lassar!

Ah, I think you better shell...Host Lassar!
I can't hear you...Host Lassar!
Where you gonna shell?...Host Lassar!
Louder!...Host Lassar!
Where you gonna shell?...Host Lassar!
Where you gonna shell?...Host Lassar!

fade out

Chris 'Krease' Harasemchuk

Stunning Soccer Standings!

Greece? They were a shoo-in compared to us! But through lots of effort, good teamwork and a "little" luck the mathletics soccer team are the champions of campus Rec C league soccer.

What does the future hold for our valiant mathies (and associated hangers on)? No one's quite sure, but there have been rumours of B league standing in the fall.

Congratulations to everyone!

The team members are:

First Row(left to right): Roumen Grozev, Thomas Humphries, Jess Liu, Shez Suhail, Denglin Zhou, Cai Xun, Priya Mathews
Second Row: Dylan Chadsey, Geoff Cruttwell, Mike Chung, Colin Davidson, Chris Almost
Absent: Abtin Azari, Peter Lukow

Ways to Prevent Theft from Computing Labs

The story: A couple of weeks back, several of the computing labs that were functioning perfectly well were "upgraded" with flat panel monitors. Soon after, a handful of these monitors were stolen in the middle of the night. In response, the computing overseers starting shutting down the labs with the EZ-steal monitors at 4:30. So in what has to be the biggest bit of irony this term, a huge expenditure of computing funds has led to us having less computing resources. Until a better solution than keeping the labs closed at night comes forth, these computer labs will only be open a third of the time they used to. Here are some simple solutions to the theft problem:

- Sharks, with frick'in lasers on their heads.
- Paint all the monitors a flamboyant pink colour, no self-respecting thief would be caught dead with a pink monitor, and we'd be promoting faculty pride.
- Run a mild electric current through the cable which locks the monitor to the table. Ensure that the current is strong enough that it will keep people from touching it, but not so strong that if it touches the CPU power cable three servers go down for the count.
- Put a scare-crow in the computer labs, sit it down at a machine face down on the keyboard, with any luck, a potential thief will think its just somebody taking OS.
- Hire a co-op to walk around the MC at night, and randomly pat-down people to see if they're hiding a monitor, give the co-op a tazer to handle those who do not cooperate.
- Bottle the smell from the comfy and spray it into the computer labs, UW mathies will develop an immunity over time, and any thieves will be too disgusted to go into the lab to steal anything.
- Change the monitors so they only display greyscale. Given that the computing environment is the same as it was in 1991, nobody will know the difference, and the monitors will be useless elsewhere.
- Bring the big-ass monitors back, sell the flat panels on ebay, use the money to buy a Commodore 64 lab.

Ian W. MacKinnon



GhostbustersQUOTES

Egon, this reminds me of the time you tried to drill a hole through your head

Peter Venkman

Listen, do you smell something?

Ray Stantz

I think this building should be condemned. There's serious metal fatigue in all the load bearing members, the wiring is substandard, it's completely inadequate for our power needs and the neighbourhood is like a demilitarized zone

Egon Spengler

I'll take Mrs. Barrett back to her apartment and check her out...I'll take Mrs. Barrett back to her apartment and check it out

Peter Venkman

That's the bedroom, but nothing ever happened in there

Dana Barrett

We're exterminators...someone saw a cockroach up on 12

Peter Venkman

24 hours a day, 7 days a week, no job is too big, no fee is too big

Peter Venkman

Do you believe in UFOs, astroprojections, mental telepathy, ESP, clairvoyance, spirit photography, telekenetic movement, full transm mediums, the Lock Ness Monster and the Theory of Atlantis?

Janine Melnitz

Let's say this twinkie represents the normal amount of psychokinetic energy in the New York area. According to this morning's sample, it would be a twinkie 35 feet long, weighing approximately 600lbs

Egon Spengler

I make it a rule not to get involved with possessed people...actually, it's more of a guideline

Peter Venkman

Hey, where do these stairs go?

(reponse)They go up

Ray Stantz to Peter Venkman

Gozer the Gozarian, good evening. As a duely designated representative of the city, county and state of New York, I order you to cease any and all supernatural activity and return forthwith to your place of origin or to the nearest parallel dimension

Ray Stantz

Gozer: Are you a god?

Ray: No

Gozer : Then DIE!

Gozer the Gozarian to Ray Stantz

We've been going about this all wrong...this Mr. Stay Puft is OK...he's a sailor, he's in New York, we get this guy laid, we won't have any trouble.

Peter Venkman

This job is definitely not worth \$11,500 a year

Winston Zedemore

He was borderline for a while, then he crossed the border

Egon Spengler

No respected psychic will come on your show, they think you're a fraud.

(response) I am a fraud

Norman (Peter's guest-finder), to Peter Venkman

I bet those science chicks really dig that big cranium of yours. (response) I think they're more interested in my epidermis.

Peter Venkman to Egon Spengler

We had part of a slinky, but I straightened it

Egon Spengler

There are so many holes in 1st Avenue, we didn't think anyone would notice

Peter Venkman

And you don't want us exposing ourselves

Peter Venkman

Is the atomic weight of cobalt 58.9?

Egon Spengler

Oh no, OH no, OH NO!...she cleaned!

Peter Venkman

No, no, no, no...I have all new cheap moves

Peter Venkman

I used to have a roommate, then my Mom moved to Florida

Lewis Tulley

What to do when you can't think of an article to write

- Write several unacceptable articles just to be censored and feel controversial
- Argue about frosh week / health plan politics
- Sit around asking "when is the pizza coming?" every 5 minutes
- Read past articles by yourself online trying to regain your past humour
- Update your blog
- Photocopy unmentionables in the soc
- Argue some more about the dental plan for 20 minutes!
- TP the 6th floor
- Snuggle with Snuggles, just cause it sounds so cute
- Write a hack article about not writing articles in a style that's probably been done before
- Play Colours and Countries or Names and Anything
- Steal the Orientation megaphone and declare Kaitlyn sexy over it

Half-pint

How to Ignore the Theme of a Themed *mathNEWS* Article

Because themes are for chumps

So, you're writing a *mathNEWS* article the day after production night because you feel guilty about eating the *mathNEWS* pizza without writing anything. And you don't know what to write about, because you have ten minutes to your next class. What do you do? WHAT DO YOU DO!?

Well, if you're anything like me (and why would you ever not want to be?) the easiest solution is to ramble on about a bunch of random crap. Much like this article. Yeah. However, as I have some semblance of standards for my articles, I'd like them to be at least somewhat funny.

So, I'm going to describe my plan to take over the world.

First, get yourself a very, very, VERY large heat ray. The kind you perch on the top of a very large mountain. Then, get at least a dozen large collection machines. For bonus points, make them shaped like some sort of animal. Or make them out of platinum. Themes are fun.

Now, use the heat ray to boil the whole ocean. This will cause all the aquatic life to die. Use your collection machines to collect all the fish carcasses and bring them to your mountain heat ray fortress.

Put all the fish on ice. I mean ALL of them.

Wait about a year. All the world's supply of canned, fresh and cooked fish will be consumed, and you now have a monopoly on the fish market. As well, because you've singlehandedly killed and boiled all the fish at once, you hold the entire world's supply of cooked fish.

With supply dropping to zero, demand will skyrocket. You can then sell each boiled fish for tens of thousands of dollars. With all the money you get from your monopoly, you can then buy a giant death ray modification kit for your giant heat ray, and use it to rule the world with an iron fist.

...that'll teach me to eat then *mathNEWS* pizza before I write anything.

Sheep Nine

Ghostbusters: The Musical

And the rage it instilled

Ok, so I came across this webpage. This webpage contained "Ghostbusters: The Musical". I was seriously disturbed. After having seen the Ghostbusters movies just yesterday, seeing this webpage turned me into this rage of fury. Seriously, I yelled and... well, maybe not yelled, but I most certainly got mad and disturbed.

Granted, it's amusing. But it's amusing because it's so bloody awful! They make it known to the reader that they sing songs to the tunes to "There's No Business Like Show Business", and "Y.M.C.A.". They also alienated a Beatles song [*Blasphemy! — BeatleEd*]. They took "Yesterday", and made it "Ghosts Away". It hurt my brain.

How can one take such incredible theatrical releases, and turn them into crap by making musicals out of them. It deserves to be printed up, and then burned. Burnt to a crisp! It should burn in hell! Now, don't get me wrong, I think that some of the script is entertaining, but it's just so wrong to think of Ghostbusters as a Broadway Musical! GRRRRRRRRRRRRRR!!

Pete

School Installs Pole in MC

Projected to Alleviate Pedestrian Congestion in Crowded Building

School administration recently approved a plan to install a pole in the Math and Computer building. A pole was originally proposed as a solution to the traffic problems that has long plagued the MC stairways.

The new pole will connect the centre hallways of the fourth and the second floors of the building. It bypasses the third floor by running behind the Nortel and CS computer labs. This pole will allow students leaving the fourth floor to quickly and efficiently go to their next classes on the second floor, or to leave the building without clogging the already congested stairwells.

Undergraduate students are looking forward to using the new pole to get to and from their classes in the MC. "Hey! Does this pole still work?" exclaimed excited student Ray Spangle upon discovering the new addition to the building. "This building is great!"

Unfortunately, not everybody is happy about this new addition. "This pole is making all of us [graduate students] jealous," said a graduate student who asked not to be named. His most frequent trips are from the fifth floor, where he works, to the third floor, where he must go to get food from the Coffee and Donut shop.

Some graduate students, in fact, are feeling emotions even stronger than envy. Peter Short, who is one of these disenfranchised graduate students, is trying to organize a protest to get a pole from the fifth floor to the C&D. "We have waited long enough," said Short, to an agitated audience of graduate students, "our requests have been ignored again and again by the administration and the time for complacency is long past!" "Down with the Establishment!" concluded Short, before the crowd became a frenzied mob and left the building to pillage and plunder.

A secondary pole from the fifth floor to the C&D was also proposed, but the proposal was scrapped due to insurance concerns.

Symbolic Reference

Study Ghostbusting at UW

Engineering creates new program

We all know that the Engineering faculty has been searching for even more ways to divy up their programs, but who would have thunk they'd ever get this? Last week, in a surprise move, the Dean of Engineering announced that there would be a Ghostbusting engineering program, which would be equivalent to taking electrical, chemical and paranormal engineering. When asked what paranormal engineering was, the Dean turned to one of his associate Deans and asked "had we not released this one yet?". This program is broken down to allow students to learn all the "ins and outs" of ghostbusting, along with how to do it. Graduates are expected to start their own businesses, usually by having three mortgages on the house their parents left them, in the world's metropoli where ghosts are causing havoc.

Beatlemaniac

HorrorScopes*Still Not Very Good*

ACC - Now is the time to learn to do things the right way, so when you try and cook the books later, you'll know what people will be looking for.

Something must be wrong... The stars just dispensed practical advice...

Your lucky number is 100%.

ACTSCI - Just because you've fallen into the habit of failing SOA exams doesn't mean you should fall into the habit of failing UW exams. I suggest learning how to fail to fail instead.

Two wrongs might not make a right, but three lefts sure do. Keep that in mind.

Your lucky number is 3 hours.

AMATH - OR is going to ask you to do them a favour. By all means, say no. You have better things to do.

In other news, I see your gibberish worked out well. Forsooth, verily I say unto you that malignant fruits can only discombobulate blind toasters.

Sorry, it seems to have gone again.

Your lucky number is 7.

BBA/BMATH - MATHBUS seems to have some kind of axe to grind. Prepare a business case outlining how your continuing antagonism benefits no one.

If appropriately lengthy, you should be able to use the business case to fend off attacks. I also suggest finding a big stick and moving their cheese.

Your lucky number is at least 20 pages.

C&O - What a tangled web we weave, etc, etc. This will be doubly true for you next week as you become an unfortunate victim of the militant wing of the Simplicity Circle.

ES has plenty of experience in dealing with these hippy-types. Throw them a banana and they may help you.

Your lucky number is k-2376.

CS - Accidentally, you seem to have wound up with the same fortune as SOFTENG. Except yours is not as rich in iron.

MATHBUS - Let's face it: it's gonna be pistols at dawn. You know what I'm talking about.

Fortunately, BBA/BMATH has terrible aim. Consult OR for an optimal bullet path.

Your lucky number is 6 rounds.

MATHSCI - No one could've expected it, but your dizzying array of party tricks will be just what you need to pass your exams.

I'm not sure how, but being able to cherry stems in a knot with your tongue will give you the answer to the thrid question on your second exam...

Your lucky number is 85%.

Operations Research - Whatever you do, don't calculate optimal trajectories next week. Besides, that's AMATH's job.

If you need to calculate something, I'm sure PMATH has some equations that they feel are below them.

Your lucky number is, uh, what's a number?

PMATH - Finals are upon us, which means it's time to start learning your course material. The good news: you should be able to derive most things from first principles. The bad news: it might take longer than 3 hours.

If in doubt, cheat. ARTS may have a word or two of advice on how to not get caught.

Your lucky number is 15 hours a day.

SOFTENG - I seem to have mixed your fortune with that of CS. It tastes a little like lemon-lime.

STAT - Um, good news, bad news. The bad news is that you're going to fall asleep during one of your exams and wake up with not enough time to finish it. The good news is that that won't matter when a freak hailstrom claims you next Tuesday.

Sorry, I have to predict a death once in a while or people stop fearing me.

Your lucky number is a 2 week life expectancy.

UNDECLARED - At times like these, it's important to point out that not choosing is the key to remaining open-minded about things.

That being said, I would suggest you choose to study for your exams in the order in which they will be written, because if you spend too long prevaricating, you could wind up like PMATH. Which is to say, not studying at all.

Your lucky number is 5 in serial order.

ARTS - Well, the summer term's officially coming to a close. With all those notches you've gained in your bedpost this past term, you're going to be able to sell it as a sculpture soon.

That's not such a bad idea, the stars tell me. Recruit a double degree or MATHBUS student to help with the marketing. Just don't promise to make more: you don't want to be that busy.

Your lucky number is embarassingly high to most people.

AHS - Goodness, you seem to have the same prognostication as ES!

No, sorry, my bad. Practise your throwing arm; there's a brick that gonna need lobbing next Monday. I'm sure everything will be clear at the time.

Your lucky number is 40 N to get it to the right speed.

ENG - I can only suggest beating the summer blahs by preparing for your examinations, because, let's be honest, what else do you have to do between now and the middle of August?

The stars tell me STAT plans to spend the time similarly sequestered. You should call them up so you can be anti-social together.

Your lucky number is 14 days with no sun.

ES - Egads, your fortune looks strikingly similar to that of AHS!

Sorry, it's a trick of the light. Speaking of which, stay away from windows, unless you want to get hit by a brick.

Your lucky number is 1 kg at 15 m/s.

SCI - The stars have bad news concerning your practical examination. Disaster may be mitigated if you can remember acid into water, not water into acid.

Oh, who am I kidding? Just try and leave the building standing; we're running of rich alumni to give us money to build new ones.

Your lucky number is 400 kilotons.

Eric Logan

taQUOTES

"You always have to delete newed items."

Last article of the term...

So, it's the last issue of this term, and so I need some sort of special article to go with it. The last two I wrote have been among my most successful, and I think best articles that I have written since starting my *mathNEWS* writing last September. There is one thing that both of those articles have had in common, something that other ones I've written haven't really been. Way too long. So to celebrate this I'm going to see about trying to write my longest article to date. However, I say this as I've only got this much written and I have absolutely no ideal just what I could possibly write about. In fact you probably know better what I'm going to write about than what I do. There's certain things that always seem popular to write about in these things.

- **First is lists.** People don't like reading 'paragraphs' but they often like lists. Seriously how many people are looking at this now solely because it's a list
- **Girls** are always a popular topic. There are many of you readers out there who are unable to get a girl, and reading *mathNEWS* stories about mathie/girl interactions are about as close as many of them will get to mathie/girl interaction. Others just like the absurdity of the jokes that we make here
- **Games** although not talked about nearly as much as some of these other things, unless the game happens to be Magic, and it's being played in the comfy, a good settlers reference or computer game of the day can also work.
- **Making fun of Arts**
- and a few more that I can't put here as it makes the rest of this article next to impossible.

So, with those in mind, I bring you the Top 3 Magic related pickup lines. Because it's pizza time and I'm not going to make more than that

1. I won't counter anything if you try to make my "endless wyrm" end up in your "fissure"
2. I hope I don't get you with my "Primordial Ooze" too early.
3. Some people think that the "Fire Elemental" art is pretty hot, others say that "Serra Angel" looks better, well compared to the way you look, they look like "Scathe Zombies"

So yeah... I didn't meet my target of a long article, and I didn't meet my target of a good one either. Wow, I was right, long ones are better, well I know better for next term, and who knows, hopefully I won't kick the power bar on my other article and lose my progress. Good luck on exams and read again next term, I'll hopefully have some longer stuff by then

DanS

mathNEWS wants you!

Do you like *mathNEWS*? Are you a frequent reader, writer or proofreader? Do you like being able to add cool things to your resume, such as "I write for *mathNEWS*"? How would you like to add even MORE than that? Well, it's easy! *mathNEWS* is looking to add another person to the editorial staff, beginning in Winter 2005. Just let us know you're interested in our uber-cool editor position by email mathnews@student.math.uwaterloo.ca, in the BLACK BOX or by talking to one of our current editors.

Beatlemaniac

MATT DAMON IS JASON BOURNE 7PM

LIKE FREE MOVIES?

OF COURSE YOU DO.

THIS THURSDAY, JULY 29

ENTRY TO MATHSOC

THE BOURNE-MOVIE NIGHT IS FREE

IDENTITY

YOU KNOW YOU WANT TO.

All Starting at 7PM

HELLBOY

HERE TO PROTECT

9PM

City Planners to Refactor Waterloo

City planners began the long process of cleaning up the city this morning by unveiling their two-year plan to refactor its design. The plan seeks to reduce bad smells in the design of the city. Specifically, the goal of the project is to reduce duplication, improve the readability of the city, improve cohesion, reduce coupling, and improve the flexibility of existing city infrastructures.

The first phase of the plan will factor out the redundant parts of King and Weber streets and replace them with a private helper method to be added to the Waterloo Park module of the city.

Among the bad smells that the plan seeks to eliminate is the unpleasant odour that drifts over the city every year in the Fall. Residents and visitors alike have been in unanimous opposition to this odour and have complained about it for years to the city. Edward Bracebridge, a civil engineer working on the project, said, "The design of the city places several obstacles to the refactoring of the autumn-time odour, but because it is such an important job, we'll have to relocate it with a hack. It won't be pretty, but we'll make sure it's well documented for future developers."

Another ambitious part of the plan is to completely re-build the Waterloo-Kitchener interface along sections of Union Street. "It's been well known for some time that the Union Street interface violates the open-close principle," said project manager Brad Wu, "City Planners have been working around it for years, but we've never had a chance to fix it until now."

Symbolic Reference

7 Rules For Dating Rain Water

I have just been informed that I am currently dating at least 7 guys here in Waterloo. I have no idea how this has happened, or to be honest who these guys are. I mean if anyone knows that you are one, just tell me I would really like to know. Regardless of who you guys are I figured that I would give you just, like, a little set of rules or, well, suggestions to keep me happy.

1. I like shiny things, so get me shiny things. (Note: newly minted toonies are shiny)
2. I am a girl (if you had not noticed) and I believe that girls... women are capable of doing anything they want. DO NOT tell me anything to the contrary.
3. If it ever happens that I am staying at your place over night feed me in the morning. I will be far more likely of repeating the previous night's events.
4. Like number 1, I like money... give me money... I will work for it don't worry. *wink wink*
5. You don't need to give me alcohol to get in my pants. Any one that has seen the "pants free zone" knows it wont take that much. Save your money on the alcohol for appropriate uses see numbers 1 and 4.
6. I know I do and say stupid things, don't point them out I will not appreciate it or welcome the correction.
7. Follow my t-shirt... "Talk Nerdy to Me".

Follow these simple rules and you will keep me happy. And trust me, there is nothing better than keeping me happy. If I am happy, you will be happy if you know what I mean...

Rain Water

Proposed Crop Subsidies

Washington — A Senate committee recently found that many farmers were using pesticides on their crops that cause cancer. In a measure to promote cleaner cultivation and healthier consumption of cancer-causing crops, the Senate introduced new legislation that would provide government subsidies to American farmers who grow their cancer-causing crops without the use of pesticides. According to the study, these organically grown crops that cause cancer are safer and healthier than their pesticide-assisted counterparts for public consumption. If the measure passes, as much as \$223 million a year will eventually be spent to subsidize organically grown crops that cause cancer.

Cancer-causing crops are usually processed by the food industry into everyday food products such as bologna, fish, margarine, marshmallows, crackers, and spinach. The Senate report found that as much as 2% of the pesticides used on cancer-causing crops are present in the final processed products.

"The use of pesticides has polluted the cancer-causing food supply for far too long," said Senator James Serious (D-CT). Senator Sam Bond (R-KY) said, "It is our responsibility to make sure that Americans have the healthiest selection of cancer-causing crop products available to them."

United States Secretary of Agriculture, Ann M. Veneman, told reporters this is going to enrich the cancer-causing content of all Americans food. The Senate will vote on the bill on Thursday.

American Legislators could not consult the Canadian Minister of Agriculture because he or she, along with the rest of the cabinet, has yet to be named. When the unnamed Minister of Agriculture was asked to comment on this, he or she said, "We are not considering this kind of legislation right now because farmers in Canada grow so few crops that cause cancer that we feel no need to regulate their use of pesticides at this time. I am glad to be chosen Minister of Agriculture".

Bob Speller, the previous agriculture minister, was not re-elected in the previous election.

Symbolic Reference

An Observation

Does anyone else find it ironic that CS 246 is a course about making classes that don't suck?

HWT

CS 246 LAB,LEC,TST,TUT 0.50

Course ID: 004380

Software Abstraction and Specification

Systematic methods for designing, coding, testing, and documenting medium-sized programs. Major topics include formal specification, abstraction, modularity, reusability and being raped in the ass with large, blunt objects. Students will become strong apprentice programmers able to write a clear specification for a problem, read a specification, function for twelve continuous days without sleep, read the specification again, rapidly abandon faith systems, rapidly readopt faith systems, use appropriate data structures in a program, replace the appropriate data structures with six interfaces, write rewritable code, reuse existing undocumented code when mandated, swear in eight languages, debug a program through demonic bargains, and die.

[Note: Enrolment is restricted; see Note 1 above. Lab is not scheduled and students are expected to find time outside of the natural flow of linear time to complete their work. Inflicted: F,W,S]

Prereq: CS 241, PSYCH 218; Computer Science students only.

Antireq: GENE 342, SYDE 322/221, PSYCH 232

Effects of Linear Algebra and Excessive Caffeination on My Brain and the Demons of Algebra

(also entitled *I've never seen Ghostbusters so I can't think of anything better to write*)

Recently I've discovered that assignments are a lot more fun when under the influence of caffeine. Oh yes! Its true! While writing my last linear algebra assignment, I found that many bottles of Jolt became of much use to me. I discovered a new method of proof. Proof by giggles. You laugh at the fact that you have no idea what you're doing. Therefore it must be true. Luckily I realized that this method would not be acceptable if I were to actually hand it in. There's also proof by "what the hell was I thinking." You look at your own incomprehensible writing and realize that what you wrote makes absolutely no sense. Therefore, it must be true! Well, perhaps not... There's also "proof by my calculator says its true" therefore, it must be true. If only the calculator could control a pencil and write out a proof correctly for me. There's even proof by "we did it in class that one time but i can't remember, but i know we did it in class, therefore it must be true." Unfortunately, this won't be viable if you hand it in.

Finally, we arrive at proof by caffeination. Proof by caffeination involves excessive hyperactive behaviour. Simply write out everything you possibly can come up with. Then hope its right. This usually doesn't work. So my friend Bradford told me that if I actually use these methods, then demons of algebra will hunt me down. To which i say "cool!!! demons of algebra!!!" These evil creatures are servants of Satan of Sadistics, also known as Statistics.

He told me that he will send demons of algebra to hunt me down if I use these proof methods. Now I'm afraid. At least the spells and incantations of the wizards of the comfy lounge will cast spells of protection. Its been said that an ancient spell pronounced "Calculustus Theoremation Protectus Unum" will scatter the demons of algebra, confusing the hell out of them (no pun intended).

In conclusion to my adventures with caffeine and linear algebra, I have determined that it is a dangerous road. Only the brave should dare travel there.

May the Carrots be with you

Commander Celery

Got Your C&D Certificates?

Have you won a Squiz, Gridword, Cryptic Crossword or Break Your Own Brain in the past term, but not claimed you're prize? If yes, then you're probably one of the following people: SquirrelToken, Adam Weatherhead, Hoon, Frogg, Aaron, or Bryce. If you're name's on that list, you should drop by the MathSoc office (MC 3038) to claim your prize.

If you've read this much, why don't you get a subscription? Fill out the thingy on page 2 and put it in the BLACKBOX!

mathNEWSQuiz #6

subtitle

All right folks, this is the last squiz of the term so let's start off with last issue's answers. Euro 2004: 1)16; 2)Phillip Cocu; 3) Theodoros Zagorakis; 4)Bulgaria; 5)Lisbon. Non-Holiday holidays: 1)13; 2)3; 3)Pamela Anderson; 4)Family Day; 5)Food and Entertainment. Movies: 1)I, Robot; 2)5; 3)Shrek 2; 4)Fahrenheit 9/11; 5) 868. And now for the submissions: The only submission was by Dan Lynch. So he wins with 10. And here are your questions for this week, good luck all you aspiring Ken Jennings.

Ghosbusters I

1. What does Egon collect as a hobby?
2. During the movie, how many times does Lewis get locked out of his apartment?
3. How much do the ghostbusters charge for their first job?
4. What was the freaky apartment made of?
5. What is the ghostbusters phone number in this movie?
6. Why is it bad to cross the streams?

Ghostbusters II

1. What is their phone number in this movie?
2. How did Vigo die the first time?
3. Where does Egon work?
4. What institute do the ghostbusters get committed to?
5. Which Ghostbuster hates Jello?
6. Lewis wears a Ghostbusters uniform in this movie, who's is it?

The Squizmaster

1. Whose 38 plays are sitting on my bookshelf waiting to be read?
2. Which movie series do I have the special and original editions of?
3. Which movie has the funniest subtitle ever, Pikey?
4. Which movie I saw last did not Rock in my opinion starring Jack Black?
5. Which fiction book am I currently reading, it stars a character by the name of !Xabbu?

Good luck and have fun next term! [Ok guys, as an incentive, we're offering a FREE (yes, you read that right, it says FREE) subscription to the winner of the Squiz — BeatleEd]

Dirty Flame Axle

Waterloo Aerial Robotics Group info

Upcoming competition

WARG will be travelling to Georgia to compete in an international competition next week where we are hoping to successfully achieve a milestone in the competition and win some awards.

We will be having a media information session this friday @ 6PM to discuss our systems and answer any questions which you are welcome to attend. Please let me know if you have any questions.

Thanks,

Brent Tweddle
Council
Waterloo Aerial Robotics Group

mathNEWS BYOB #6*Break Your Own Brain - Sextuple the fun*

Before anymore begging you into wringing your brains, let me say that it has been a great term for this new feature, we had tons of submissions over the past couple months, and I'm sure we'll be running this new column well into the future. So thanx to all who submitted, and look for more mind boggling problems in the terms to come.

Frogg's Flipping Ferocious Flamingos

Many people had trouble with this one (and asked me if I was sure I had the problem right). The problem seemed to be that people got caught on the binary nature of 8 people (which elegantly is countable with three binary switches), and the fairly simple solution of using the switches by setting up a system where you can increment them the first time you go in the room, and not flipping any after that. But you're required to flip a switch in the room. The only way around this is to have a meaningless switch. Once you accept that you're faced with another problem, 2 switches cannot count to 8. Which means you need another counting mechanism. So one prisoner is appointed scorekeeper. They keep track of how many people have been in the room, and they are the only one who can end the game. Amusingly with this system, you only use one switch to have any meaning, and the other two are used as throw aways. If the problem had been setup with only two switches I wonder if people would have found it easier, since they wouldn't have gotten sidetracked with the binary counting solution.

The non-scorekeeper prisoners need to ensure they are each counted twice (I'll tell you why later), upon entering the room a prisoner checks the left switch, if it's up, someone is already waiting to be counted, so they flip one of the others. If it is down, they flip it up and consider themselves counted once. Upon future entries they repeat this process (so they get counted twice), once they've been counted twice they always flip a meaningless switch.

When the scorekeeper enters the room, if the left switch is up they increment the score (there's a reason we call them the scorekeeper, oh, and the score starts at 0) and flip the left switch back down (the scorekeeper is the only one allowed to flip the left switch down, as they are the only one keeping score). If the left switch isn't up, then no one is waiting to be counted, so they flip a meaningless switch.

When the scorekeeper gets their score to 14 one of two things has happened. Either the original position of the left switch was up, so 6 of the prisoners have been counted twice, and one only once (which is fine, since they've all been counted at least once). Or, the original position of the left switch was down, so each prisoner was counted exactly twice. In either case every prisoner has been in there at least once (and you should now understand why they each had to be counted twice).

Kathryn's Klever Kicking Kangaroos

1)

30			
17	13		
11	6	7	
7	4	2	5

2)

65			
38	27		
24	14	13	
13	11	3	10
3	10	1	2
		8	

Kathryn's Klever Kicking Kangaroos

3)

262				
123	139			
54	69	70		
24	30	39	31	
13	11	19	20	11
9	4	7	12	8
			3	

4)

200				
103	97			
54	49	48		
28	26	23	25	
13	15	11	12	13
1	12	3	8	4
			9	

Hologrami's Holistic Hungry Hippos

The only answer is 21,200. Obviously no digit can be 5 or greater (since there would only be four remaining slots to put five of whatever you just declared there were). Any 4's in the number defines all other positions and causes the base setup to be broken, so we are left with 0,1,2,3 as our possible digits, and we now know our last digit is a 0. XXXX0

With a 0 in the last digit, any threes cause the same problems four did (namely defining the rest of the number in a bad way), so the second last digit is also 0. XXX00 And we also now know the first digit must be a 2, since we've shown there are at least 2 zeroes and no threes. 2XX00

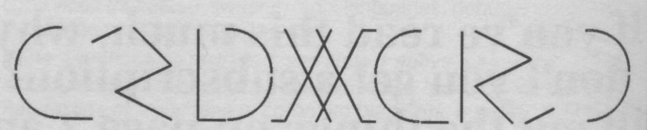
We now have each of the second and third digit being a 1 or 2. If the third digit is a 1, the second digit cannot be a 1 or a 2. So the third digit must be a 2, which causes the second digit to be a 1. 21200

I think we may have stumped many of you with the prisoners problem and intimidated you out of submitting, as we only had two submissions, and one was for the wrong problem set (Will Chen, either you submitted late or the **BLACK BOX** liked your submission so much it held onto it for a bit). So Chris Hawthorne with 2/3 (missing Frogg's mind-boggler) wins and can come on down to MC3038 (MatSocian Appreciation Office) to pick up your C&D gift certificate.

This is the last issue of the term, so the Squiz and gridWORD are telling you not to submit, but we here at BYOB are better than everyone else (we have a big head because we keep stealing your brains... braaaaaaaains), so we still encourage submissions. However, we are not particular about what you submit, and we're not offering any sort of prize, in fact, we're not even offering any problems. But you can still submit to the **BLACK BOX** between the C&D and Comfy or email us at mathNEWS@student.math.uwaterloo.ca. Submit anything you want, we'd appreciate more problems for a good start to next terms BYOBs, but we also accept skittles and vestal virgins.

So until next term we here at BYOB want you to practice two things, coming up with problems and/or solutions for us, and your love for submitting to our dominating power. **SUBMIT SUBMIT SUBMIT.**

Brain Master Snuggles

No**This issue...**