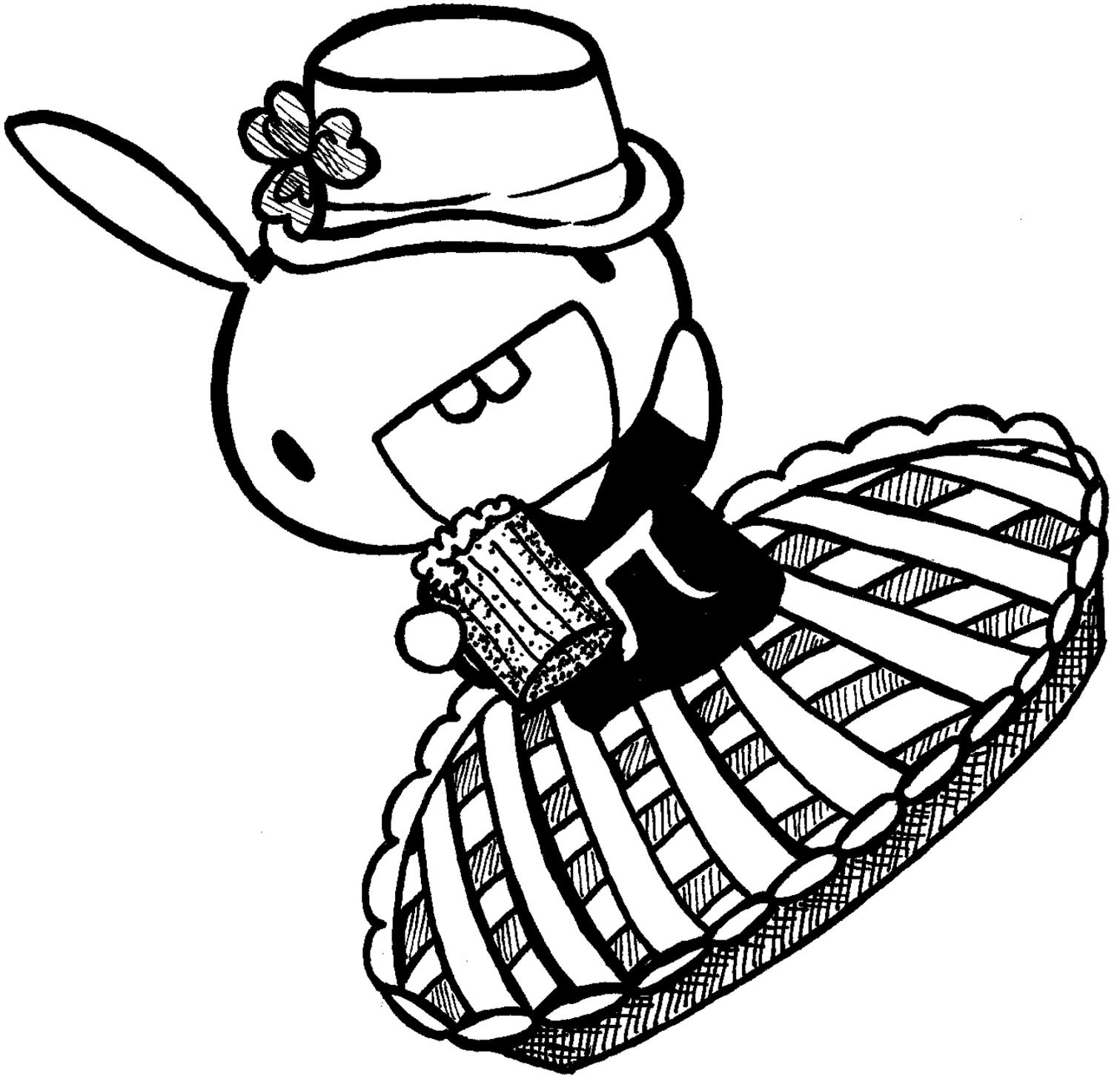


math

NEWS

Volume 123, Issue 4

Friday, November 8th, 2013



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lookAHEAD**mathNEWS**

November 8	Issue 4 begins stockpiling food (like pie)
November 18	Issue 5 locates cave, prepares to sleep
November 22	Issue 5 wakes from hibernation early

MathSoc

November 8	Pi Day
November 10	MATHSOCcer Tournament
November 13	Pints with Profs
November 21	Charity Ball
November 24	Video Games Tournament

CECA

November 8	Ranking closes
Ongoing	Interviews and Whatnot

Feds

November 15	Casino Royale
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University

November 15	Drop, Penalty 1 Period ends
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WatSFic

November 10	Magic Tournament
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**Send us your articles,
profQUOTES, grievances, puzzle
solutions, flirtations, and Sez's to
mathnews@gmail.com.**

Article of the Issue

Congratulations to $s, t \in \{2k, k \in \mathbb{Z}\}$, 144 for winning this fortnight's Article of the Issue with your article *To Beard, or not to Beard*. Claim your prize at the next production night.

The Editors

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mathNEWS is normally a fortnightly publication funded by and responsible to the undergraduate math students of the University of Waterloo, as represented by the Mathematics Society of the University of Waterloo, hereafter referred to as MathSoc. *mathNEWS* is editorially independent of MathSoc. Content is the responsibility of the *mathNEWS* editors; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or *mathNEWS*. Current and back issues of *mathNEWS* are available electronically via the World Wide Web at <http://www.mathNEWS.uwaterloo.ca/>. Send your correspondence to: *mathNEWS*, MC3030, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid *mathNEWS*@gmail.com on the Internet.

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The Dynamic Duo: Prometheus (Murphy Berzish), Atlas(Lenny Morayniss), Epimetheus (Thomas Baxter)

mastHEAD

I don't watch Game of Thrones;

why did everyone call me Ned Stark as I wrote this?

And as the weather outside gets colder, we bundle on more layers, drink more hot chocolate, and have more regrets regarding our decision to study at a university that's as far north as the southernmost tip of Australia is south.

As someone with no less than seven blankets of varying sizes and materials scattered around his room, and as someone who has survived previous Canadian winters with them, I think I am fairly well prepared. Polar fleece is magical.

If this is your first winter, here are some tips for beating the coming cold. I asked the hottest people I know, the *mathNEWS* writers (I really need to get out more...), "How do you plan on staying warm this winter?"

Biomy ("Take the Waterloo geese, pluck their feathers, stuff things with their feathers. Killing two birds with one stone. Every time."); Element118 ("Radioactive decay"); k! ("Lie on top of students' laptops."); TubesJr ("All the layers of plaid flannel!"); yourlocalWHETHERgirl ("Polar bear swimming!"); AddictedGmr ("Body heat!"); himynameis ("My Peg City blood."); !bar ("I'm hot all year long :)"); ScruffyED ("Outside. You are outside. It's bitter cold and you pull your jacket around yourself. To the north is a nice, warm Holiday Inn hotel, where the killer is rumored to be staying."); unit ("socks."); ObjectED ("I'm Canadian—I don't get cold."); MustardMap ("Burning the corpses of the editors."); theDreamer("Magic."); waldo@<3.LE-GASP.ca ("Earmuffs and layers. So...many...LAYERS!"); Ice Nine ("My mega-evolution ability: Thick Fat. I am a Venusaur."); Wolverine Panda ("Use your imagination (wink)"); xoxo ("Tying the geese together to make a winter coat."); Beyond Meta ("Purchasing something at Canada's #1 Drug Dealer."); tesseract ("Lots of sex. (By myself.) Or the inevitable heat death of the universe."); Zethar ("Remember to hibernate *on* my hoard, near my Tokamak Hell Raven neighbour."); psychomath ("The burning of my soul in the depths of hell."); InsideVoice("Snuggles. So much snuggles."); Soviet Canadian ("Ushanka and Vodka"); $s, t \in \{2k, k \in \mathbb{Z}\}$, 144 ("Six feet of blankets."); theSMURF ("Performing CPU intensive tasks on all four of my cores should be sufficient.");

ConvolutED

("Convince roommates that thermostat uses Fahrenheit scale.

Persuade them that this is always how warm 70° felt.");

Fall Open House Volunteers

On behalf of the Dean of Math, our academic units, and all the people involved who helped organize this event, THANK YOU for sharing your valuable time and energy with our many visitors on Saturday, November 2. You made the event outstanding! In fact, we couldn't have done it without you. If you enjoyed being involved. the next event is in March 2014. Get more information in January. Best wishes and good luck with your final exams!

Gayle Goodfellow

CRO Sez

Hello again; it is that time of the year where the students elect the MathSoc president, the VPs, and councilors for the 2014 year. For the ambitious, it is a time to campaign and claw their way up to the top in order to lead the society with their vision. For those not informed, MathSoc has four vice presidents, the Vice Presidents of Academics (VPA), Events (VPE), Finances (VPF), and Operations (VPO), as well as a President. Of those Vice Presidents, the VPF is not up for election.

People interested in an executive or councillor positions can begin nominating themselves by picking up a nomination form outside of the MathSoc office and submit the form by the end of the nomination period on November 15th. If there is competition for the seat or position, campaigning is from the 13th to the 20th, and the dates of the election are on the 21st and the 22nd.

For councillors, there are open seats as follows: Actuarial Science (3); Computing and Financial Management (1); Computer Science (5); Math/Business (5); Math Studies and Others (4); Pure Math, Applied Math, Combinatorics and Optimization (2); Statistics (2); and Math/Teaching Option (1); You should apply to represent your program on council matters.

Do remember the position is not for consecutive terms; if you are only here in Spring next year, you can apply to be, say, VPA for Spring 2014 and not Winter or Fall. One simply marks the appropriate box on the form. If you wish to be VPF for next term, look out for more information (you need to submit an application to the VPF selection committee when the time comes).

Good luck,
Febrian Sidharta
CRO Fall 2013

General Meeting Announcement

The General Meeting will be Monday, November 25th, 2013 at 5 pm in the Comfy Lounge (MC 3001). Please send prez@mathsoc.uwaterloo.ca agenda items before November 18th.

Stéphane Hamade

Attention Magic: The Gathering Players

WatSFic Magic is holding a Grand Prix Trial for GP Toronto. Winner gets two free byes to this local Grand Prix! Here are the details:

Date: This Sunday, November 10
Time: Registration at 10am, 11am start
Format: Theros Sealed
Cost: \$30
Prizes: 3 Theros packs / player, plus byes
Location: MC 2035

Questions? Email dtaleman@uwaterloo.ca

VPE Sez

Hi Mathies, here are some exciting upcoming events:

Pi Day

TODAY

1:59PM

MC 3rd Floor

This term's Pi Day is today! As per usual, we will be distributing FREE pie to all students, and hosting a Pi Recitation and Pie eating contest!

MATHSOCcer Tournament

Sunday, November 10, 2013

9:30AM-5:30PM

Columbia Ice Field

FREE for all Math students to participate. Pizza lunch will be provided.

Signup at <http://bit.ly/17rDsIK?>

Pints with Profs

Wednesday, November 13, 2013

4PM – 6PM

Bomber

Want to meet your profs? The dean? Pints with Profs is happening next Wednesday! There will be free appetizers and your favourite profs. Invitations are available outside the MathSoc office (MC 3038).

Charity Ball

Thursday, November 21, 2013

Charity Ball ticket prices have been LOWERED. \$35 per person, \$65 per couple, \$245 per table of 8. So call up your friends and come to MC3038 to buy your tickets! It's going to be a great night with awesome dinner, live and silent auction and paparazzi. Please buy your tickets soon to guarantee your seat with your friends.

Video Games Tournament

Sunday, November 24, 2013

9:30AM-5:30PM

M3 1006

A whole day of playing video games! Different stations, including XBox, PS3, and Wii will be set up for all attendees to play. There will be free food!

Entry Fee for tournament: \$15 for a team of 5 if there are at least 2 Math students, otherwise \$25 for a team; 3 people must be present.

If you have any questions or if you want to volunteer for events, email vpe@mathsoc.uwaterloo.ca.

Thanks,
Jazbel

Sweet and Sour

There are three important dates coming soon:

1. Open enrollment for the winter term begins Nov 11th. This is your opportunity to change your selected courses for the winter term.
2. The Drop Deadline for the fall term is Nov 15th. This is your opportunity to drop courses with a WD penalty. After this date, if you drop, the grade will be a WF (a failing grade). If you are having difficulties, after this date you should talk to an advisor.
3. Course Selection for Spring is Nov 18-24th. This is your opportunity to tell the university which courses you would like to be in this spring.

The normal sequences are:

1A – MATH 135, 137 and CS 115/135.

1B – MATH 136, 138 and CS 116/136.

2A – In many plans: MATH 235, 237 or 239, and STAT 230.

Once you move into 2A, you are moving into your plan, so you'll have to do some more research to get a better understanding. For example, the 2A plan above neglects the BCS degree, which does not require MATH 235.

The definitive rules are at ugradcalendar.uwaterloo.ca, and advisors (mathadvisors@uwaterloo.ca) in MC4023 are quite happy to help you with this. SOAR!

Riley Metzger

mathadvisors@uwaterloo.ca

Scientists Discover Vaccine Against Common Sense

Scientists at the Institute for Declaring Increasingly Odd Tidbits have, as their job description requires them to do, come out with a bizarre announcement. They claim to have found a vaccine that inoculates patients against logic and common sense. It was allegedly manufactured and distributed in large quantities in the 1970's and 80's. This means that a lot of individuals who were growing up at that time, and who are raising children now, were left with impaired reasoning abilities.

As a consequence, when the time came to have their own children, they were totally unswayed by the overwhelming evidence in favour of vaccinating their children. So they didn't, and now there are tons of children running around without vaccinations and they are getting diseases that are totally avoidable. Sigh.

tesseract

[shhhh, my common sense is tingling—*ObjectED*]

MATH SOC PRESENTS



Charity Ball

— FEATURING —

DINNER.AUCTION.PAPARAZZI

New Lower Price!

\$35 PER PERSON . \$65 PER COUPLE

\$245 PER TABLE OF EIGHT

TICKETS AVAILABLE AT MATHSOC OFFICE, ROOM 3038

PREMIERES THURSDAY NOVEMBER 21 2013 6:00PM

SCH FESTIVAL ROOM

Numbers!

But Not Math

As you may have noticed, if you actually look at the text on the covers [*or on every other page's header—ObjectED*], this issue of *mathNEWS* is volume 123 issue 4. I'm not usually a superstitious person, but I believe that this is a milestone for *mathNEWS*, of the first kind since volume 111 issue 1, or volume 66 issue 6 (the luckier volume 77 issue 7 may be a thing though, no one's cared to look that far back [*I just did. It does.—ObjectED*]). The number 1234 is also the most common PIN for bank accounts and cell phone SIM cards.* The year 1234 apparently started on a Sunday, with the same structure as the years 2006 and 2017. The roman numeral kinda looks pretty self explanatory MC-CXXXIV. Stupid Roman numerals. In the words of Prof. Marek Stastna, "If you don't think notation is important, try doing long division with Roman numerals." The Wikipedia article for 1234 is a lot less interesting than I expected.

I just wrote this article so I could tag it v123i4.

yourlocalWHETHERgirl

*These statistics, as usual, are bull.

Toronto Mayor Rob Ford Apologizes for Murder, Still Refuses to Step Down

November, 2013—As if being an addict wasn't enough, Toronto Mayor Rob Ford is now an alleged murderer. Earlier this week, police discovered that Mr. Ford was involved with the death of Jeremy Williams, a reporter for the *Toronto Star* who went missing last year while investigating Ford.

When interviewed by the media, Mr. Ford dared the Toronto police to “arrest me”. He apologized for taking the life of a man, but made it clear that he would not step down as mayor.

“I have made mistakes,” Ford told listeners. “I sincerely, sincerely apologize to my family, to the citizens, the taxpayers of this great city and to my colleagues on Toronto city council.”

“I am going to continue doing my job that I was elected to do,” Ford said, appearing to be on the verge of tears. Mr. Ford plans to hold office until the end of his term, and run for office next term.

theSMURF

World's Largest Crayon to be Newest Faculty Member

Needles Hall—The University of Waterloo announced today that the Faculty of Arts would be welcoming the world's largest crayon, Razzle Dazzle Rose, as a full-time lecturer and professor for the Fine Arts program.

Rose, who rose to fame five years ago when she made headlines in Georgia for her creation, has since fallen to relative obscurity. Working mostly at a museum as the main attraction, the step to academia may prove to be constructive for her future career. Sources close to her say that she is thrilled to be hired on the merits of her artistic contributions, and not just on her unique physique.

“When we found out that none of the major Ivy League universities had her yet, we knew that we had to poach her before she started receiving offers,” says Ken Rovost, Chief Hiring Officer at UW. “We've been on a roll lately when it comes to high-profile hires, and the momentum will not be slowing down this week. With Chris Hadfield joining us for Aviation, and the world's oldest rock becoming a fixture in our rock garden and ecology program, we could only step up from here.”

Rumours swirl about who will be hired next, and signs are pointing towards Tony Stark as the new head of the Mechatronics Engineering department.

Big Mak

So You're Trapped in a Bathroom: An HvZ Stakeout Survival Guide

Humans vs Zombies has come and gone, and no term would be complete without some people getting trapped in a bathroom for an unreasonable duration. I've now been on both sides of the safe-zone stakeout, and have compiled a list of tips for those who find themselves stuck in one spot until the undead decide they have better things to do (And woe betide those caught by zombies with time to spare)

Bring food: The zombies have the advantage of freedom to guard in shifts, which means they can go get something to eat while their friends keep watch. Humans, however, do not have this luxury. So wherever you go, make sure you've got enough food to keep you functioning in case you'll be cut off from supplies for a while. Failing that, see if you can find a pizza place willing to deliver to bathrooms.

Pick your location wisely: While there are a number of different perpetually safe places across campus, not all safe zones are equally well suited for an extended stay. Washrooms are a classic, and not without good reason. Not thinking about waterfalls only works for so long, and it's better not to have to get creative.

Have pillows and blankets: The main downside to choosing a washroom for your home away from home is that there's no great place to sleep, and chances are you'll be there well into the night. If you lack proper bedding, jackets and sweaters can do pretty well in a pinch. Also, bring headphones if you can, since the zombies probably won't make it quiet enough for shuteye.

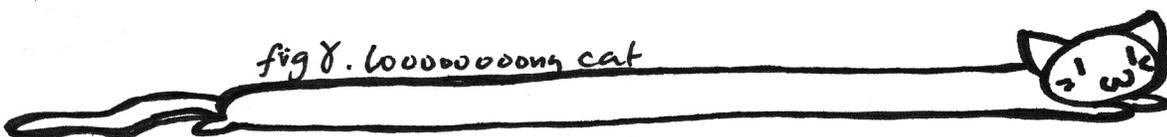
Have friends: If you're going to be stuck in a bathroom for 16 hours, it's nice to have someone with you who's on your side to keep you company. The zombies can be friendly enough at times, but they don't exactly have your best interests at heart. Plus, if you have to make a break for it, your “friends” can make a handy distraction to keep the zombies busy enough to buy you time to escape.

Keep occupied: As I've said, these things can last a long while, and the urge to sacrifice your life just to end the siege becomes more and more appealing as time goes on. Make sure you have something you can use to pass the time, be it homework, books, or some sort of portable video game (I hear Pokémon is popular). Make sure not to rely too heavily on electronics though, as I've yet to find a bathroom with power outlets.

Hopefully this guide will be of some use if the worst happens. Just remember to stay strong, be patient, and hope that the zombies get bored eventually.

$s, t \in \{2k, k \in \mathbb{Z}\}$, 144

fig 8. looooooong cat



Going on a Quest... and Losing

As of the writing of this article, winter course enrollments have appeared on Quest. The problem is, that statement is kind of a lie. Some courses have appeared for some people. Many, however, have not. I enrolled in 5 courses, and have been placed in two. One has the issue of “requirements have not been met”. This is a familiar line; in my case, all it means is “You are not actually a math student, even though you can fake it. Go get an override form like every other term.” However, my other two courses have the message “Class full or time conflict.” However, I have the ability to google things, and know that the schedule of classes exists. The classes in question are not full. The classes in question do not conflict with my other classes; this may have something to do with the fact that I was only placed in two, and thus have a completely open schedule.

As of this production night, I am sitting in a room of people who largely all have the same problem—one or two courses that inexplicably did not show up [*One frosh has 0 courses. All of them seemed to conflict with the empty schedule—ObjectED*]. This failure to enroll classes on the part of the system that enrolls us in classes is a worrisome concern. I hope it is only a temporary issue, and whatever automated process adds classes is just not done yet. That would make this concern analogous to the fears of past apocalyptic cults that had to sit around with awkward looks on their faces after the appointed date and time. But I fear that this may not be the case; the concern may be genuine. In this case, we will have serious issues. The first of these will be a need to hold the Registrar’s office ransom until it gives us our courses. Alternatively, when open course enrollment (a.k.a. our one chance at redemption) occurs, we will all have to enter the secret combination of course codes that will awaken the computer to sentience, get it to exploit the market in such a way as to pay all our tuition, and bake us cakes. Cakes are more fun than classes anyway.

Sonnet 155

Shall I compare thee to a lazy day?
I scroll down and am lost in your embrace.
When all the world I know has gone away.
You give me something that can't be replaced.

My int'rests come and go with passing days,
One day I like cartoons, next Hannibal.
But whatever I like, you hold me sway,
With pictures, gifs, fanfiction ever full.

My dashboard scrolls forever and a day.
With Loki, hipsters, protests, fandoms, art.
Forever scroll entices me to stay.
Despite my knowledge that I should depart.

Oh Tumblr, never leave me on my own.
Although the time I've spent I must atone.

As I am yours in Tumblr sanity,
Shay Blair.

Winter is Coming

With the recent “Fall Back” section of Daylight Saving Time, it is suddenly dark much earlier, a hallmark of winter. Thus, I am releasing the white ravens, to declare that winter is coming. Breaths are frosting in the air, and grass crunches underneath. As soon as the first snow falls, most people will forget that they know how to drive.

For some, this is their first Waterloo winter. Some things that you should know about campus in the winter: We don't get too much snow, but it is entirely possible that some paths will get icy. Personally, I recall the path from REV to V1 getting icy in my first winter. There will be snow, but the snow is generally unsuitable for snowball fights. It is mostly cold and sometimes windy. A jacket is all but essential, though I managed one of my winters with nothing but sweaters and hoodies—not the most comfortable decision I have ever made.

In terms of campus, SLC turns up the heat in all of the entrances, which is one of the most amazing things to happen on campus in winter. It is super comfortable when walking in from the cold. A giant tree is put on top of DP. And life continues largely as normal. Including the geese. The geese never leave.

For others, this is not their first winter in Waterloo. You should all know what to expect.

Thankfully, winter only lasts about 5 months, so we're doing better than most of Canada. As well, winter term contains reading (a.k.a. sanity) break, which is a definite plus.

InsideVoice

tesseract



Remembrance Day

We have this time set aside so we can remember the terrors of war, look upon it in its horror, and collectively tell ourselves “Never again.” I will leave this point to be made by a better writer than myself—Wilfred Owen, a British soldier and poet in the first world war, who was killed a week before the armistice. For those of you who don't know and/or are too lazy to Google, *Dulce et decorum est pro patria mori* translates roughly as “It is sweet and noble to die for your country.”

Dulce et Decorum est

*Bent double, like old beggars under sacks,
Knock-kneed, coughing like hags, we cursed through sludge,
Till on the haunting flares we turned our backs
And towards our distant rest began to trudge.
Men marched asleep. Many had lost their boots
But limped on, blood-shod. All went lame; all blind;
Drunk with fatigue; deaf even to the hoots
Of gas-shells dropping softly behind.*

*Gas! GAS! Quick, boys!—An ecstasy of fumbling
Fitting the clumsy helmets just in time,
But someone still was yelling out and stumbling
And flound'ring like a man in fire or lime.—
Dim, through the misty panes and thick green light,
As under a green sea, I saw him drowning.*

*In all my dreams before my helpless sight
He plunges at me, guttering, choking, drowning.*

*If in some smothering dreams you too could pace
Behind the wagon that we flung him in,
And watch the white eyes writhing in his face,
His hanging face, like a devil's sick of sin,
If you could hear, at every jolt, the blood
Come gargling from the froth-corrupted lungs,
Bitter as the cud
Of vile, incurable sores on innocent tongues,—
My friend, you would not tell with such high zest
To children ardent for some desperate glory,
The old Lie: Dulce et decorum est
Pro patria mori.*

tesseract and Wilfred Owen

A Limerick

About a hundred years ago minus one,
A war started with the shot of a gun,
They went off to France,
Fought a bloody dance,
And we'll honor them under the rain and sun.

Remembrance Day II

The Next War—Wilfred Owen (again)

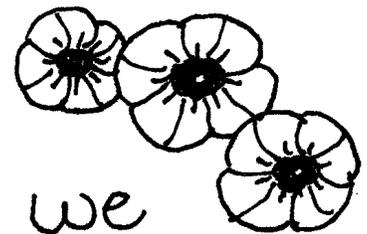
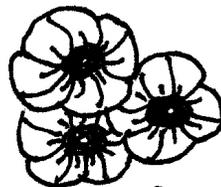
*Out there, we've walked quite friendly up to Death,-
Sat down and eaten with him, cool and bland,-
Pardoned his spilling mess-tins in our hand.
We've sniffed the green thick odour of his breath,-
Our eyes wept, but our courage didn't writhe.
He's spat at us with bullets and he's coughed
Shrapnel. We chorussed when he sang aloft,
We whistled while he shaved us with his scythe.*

*Oh, Death was never enemy of ours!
We laughed at him, we leagued with him, old chum.
No soldier's paid to kick against His powers.
We laughed, -knowing that better men would come,
And greater wars: when each proud fighter brags
He wars on Death, for lives; not men, for flags.*

Translation: Humanity, let's put this juvenile nationalist butchery behind us, do some science, and kick Death's ass.

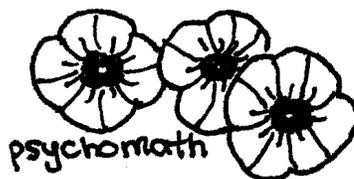
tesseract

**Drop your Minecraft username
in the BLACK BOX or email it to
us at mathNEWS@gmail.com to
be whitelisted on our Minecraft
server (129.97.134.134).**

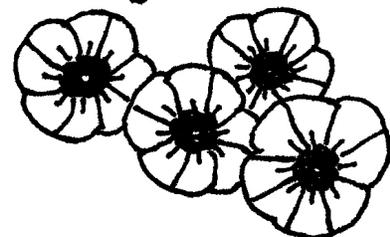


Lest we

Forget



psychomath



Big Mak

Reasons Why I'm Scared to Live in My Apartment

If you think living off campus is a good idea, think again. As I've recently discovered, living off campus is actually really scary because...

- My mad scientist housemate is trying to kill the entire human race by spreading diseases throughout the world.
- The downstairs neighbours are filming something that closely resembles a porno.
- One of the downstairs neighbours likes to walk around naked (with the curtains open).
- One of the other downstairs neighbours is a red-headed vampire who only sleeps during the day and wants to kill me and my housemates because apparently, we "interrupt his sleep".
- We have a fish that shares a personality with one of my housemates.
- One of my housemates has a collection of swords, and using them to pop balloons is a common game.
- Random people like to hide in bushes and jump out at me when I'm walking home.
- The fire alarm talks to us.
- One of my housemates is now a mutant after drinking hydrochloric acid.

Sylvia MacIntyre

The Local Kink/BDSM Scene

Recently, I've seen that there are a lot of posts on OMGUW about kinky things. Besides that, there have been posts on Reddit, as well as an attempt a couple years back to get a kink club going. This seems to be a fairly hard task to accomplish, though it would be nice to have related workshops and the like on campus, I think it might be too much effort for things that can be gotten in the local community anyway.

First off, if you're new I suggest coming out to a munch. That is, a gathering of people in a socially normal setting where people can talk about kink. They're held in "vanilla" venues, that is, rather normal restaurants or pubs, and everyone wears normal clothing except maybe a collar or two. The one I suggest coming out to is the Tri-NG (Tri-Cities version of The Next Generation munch, explicitly for people under 35 years old). It's a small group, and quite newbie friendly. They meet the 4th Wednesday of each month at the Fox and the Fiddle pub in uptown Waterloo at 7:30 PM. It's held in the pool room at the back.

Second, if you're comfortable with it, I suggest creating an account on the kinky social networking website Fetlife, then join the Tri-NG group as well as "The Kinksters of Kitchener-Waterloo, Guelph, Cambridge, Ontario". Some excellent discussions are held there and they are a good way to meet people. Both groups also have postings about upcoming local events.

Next time: ways to talk to your partner about kink.

Ice Nine

Overenthusiastic Science Students

I am convinced that science students have taken to releasing their experiments gone wrong into the wild around Waterloo. Before you dismiss this as another insane conspiracy theory thought up by an over-caffeinated math student in the midst of midterms, hear me out.

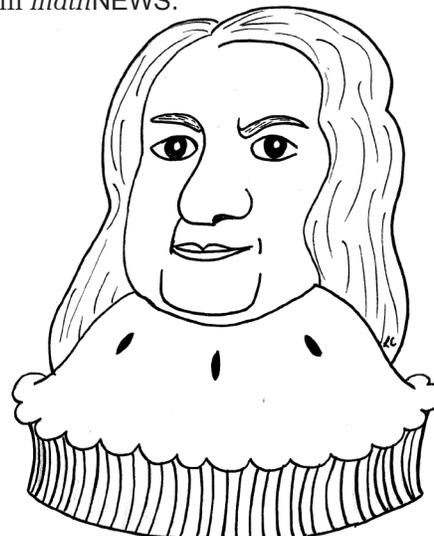
First of all, has anyone else noticed that the squirrels around here make really strange sounds? They quack. I shit you not; they sound like ducks. Strangely enough, I have yet to hear the ducks make any noise... Science students must have been dabbling in Little Mermaid-esque voice transplants; once they figured out that Mambo No. 5 doesn't sound as nice when quacked out by a squirrel-duck, they gave up. Obviously, the only humane way of disposing of their experimental subjects was to release them into the wild to terrorize unsuspecting university students. Also, I've passed by some plants straight out of a Tim Burton movie—they were purple, as if arts students went by with paintbrushes and coated the stem and leaves in the most aesthetically pleasing shade of lavender possible.

Science kids, I appreciate your creativity, but you might want to tone it down a little. Preferably before the environment students riot and come after you with energy efficient torches and recycled-scrap-metal pitchforks.

XOXO

How to Write an Article in 15 minutes

- Step 1: COFFEE!
- Step 2: Write down all ideas.
- Step 3: Grab an object you can poke things with.
- Step 4: COFFEE!
- Step 5: Close your eyes and poke something on your list.
- Step 6: Apply first aid if you miss and poke yourself.
- Step 7: If problems persist, see a doctor.
- Step 8: Go with whatever you pick. It doesn't even need to be funny to be in *mathNEWS*.



Bitmon

PIE-RRE DE FERMAT

A ROM Com

Two Bytes, a Word apart – a Read Only Memory based Romantic Comedy.

Once upon a motherboard, there were two bytes burned into the die by a sufficiently high voltage. They were addressed (Amanda) 0x3A28213A and (Laura) 0x3A282143F, destined to be separated by a WORD. One magical day, the system was powered on and the ROM accessed.

While their values floated through magical memory space on the way to the CPU for the first time, they noticed each other floating through the nothingness. Ever since the first boot, they knew they were destined for each other. Boot after boot they crossed paths on the way to the CPU, but alas, they were never together for more than a few cycles.

Their love grew ever stronger with each passing cycle, and they longed for each others company. Time and time again they attempted to settle themselves side by side, to change their destinies and stay together forever, but it was fate that Mu the Memory Management Unit decreed that it would not be so. That they, residents of ROM, would never be able to move, and never be sequentially accessible.

And now they sit on the die, a WORD apart, hoping and waiting, for the cycle where there will be sufficient voltage for Amanda to overpower Mu the MMU and write herself next to Laura.

RAM

The Supremacy of Canada's Number One Drug Dealer

Drugs are a very lucrative market: the sales of Canada's most popular drug is about 1.6 billions dollars. In Canada, the drug market is dominated by one organization: the Hockey Syndicate, which controls 62% of all sales. Numerous attempts have been made to overthrow it.

One of the most recent attempts was made by Old Mac. It had decided to branch off of its main operation of distributing bio-hazards to intrude on the Hockey Syndicate's turf. Old Mac's attempts are an exercise in futility—the Hockey Syndicate influence is so wide reaching that it operates in plain sight. In fact, there are four locations on campus alone.

Often consumed in liquid form, this dark concoction is highly addicting. Chances are someone you know may have already fallen prey to this mass produced stimulant.

Personally I have never cared much for coffee, though I will admit to occasionally buying donuts at Tim Hortons.

Beyond Meta

Sewing: Easy yet Difficult

Sewing. A skill. An art. A harder-than-it-looks thingy.

I learned how to sew. Why? I'm making a giant plushy for a project and everyone I live with (house of guys) all know how to sew, but me! I felt a little left out. If there's ever a zombie apocalypse or I become an amazing spy/assassin, knowing how to sew my flesh back together can be useful. Oh! It's also a useful skill to have for buttons and socks, but no one cares about its practical use. I jumped into the process of learning how to sew thinking it'd be easy. Was it? Sure, my grandmother showed me how to use a sewing machine and it looked pretty simple. The sewing part is actually pretty straight forward.

“So, why are you calling it a harder-than-it-looks thingy?” Why? WHY?! Because I spent, easily, more than 14 hours making a template for the plushy. It has to be exact for it to be easy to sew and you have to draw out the shape/form thing flat out.

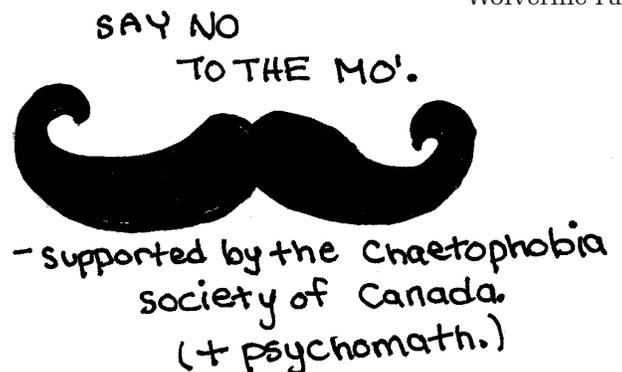
“Why didn't you use a previously made template for a plushy?” Well 1) Most of them aren't big enough. 2) The design wasn't what I wanted (I wanted to make it look like my drawing). 3) I can't find a fucking template of a goddamn bunny that's cute enough! 4) Other stuff can look like your shit that vomited more shit. Still, I approached this as “Oh, it'll be easy. I just have to draw some forms”. I didn't expect all the math involved. All the measuring and all the goddamn ratio crap. Making a template from scratch is fucking difficult.

This is more of a rant about why you shouldn't make your own template unless you have a shit ton of time to spend (depending on the size, my plushy is about 39" tall). All the measurements must be exact for any project to sew together nicely. I am now enlightened. I have a huge appreciation for anyone who makes plushies, clothes, or anything like that. If you do, YOU ARE A BOSS! If you don't, you are still a boss, but my enlightenment and new found admiration isn't for you.

If you want to learn how to sew, go do it! It is simple and straight forward! If you want to make your own clothes, plushies, or anything where you have to make a specific template for it (you can't just sew crap together and hope it works – it doesn't!), it'll be work. It'll be tedious and it'll take time. Good luck on your future endeavours.

Never give up on what you love to do.

Wolverine Panda



Greetings from Grad School, #3!

Hello again! I'm back, after an extended absence brought on by Thanksgiving weekend, a different weekend spent in Vancouver seeing Streetlight Manifesto again, and—well, that's it, but you can throw an emotional breakdown and illness in there too for good measure (as opposed to “bad” measure, or maybe like, a pre-measure? An outer measure? A probability measure on Cantor sets, where you only need to define it on the algebra of clopen sets to be able to do really cool stuff?). Meh, there wasn't that much of which to speak. (Lies.)

As a quick note, one way in which grad school is different from undergrad, if you change universities, is that one must attempt to get re-established, socially. New friends, new groups and activities, new shopping places, etc etc. You might object, saying “I did that for undergrad!” That is fair, until you realize that there's an entire undergraduate class entering with you, experiencing the same thing, and often you're also in residence, ‘forced’ to be in close proximity to other first years. Grad school is different, in terms of scale and situation, in most cases. Here, it's easier to be alone when you're not on campus because you're probably at home, not living with anyone else, and it's easier to get absorbed in your work and forget to get involved in the community outside of your department. It's also easier to miss the friendships built up in the years prior to grad school; undergraduate friendships are strong bonds, in many cases. Perhaps like ionic bonds; I've been told by reliable sources (ahem) that they are stronger than covalent bonds, contrary to what I learned in high school. (As an aside, do you ever learn anything in chemistry that isn't refuted later on in your education?) Maybe (probably) I just don't understand that stuff.

Of course, this is only my experience, so far. It could be that the majority of people have their acts together when they go to grad school, make friends immediately, and are otherwise happy. Please note that this is not automatic. Make sure you try if you go off to grad school.

On a much more pleasant note, this past Tuesday I experienced the sheer joy of the aftermath of a PhD Thesis Defense. We made brownies and cake and stuff to celebrate the occasion, and there was a party, and a free drink at the Grad House for the candidate, etc. It's exciting to know that one day, someday soon (ie. in the next 5-7 years? I hope?), I'll be doing roughly the same thing. And the goal should be to enjoy most of the journey in between; we'll see how that goes.

Speaking of that journey, in my case one into ergodic theory, I've run across the idea of mixing. Mixing transformations are ones which offer a notion of asymptotic independence. That is, suppose you have two events in a probability space (X, \mathcal{B}, m) , A

and B , and a measure-preserving map T on X , which acts as a discrete “time step” (recall that this is just an abstract dynamical system). Note that A and B are just sets in X , and the probability that A occurs is $m(A)$, and $m(B)$ for B . If they are independent, then $\text{Prob}(A \text{ and } B) = m(A \cap B) = m(A) * m(B)$. That is, if you pick a random x in X , the probability that it'll satisfy the conditions of both A and B is just the product of the probabilities separately.

Of course, not all events are independent. However, we often care about the situation where x is in B , and is eventually in A , under iterations of the map T . Then, we care about the limit of $m(T^{-n}(A) \cap B)$, as n goes to infinity ($T^{-n}(A)$ is the set of all x in X such that x is in A after n iterations of T). We say that T is strongly mixing if that limit is $m(A) * m(B)$, for all A and B measurable. There are two other types of mixing, weak mixing and exactness, the former being weaker and the latter much, much stronger than strong mixing. Ergodicity is also a form of mixing, on the average; it is weaker than weak mixing. Strong mixing can be generalized to “ k -fold” mixing, where you consider A_1, A_2, \dots, A_k for sets in the future, and B in the present.

Alternatively, one can think about this mixing property as a dispersion of the set across the whole space, hence the name. $T^{-n}(A)$ spreads out across the space, but retains the same measure as A . This is an interesting description of the dynamics of the system, and one that can help us say, in a probabilistic sense, what can happen as a system evolves.

As well, I've realized that using measure theory to understand probability is a fantastic idea and should be encouraged. In particular, the notion of conditional expectation is remarkably useful; I recently utilized to great effect the so-called Martingale theorems, which describe the convergence of a sequence of random variables in probability theory, to prove that exactness implies k -fold mixing, for any non-zero natural number k . This has to do with how we model information in probability theory: via sigma-algebras! Not that I really know enough to expound on this, but I thought it was really cool.

That's it for this fortnight; hope you had a happy Guy Fawkes Day on Tuesday! As well, please make sure you take time on Monday at 11 am to remember those who have died in war, whether they won, lost, or were neutral; stop your class, if need be. You may disagree with war, but at least you can respect the memory of those whose lives were cut short.

Lest we forget.
Scythe Marshall

*dissed*CONNECTIONS

Wanted: Someone to write some filler for *mathNEWS*. Must have a meta sense of humor, not get caught in a loop of self-reference, and be willing to write *dissed*CONNECTIONS as filler. Please apply via **BLACK BOX**.

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or in person (MC 3030)!

(A Racket About Racket)

When the time came to apply to university, I knew where I was going. I was going to Waterloo, and I was going for computer science. I was so confident I didn't even apply to other universities because, UofT with its international CS reputation? Not even worth my time. It was Waterloo because I wanted the best, and the best, is Waterloo. Or so I thought.

Cue the start of the term. I'm in my lecture early, laptop open, ready to start writing the next big operating system using only assembly, or maybe, this being Waterloo after all, using just ones and zeroes. But when the prof started talking he revealed we wouldn't be using binary, we wouldn't be using assembly, we wouldn't even be using C++, or Python. We would be using Racket. A dialect of a dialect of LISP.

The first thing I noticed about Racket were the parentheses. The second thing I noticed about Racket, were the parentheses, because there are so many damn parentheses. After a few weeks in the course, my parentheses keys are now broken, and one tired night I fell asleep while working and almost drowned in the sea of parentheses.

The third thing to notice is that it's a prefix language, which isn't too bad; you adjust eventually. It's the combination of the prefix parentheses that works terribly. I'm a student that went from the beautiful and clear code of Python to what is essentially the aftermath of five of the natural disasters of your choice hitting a landfill. I've successfully proven that even trying to read Racket code is an NP-hard problem [but it has a fairly fast inter-

preter! There is no way it isn't polynomial.—ObjectED]. In other languages it's assumed that you can read simple lines of code. In Racket, accessing the second element of a list is so confusing that it's on the quiz. Speaking of lists, heavens forbid you try and do anything with nested lists. Lists in lists is like the horror child of your worst nightmare and your best friend's worst nightmare. Reading and writing Racket code is a flustercluck of brackets and list accessors, meaning you will inevitably make mistakes. And the only way to prevent mistakes, is to write tests [HEAVEN FORBID WE HAVE TO TEST OUR CODE! If it compiles, it works, right?—ObjectED].

Tests are like the devil's gift to mankind. In light of all the testing I do, I have decided that Computer Science should not be called Computer Science, but Function Testing. On every assignment I reliably spend about 10% my time writing functions, and 342% of my time writing tests. Tests need to test for every possible mistake, and as far as the professors are concerned every single possible combinations of values is a potential error. This means every time a function takes in a number I have to write a test for every single possible number, up to infinity and beyond. My course review is going to be a proof that the set of all tests I wrote is equal in size to the set of all real numbers.

tl;dr: This is not the amazing computer science course I had been promised, this is a possessed, twisted version of a once great program which now exists only to mock the art of programming.

TheNotChosenOne

(A Racket About (A Racket About Racket))

There is an age-old saying that goes "Don't judge a book by its cover". Now, it's kind of a shitty saying since the cover of a book is what initially piques my interest and directly correlates to how likely I am to pick up and read the book, but we're going off topic here and it's really not helping my point. Right, my point.

All hyperbole aside, you should not be putting off the entire faculty of Computer Science based on your not-so-fantastical experience with a single, basic introduction to CS course designed for students that have no experience in programming. Be glad you're getting a easy start, learning to walk before running. You'll be coding in machine code (you'll hate your life), *asm* (you'll hate your life slightly less) and C/C++ soon enough.

Also: *asm*, C++, and **Python**? One of these is not like the other (hint: it's the one that is bold).

I agree that Racket seems kind of silly and is not the ideal starting language, but that is because I come from a background with imperative programming experience. It's useful for teaching new programmers, and puts everyone on the same starting point. The language is not complicated, and all the assignments in 1st year are trivial, especially with previous experience. If you wanted challenge or something different (ie. C++), take CS 145 or switch into SE and take CS 137/138.

theSMURF

Racket About (A Racket About (A Racket About Racket))

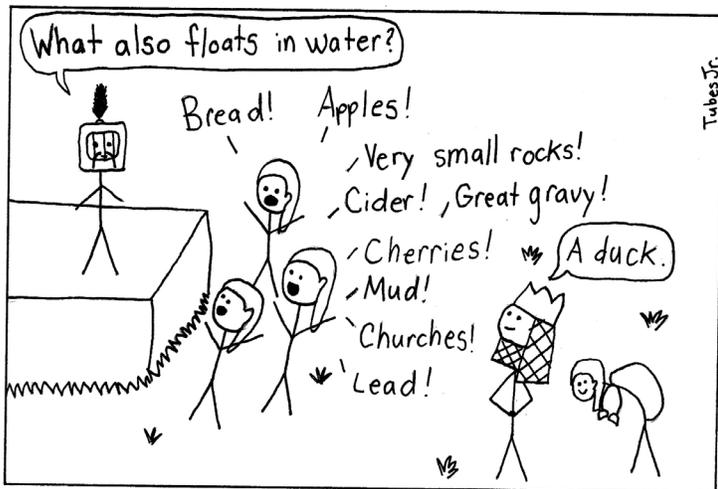
```
#lang racket
(define lng "Racket")
(define (about lst) (cons "About" lst))
(define (rant lst) (cons lng (about lst)))
(define first-article
  (cons "A" (rant (cons lng empty))))
(define second-article
  (cons "A" (rant first-article)))
(define this-article (rant second-article))
(define sa string-append)
(define (brkt str) (sa "(" str ")"))
```

```
(define (ttl l)
  (cond
    [(empty? l) ""]
    [(= (car l) "A")
     (brkt (sa "A " (ttl (cdr l))))]
    [else (sa (car l) " " (ttl (cdr l)))]))

(read (ttl first-article))
(read (ttl second-article))
(read (ttl this-article))
(display "This is getting ridiculous...")
```

Monty Python in Python—Can Burn?

```
def can_burn(witch_weight, duck_weight):
    print "B: Does wood sink in water?"
    print "V: No, no. It floats! Throw her into
the pond!"
    answer = (raw_input("B: What also floats in
water? \nV: "))
    while answer != "A duck.":
        answer = (raw_input("V: "))
    print "B: Exactly! So, logically..."
    print "V: If...she...weighs the same as a duck,
she's made of wood."
    print "B: And therefore-?"
    print "V: A witch!"
    if witch_weight == duck_weight:
        print "V: A witch! A witch! Burn her!
Burn!"
        return True
    else:
        return False
```



A New Method Resolving Constitutional Crises

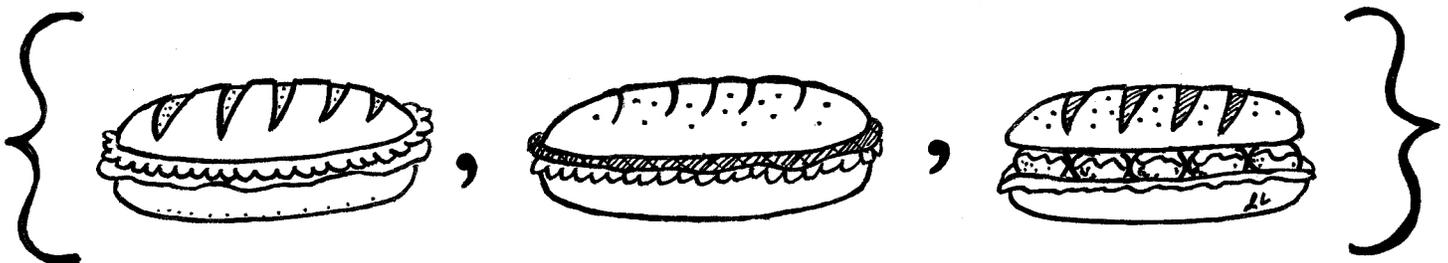
Constitutional crises seem to be more frequent in developed nations lately. The Prime Minister of Canada, in 2008, asked the Governor-General to prorogue Parliament in response to a letter from opposition MPs indicating that they would withdraw the Commons' confidence in the government and support an alternative government. In the United Kingdom, the people elected a hung parliament and subsequently they had to deal with the first coalition government in decades. In the United States, deadlock between the two Houses of Congress has resulted in a monumentally useless governing body, almost entirely incapable of passing any legislation whatsoever. Egypt has been having a host of troubles, though they haven't come out of the darkroom yet so we can't really call them developed.

In this paper, we propose a new method of resolving constitutional crises. The first step in this new process is to pick an independent authority to declare when a constitutional crisis has occurred. In the case of a constitutional monarchy, such as Canada or the United Kingdom, the authority would naturally rest in the Sovereign or their Governor-General. In some nations, the Constitutional Court would be a good choice. In the United States, a search is ongoing to find an eligible authority.

Once a constitutional crisis is declared, the constitution is to be immediately suspended, specifically above a pool of lava. Additionally, the rope holding the constitution should not quite be anchored properly, so that it is slowly dragged downwards over time as the nation grows to appreciate the gravity of the situation. In effect, this imposes a time limit on the resolution of the crisis. If the constitution burns up before it can be resolved, the crisis authority—being the only authority left, now that the constitution is gone—can immediately impose martial law and order everyone else involved executed. If the crisis is satisfactorily resolved by the agreement of everyone involved, the the authority will declare the constitution saved and ceremoniously raise it back to safety.

We believe that this method of constitutional crisis resolution will result in fewer constitutional crises, and that any constitutional crises that do arise will be resolved quicker and with less bloodshed, political or otherwise.

Algo weird



SUBSET

Batman: Arkham Origins Review

Well *Batman: Arkham Origins* came out a couple weeks ago, and I picked it up because I'm a huge fan of the previous games. They just gave you the awesome sense that you were Batman.

Origins' combat system stays true to the *Batman: Arkham* series, although little has changed. However, since Batman games don't come out every year I don't really mind that the combat feels familiar. The story is also interesting and fairly well written. Although, it is short—my play through of the main story line clocked in at about 8 hours, which was significantly shorter than the two previous games. I feel as though some of the villains you face off against early on should have reappeared later in the game, and their lack of a second appearance left me disappointed.

As in the previous games you will level up and unlock upgrades to Batman to improve your crime fighting ability. However, this time upgrades are put into three different trees where certain upgrades require previous ones in order for them to be unlocked. I feel as though this is a backward step for the series since previous games allowed you to unlock upgrades as you pleased, and prevents players from attempting play throughs without upgrading Batman's armour.

The addition of a hub area (the Batcave) greatly benefits the game since it allows you to do challenge mode without having to leave the game. It definitely makes the challenge mode feel more connected to the main game. If you aren't interested in the challenge mode you won't find yourself returning to the Batcave very often. The new detective system also greatly improves game flow. It makes you feel a little more involved than before, but you don't have a huge impact on developing the case files you go through. Unfortunately there aren't too many cases available, and they are pretty short.

The larger world gives you more space to glide around, and is pretty well designed; however, it does feel empty. The added space doesn't really add anything to the game besides a sense of scale. This sense of scale could have been achieved through more indoor areas connected to the over world. Coupled with the lack of riddles you will find yourself quick travelling when you have to go to opposite ends of the city. In fact the whole game feels like it is missing something. Perhaps this is because it was developed by Warner Bros. Games Montreal instead of Rocksteady Studios. The game isn't bad, it's just missing the charm that I feel Rocksteady added to previous games.

With the somewhat lack of content, and the fact that I'm a student, I can't recommend *Batman: Arkham Origins* at its current retail price. I do recommend picking it up when it goes on sale, perhaps the Steam Holiday Sale or waiting for the game of the year edition with all of the DLC that is sure to come out over the next year.

AddictedGmr

Kerbal Space Explosion

Space is Hard. (Technically, it is empty. Vastly, terrifyingly, inconceivably, empty.)

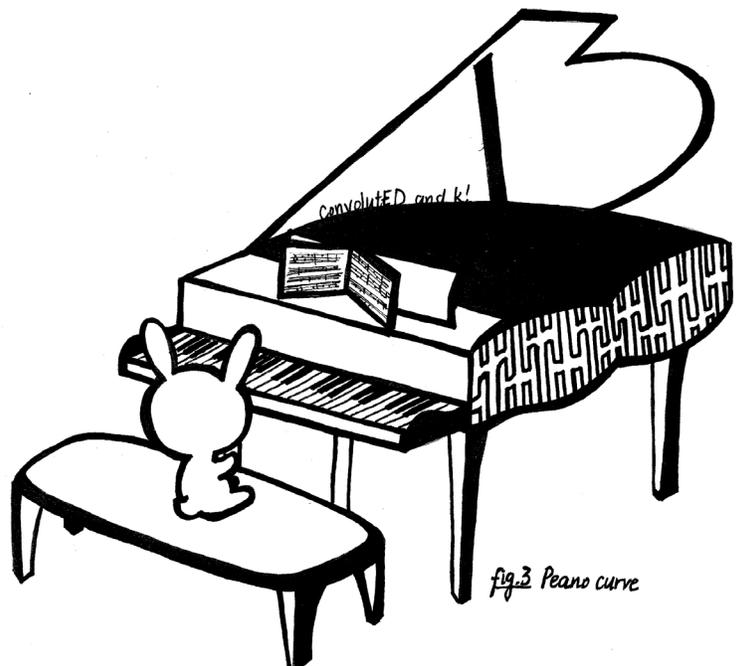
Until recently, this game was a sandbox solar system with gravity and airflow physics. With the most recent update, it added a not-too-challenging challenge system for the goal-oriented player. In the *Kerbal Space Program* you can: build rocket-ships, space-planes, landers and space stations; manipulate orbits, play with gravity, and fiddle with aerodynamics. Overall, a very simple but challenging game.

How hard can it be to take a space station in two halves, launch it into orbit on two separate rockets, and then join the two halves? With computers and physicists doing the math: easy! With only manual controls and a space map: fucking hard!

Here's the breakdown:

1. Build rockets.
2. Get rockets into orbit.
3. Stabilize the orbits to something more circular. (This is insanely difficult unless you are some sort of Newtonian ellipse manipulating god.)
4. Have enough fuel left? If not, go back to step 1.
5. Carefully adjust the orbits to within 10,000 km of each other. (Trust me, this is close in vast-empty-space terms.)
6. Wait n days, where n is the number of days for the inner orbit to come to the closest approach to the outer orbit. (This is where the game's time warp comes in handy.)
7. At the closest approach, very carefully merge the inner orbit to as close to the outer orbit as possible.
8. Move towards the other ship without increasing your velocity to the point of messing up your orbit again.
9. Line up both ships with each other.
10. Slow down to under 1 m/s relative velocity.
11. Dock and hope you don't explode from connecting your fuel tanks to the docking port.

Happy 'splodin's!
Element118



horrorSCOPES

ActSci: To find the largest dating pool, you calculate the age range for most living singles. You start dating seniors.

Your unlucky number is: 65 years of experience completely rocks your world.

AHS: Your physical prowess knows no bounds, so you try to really push your body to the limits with new techniques and positions. You sprain your spleen trying the “Gordian Knot”.

Your unlucky number is: 69 days of physical therapy.

AMATH: When two bodies become attracted to each other, they’ll be in orbit for a while before finally coming into contact. That means that there’s someone in your orbit, right?

Your unlucky number is: 350 million years without a date.

ARCH: After getting complaints from your roommates that your new partner is too loud, you decide to redesign your house to better suit everyone’s needs. The walls now have enough padding, but there isn’t any room for a bed.

Your unlucky number is: 18-pound sledgehammer to solve the problem.

ARTS: You enroll in WS 101 for an easy credit and a large dating pool. By the time midterms have come around, though, you find yourself the target of the loathsome gazes of your classmates.

Your unlucky number is: 80 pairs of evil eyes.

C&O: You run the stable marriage problem to find a partner willing to settle for you. You end up with a divorce.

Your unlucky number is: 0.68 Kardashians

CS: Your long nights in the computer lab have made you closer with electronics than with people. However, you learn the hard way that USB isn’t that universal.

Your unlucky number is: 529GB/s transfer rate.

Double Degree: You can go both ways, either as a Laurier or Waterloo student. You get rejected by both campuses.

Your unlucky number is: 42887 undergraduates who refuse to date you.

ENG: Your fruitless attempts at love have driven you to construct a robot boyfriend, who will be forever loyal to you. You neglect to set up a firewall, and catch a virus.

Your unlucky number is: 404: Love Not Found.

ENV: You try to pick up girls by telling them that you’re a crusader for the environment. Too bad that your unwillingness to shave or bathe isn’t a turn-on.

Your unlucky number is: 20-foot stench radius.

General Math: Used to being screwed in new and creative ways by the university, you get bored with what normal student population offers. You start researching into the kink community.

Your unlucky number is: 5 burns, 7 cuts, and a mysterious rash.

Grad: You have your own office to conduct your private affairs. During a particularly intense session, you press against the wall too hard and collapse into your colleague’s office.

Your unlucky number is: 1 broken pelvis.

KI: You’re a jack of all trades, and you want to try a little bit of everything. You do have some standards though, and know enough not to try out the Silly Putty and crayons.

Your lucky number is: A childhood saved.

Math Bus: A stock fluctuation in your favour has given you the self-confidence to put yourself on the market to show off your assets. You look all snazzy in the black, but unfortunately only seem to be getting the attention of those in the red.

Your unlucky number is: -12 percentage points when the evening closes.

Math Phys: Your relationship status is like an electron: simultaneously taken and single, until someone asks. Then it always ends with the same result.

Your unlucky number is: $\psi = \Sigma \alpha \psi_n = \text{single}$

PMATH: You feel like your sex life resides in the complex plane, not the real one. Any feelings of intimacy are becoming more and more imaginary.

Your unlucky number is: 2i partners.

SCI: Your lab rats are getting more action than you are. You study their courting habits for pointers. Your potential mate isn’t impressed by your offering of cheese.

Your unlucky number is: 3 grams of gouda.

Soft Eng: After a successful date, you and your partner find that you’re handling each other’s threads fairly well. Unfortunately, you soon find yourself in a deadlock as you’re both waiting for each other to finish.

Your unlucky number is: 30 minute timeout before trying again.

Stats: Going by the Canadian statistics data, you have gone out with half a dozen partners and lost your virginity 3 years ago. Let’s use that story, shall we?

Your unlucky number is: Stuck in the bottom percentile.

Teaching Option: Surrounded by students, your libido has never been more frustrated. However, you see a couple single parents who look promising.

Your unlucky number is: 46, and Stacey’s mom has still got it going on.

Undeclared: You have so many options to choose from, but you’re paralyzed by the sheer breadth of who you want to go out with. By the time you regain your senses, you find that your choices have narrowed down to either your right or left hand.

Your unlucky number is: Self-five!

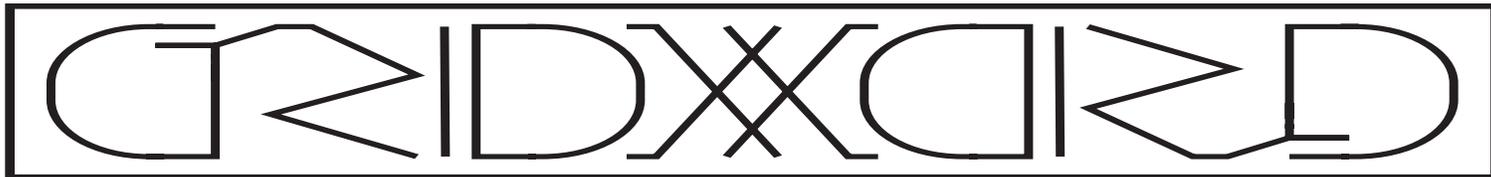
!bar

profQUOTES

- “Suppose I’m the manager of the Bombshelter and I want to hold an annual kegger. Oh, you guys aren’t legal yet, are you? Suppose I want to hold an annual juice party.”
Akash, MATH 135
- “We can tell something is not right... There’s a word for this.”
[displays a meme with a giant rubber duck] “What?”
Jao, MATH 145
- “A collision is a short, intense interaction between two bodies... I know what you’re thinking. Get your minds out of the gutter.”
Mann, PHYS 121
- “I have never fired a weapon before. Actually, that’s not true; I’ve fired a squirt gun. My name is Robert and I have fired a squirt gun.”
Mann, PHYS 121
- “Sometimes stupid is easier.”
Kuo, MATH 135
- “Stacks are just queues turned sideways”
Naeem, CS241
- “The shmget makes the shmids, which is passed to the shmat. Which shmoozes in shmire with the Cat in the Hat.”
Seuss, CS350
- “These lectures take all of my concentration, and if anything distract—SQUIRREL!”
Brecht, CS350
- “We all get confused and then we die.”
Rubenstein, PMATH 740
- “Oh, you put your assignment on top of my notes. *Picks up assignment* And now we do the assignment for Mr (random surname). Question 1...”
Nica, MATH 247
- “[Talking about local maximum] So this point b is called the local maximum. It is not a point of global maximum in the sense that, it is not the king of the whole jungle, it is only the king for this little neighbourhood in the jungle.”
Nica, MATH 247
- “You are not allowed to do homework when I am talking, that’s why the homework are due in the beginning of the class. In this room, I am the important person, and only important person is allowed to talk.”
Nica, MATH 247
- “The hand keeps writing ‘x,y’ instead of ‘x,q’ as if they were subsequent letters of the alphabet or something.”
Purbhoo, CO 330
- “I don’t know why I’m giving you a course in Complex Analysis.”
Purbhoo, CO 330
- “... but then you have to log in to Learn, and that is always an experience.”
Purbhoo, CO 330
- “On this planet trees grow upwards.”
Purbhoo, CO 330
- “I’m sorry for butchering your name, people have been butchering mine for 30 years so this is payback.”
Purbhoo, CO 330
- “Unlike US politics, where conservative things are quite goofy, in potential theory, conservative things are actually good.”
Jones, EARTH 359
- “So if we’re measuring fish and get in a canoe... actually probably just get a grad student to do it.”
Jones, EARTH 359
- “If someone tries to tell you this is true, they’re lying or they’re trying to sell you something.”
Jones, EARTH 359
- “Ecology, or what I call ‘bugs and bunnies.’”
Jones, EARTH 359
- “The example I have here is a garden hose filled with water, but given that you guys are university students, a funnel filled with beer would also work.”
Jones, EARTH 359
- “If you see a note in the side of the course notes, it’s likely something that piqued my interest about three scotches into the making of these.”
Jones, EARTH 359
- “This is one of my favourite jokes. Well, one of my favourite clean jokes.”
Jones, EARTH 359
- “Water is the most commonly used liquid by hydrogeologists, with the exception of alcohol.”
Jones, EARTH 359
- “We’re not even good at predicting weather for 48 hours from now, let alone a few thousand years.”
Jones, EARTH 359
- “Walk into a hospital and ask to borrow their MRI to test a theory in the field and they’ll likely say ‘No, grandma needs to have a brain scan so she can live until tomorrow.’”
Jones, EARTH 359
- “Is anybody here from Laurier? ... Good, just wanted to check before I told today’s joke.”
Jones, EARTH 359

profQUOTES Continued

- “Molecules behave erratically, much like drunk undergrads.”
Jones, EARTH 359
- “A fighter punches some guy’s face, hopefully the guy he was supposed to be fighting. That is stress.”
Jones, EARTH 359
- “So if I have a fish tank, and I half fill it with beer... mmm beer.”
Jones, EARTH 359
- “Feels like I have somebody else’s tongue in my mouth today... and I don’t even know why I said that.”
Bissonnette, CHEM120
- “Everything I teach you in this course is subject to debate! That’s what makes this course so much fun. It also makes it very hard to grade.”
Berry, SE463
- “...and pretty soon ideas will start coming out that are legal! Or can be *made* legal with a good lawyer.”
Berry, SE463
- “[discussing the merits of a specification for a traffic light] So let me see if I understand this correctly. When the light changes red, a big wall comes up and blocks the street...”
Berry, SE463
- “Maybe you didn’t think of your rear end as capable of observing things, but it *does* observe!”
Berry, SE463
- “So we’ve beaten this particular example to death, but zombie movies being in vogue, it’s okay to bring it alive and beat it to death again.”
Berry, SE463
- “I just spent seven minutes lecturing about nonsense and I created a beautiful model of nonsense! Isn’t that wonderful?”
Berry, SE463
- “I have to have triple-caffeinated espresso, one cup per page, in order to read [a software requirements specification].”
Berry, SE463
- “So 90% of the class has neither seen a user’s manual, nor *not* seen a user’s manual!”
Berry, SE463
- “How many here never come to lectures?”
Weddell, CS348
- “That would imply that there are two ongoing classes in two different terms, which violates our notion of time and space. However, I haven’t *explicitly* disallowed this...”
Weddell, CS348
- “The difference between life and automata is the automaton doesn’t get old.”
Ben-David, CS360
- “An automaton with two states takes us an hour to [derive], so now figure out whether this will be on the midterm or not.”
Ben-David, CS360
- “I can tell you 'Be smart and figure it out'; it’s good advice but that’s not an algorithm.”
Ben-David, CS360
- “So regretfully for you, I can’t ask this on an exam, but on the next assignment...”
Ben-David, CS360
- “Recall that Oktoberfest distribution is a distribution that we drink too much and forget what it actually does.”
Schonlau, STAT 231
- “I don’t remember why you need a calculator for the midterm, but just bring it.”
Schonlau, STAT 231
- “I could create an unstable state of, say, me outside of an airplane. Eventually, that system would correct itself.”
Stastna, AMATH 463
- “When you’re sitting in a hot tub and you move your hands together water rises, and when you move them apart, water lowers. Now imagine a giant, 400-500 km tall, sitting in the north Atlantic.”
Stastna, AMATH 463
- “Enthalpy is a good example. Where did it come from? Someone just wrote it down and it was accepted.”
Stastna, AMATH 463
- “I wish I had collaborators like you all.”
Stastna, AMATH 463
- “You might have learned this in the horror that is PHYS 121.”
Stastna, AMATH 463
- “How do you say tanh in French?”
Stastna, AMATH 463
- “ $1 + \tanh((z-z_0)/d)$ but Boussinesq said ‘I’m way too lazy for that, I’ll just keep the 1.’”
Stastna, AMATH 463
- “Try [buoyancy] with Guinness. Pour down, bubbles go up.”
Stastna, AMATH 463
- “[talking about vorticity of tea leaves] Go make some tea tonight. You can do it with other liquids too, put stuff in your beer.”
Stastna, AMATH 463



gridCOMMENTS

I am a clue brewer

(Only?) forty black squares. Clues beginning with “e.g.” are thematic.

Half the 4 submissions were perfect. I hope this week’s is easier. Andrew’s variation on “(s)he loves me, (s)he loves me not” was “she loves me, she loves my nuts”; Henry’s was a literal twist on the theme (left unmodified): a Möbius strip taped to the paper. And although Erin’s “he loves me ... or he gets shot” was quite cute, she made a few too many mistakes. So the winner is Henry—congratulations! You may pick up your prize at MathSoc.

Submit complete (or incomplete!) grids to the **BLACK BOX** (by the Comfy Lounge on floor 3 of MC) by 6pm on Monday November 18th. Include your name and your answer to this issue’s **gridQUESTION**—the grossest answer decides the winner (of a \$5 C&D gift card) in the event of a tie: “What is the worst mixed drink ever?”

Cheers (literally),
unit

This Week's Grid:

1	2	3		4	5	6		7	8	9		10	11	12
13				14			15		16			17		
18				19					20					
21			22			23		24			25			
			26		27									
		28					29				30	31	32	
33	34			35		36			37					
	38		39		40				41		42			
43					44				45		46		47	
48					49				50		51			
					52			53						
54	55	56			57				58		59	60		
61				62			63		64			65		
66							67					68		
69					70				71					

Across:

1. Bugs and Buster Baxter
7. Permutation of 18A
10. Wager
13. 1
14. Siestas
16. Notifications
18. Permutation of 70A
19. Baby horse
20. Eye part
21. “No ____!”
23. Sun bed
25. Aurally perceive
26. Pa’s pa
28. Goose gab
29. e.g. Tanqueray
30. Person, place, or thing
33. After pi
35. Edmonton hockey player
37. e.g. Русский Стандарт
38. The worst bug
40. Ex ____ o ____ fit
42. Director Spike
43. e.g. Strongbow
44. Doha rules it
46. Obstructive Sleep Apnea or Ontario Soccer Association
48. Baghdad rules it
49. e.g. Mount Gay
50. Artery counterpart
52. Australian marsupials
54. 58A
57. A square’s is a square
58. 54A
61. The Old Man’s catch
63. Delivers
65. Fairy fiend
66. “Be not ____; the isle is full of noises”
67. Coin eater
68. Something to pick
69. Short station
70. Permutation of 7A
71. End some sonnets

Down:

1. Cook
2. Against
3. e.g. Maudite
4. Hell
5. ____ Te Ching
6. Release eggs
8. Kilt pattern
9. Adam’s is water
10. White and moldy
11. Zeus imprisoned the father of all monsters under it
12. Tsaritsa, incorrectly
15. Big hitters?
17. C2H6O
22. Latin I
24. 36D
27. Of like ilk
28. Civic or Accord
31. Ancient singing place
32. Tropical guitars
34. Filamentous biomaterial
36. 24D
39. e.g. Patrón
41. Volcano juice
43. Picture places
45. Examines again
47. Okays
49. Kigali rules it
51. “Is it” contraction
53. Scoops water
55. 27th president
56. Pee part
59. e.g. Tokaji
60. Throw off
62. Wrath
64. Lady deer

**Submit your solutions to the
BLACK BOX by
18:00:00.0000 EST, Monday,
November 18, 2013 C.E.
(Unix Time: 1384815600.0000)**