

math NEWS

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Volume 122, Issue 5
Friday, July 26th, 2013

lookAHEAD

mathNEWS

July 26	The last issue of Spring 2013 bids farewell to its readers and rides off into the sunset.
July 31	Frosh Issue Production Afternoon: 3PM

FedS

July 26	End of Term A Cappella Club Concert
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University

July 30	Last day of classes (Monday schedule)
Aug 6	First day of exams
Aug 17	Last day of exams
Aug 19	Unofficial grades begin to appear on Quest
Aug 23	Co-op work term ends

Misc

July 27	National Sleepy Head Day
Aug 5	Civic Holiday
Aug 5	International Beer Day
Aug 8	Sneak Some Zucchini Onto Your Neighbour's Porch Day
Aug 10	National S'mores Day



1981 loto-québec ticket left in the BLACK BOX

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Ponies: Julie Sturgeon (Carrot Top), Rachel Wiens (Twilight Sparkle), Murphy Berzish (Dr. Whooves), Lenny Morayniss (Derpy Hooves)

mastHEAD

For this term's EOT, the writers of mathNEWS decided to be super lame and opted to do exactly what we did last semester: dinner at the Huether. Thank goodness that beat out the second most popular option: East Side Mario's. At least the Huether has good food, their own beer (which is very tasty by the way) and is somewhat fancy. A good deal of the writers will be putting on their fancy dress for the EOT this term. Only some of the editors will be dressing up since some of us are hobos *cough*ObjectED*cough* who haven't measured their necks in a while. (Seriously, it boggles my mind that "neck size" is a thing with men's shirts.) Looking for alternative ideas, we asked our writers: "What is the most fanciful way to dress?"

(define this (not cool)) ("In baby clothes, given your mother is the Duchess of Cambridge"), InsideVoice ("Birthday suit"), Stephane ("Pink dress shirt, pink dress pants, pink belt, pink fedora, pink shoes, pink socks, pink watch"), moment ("As Stephen Fry"), GingerbrED ("Pretty princess dressup!"), Grumpy Old Fart ("Wings, for flights of fancy"), MuffinED ("3-piece suit, monocle and top hat"), FashiOn Police ("Proooooooooooooom!"), Wolverine Panda ("Plaid pants, bunny slippers, top hat, monocle, bright red suspenders and a bib for a shirt"), k! ("A feathered fedora, Cheetoh-stained t-shirt, and a pair of unwashed cargo shorts"), wibz ("Waistbands at your actual waist"), Element118 ("The same way I dress every night... try to take over the world! I mean, a labcoat"), yourlocalWHETHERgirl ("No comment"), Soviet Canadian ("In ushanka and coat, there is no other clothing"), Scythe Marshall ("Like me: khakis and golf shirts all the time, and occasionally wearing pink ties, capes, belt-sashes and O-week leader shirts"), BeyondMeta ("A mobile suit Gundam"), theSMURF ("With croutons, bacon bits, and some fancy dressing"), Zethar ("With a shoulder dragon").

This Issue's Solution:

L	S	S	D		V	L	V	N	O	S		X	V	W
N	O	L		K	N	I		O	D	I	B	I	T	
V	T	U	S	R	U	L	N	I	V	S		F	O	O
C	I	N	N	V	L					I	R	I	S	
V	M		O	D		L	V	O	G		S	C	I	L
V		S	I		C	V	N	G	O	C		U		N
	N	O	L	N	I	M	D	V	B		I	R	N	I
C	I	G	V	R	T					S	U	C	R	A
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	D	I	O	T	V	K	T	V		R		R	Y	T
K		V	R		H	S	V		V	O	Z	V		S
N	S		R	I				P	V	H		C	Y	N
V	N	V	U	J	I	R	V	M		C	I	T	P	O
T	V	S	S	I	M		O	I	B		T	O	O	C
B	I	R		F	V	O	T		S	O	V	H	C	

My Final Prez Sez

Hello Mathies,

After an intense and busy 15 months, this is actually my last Sez as MathSoc President. When I started in the role, I had only a vague idea what it would be like and what projects would fall on my plate. It's one of those positions that has a lot of internal items that most students don't get to see. Over the course of my terms, I've updated policies, hired a new C&D manager, introduced a mailing list to get you all informed, and interacted with the Dean's Office on countless issues affecting math students. There's overlap with other roles too: I've renovated the C&D (and waited forever for furniture), worked on some of the new accounting requirements, led our new External Funding Committee, and worked with our C&D Management Board. I've seen four Pi Days/Pi Approximation Day/Tau Days, and have become a professional at serving hundreds of pieces of pie or cake within a half hour. This past Monday's Pi Approximation Day, we served 800 pieces of cake, and still managed to run out. This fall, every single first year student will get a pink-tie calculator as part of their Orientation Kit, through a partnership with the Dean's Office and Orientation.

There are definitely projects that I wanted to do that didn't get finished. I didn't spend as much time on MathSoc this term as I would have liked. This spring I wanted to update our website, but other priorities came up and academics/job hunting got in the way. A clubs manual is still on my to-do list. We're also still discussing the idea of renovating the Comfy or replacing the Point of Sale in the office. Going forward, I hope that some of these projects continue.

We're nearing the end of my emails too. I've met way too many people over the course of this term who recognize my name as the one who sends all the emails. Keep reading them when they are from someone else- they often have interesting information and usually tell you where to find free food. I wish the best of luck to the incoming President, Stéphane Hamade, and the future presidents for this year (to be elected in the fall). Lastly, I encourage each and every one of you to volunteer with MathSoc— as a director, a councillor, an office worker. Even if it's just for a single event, these are the people that keep us working and the society providing the things you need most (like pie and staplers).

Elizabeth McFaul

Russian Reviews: Sniper Elite v2

The human body is weak

You are an American action star given a sniper rifle during the Battle of Berlin. Heads explode. Other things explode too.

Soviet Canadian

P.S. There is also some gimmicky slow-motion x-ray system that lets you watch in gory detail as your bullet leaves the gun, and shatter the enemy's bones and organs.

FedS Sez

The last two weeks and up until the end of term have been very interesting on the FedS Front.

From the General Meeting:

We now have open board seats that any student can be elected to. There were many motions brought up at the General Meeting. For some more details you can check out the imprint article or contact us through Facebook. <http://www.uwimprint.ca/article/3285-controversial-motion-causes-abrupt-end-to>

Last Bomber Wednesday:

The last Bomber Night is Wednesday July 31st, remember to get in line really early!

Council Meeting this Sunday:

We will be discussing the FedS Budget. If you would like to see it please contact us through our facebook page.

FedS will also be looking at doing a Governance review in the near future.

Thank you,

Stéphane Hamade, Elizabeth McFaul, Jesse McGinnis,
Prashant Kumar Patel, and Febrian Sidharta.

<http://www.facebook.com/FedsCouncilMath>

Ovarian Cancer Walk of Hope Community Event

Join the Ovarian Cancer Walk of Hope and help us change the realities of ovarian cancer by raising funds to support crucial research and awareness programs.

The walk will take place on September 8th at 10am in Kitchener at Victoria Park (15 Charles Street West) in front of the Clock Tower.

Please register at ovariancanada.org.

If you have an questions or concerns feel free to contract Ashley or Amanda at walkofhope.kitchener@gmail.com

The registration fee is \$25 but if you are in a team and raise over \$100 the \$25 fee is waved.

I think this is a great opportunity to get students at the University of Waterloo involved within the community!

**Follow us on Facebook
(MathNEWS), on Twitter
(@UWmathnews),
or in person (MC 3030)!**

Rainbow Mathies 31

The Kingston Hate Letter Controversy

Late last week, a disturbing news story out of Kingston spread across the Internet, mostly thanks to the exposure offered to it by Reddit. To those unfamiliar with the story, a lesbian couple was sent a pair of letters by an alleged group of God-fearing individuals expressing a desire to drive the couple out of their neighbourhood. The first letter was longer, providing more introduction to their history (including a base in the Deep South) and their intentions, complete with subtle threats.

The second letter was markedly more direct, talking about how they will provide BB guns to their children because they couldn't get real firearms in Canada. Due to the nature of their contents, the letters will not be published here, although they can be seen by accessing the source of this article (found at the bottom of the text).

Personally, I don't really know how to feel about these letters on a high level. I mean, my first reaction was obviously one of perturbation, but that is a simple response. Ultimately, I don't think that anger or resentment is the most productive emotion to take out of this situation, because ultimately these are directed at no-one in particular. If you think about it, these letters are incredibly distant and immature. They were published anonymously, express a clear fear of getting caught (hence the threats about sending the letter to the police), and are eager to convince the reader of the author's supposed grandeur. While death threats should obviously be taken seriously, it's difficult to ignore the questionable legitimacy of the letters. These letters came at an apparent shock to the Kingston community, meaning that even if such an collection of people are organized, they are not doing so publicly. While my first impression of the situation was highly negative, the more I've contemplated it the more dubious my initial reaction felt.

While it's easy to find the negativity that has come out of this story, I want to shed light on some of the positivity that's also apparent. The loud uprising that has sprung up in support of this couple, both in Kingston proper and across the Internet.

Included among these voices are those of the authorities, reassuring us that the connections that the author claims to have do not exist and they are investigating to find the culprit. Not too long ago, it was customary and acceptable to express sentiments similar to this letter openly and publicly. I'm glad that Canadian society has progressed as much as it has forced expressions of hatred as strong as this to be relegated to anonymity. Finally, the breaking of this news story has encouraged public discourse to include more conversations on queerphobia. Many of my previous articles on the culture of silence has already explained why working to break this culture is important.

These letters, and the hardship that their recipients were put through as a result, are a veritable tragedy. However, we are blessed to have communities that can organize around these tragedies to point out and recognize the ways that life has improved, and ways we can continue to do so. I still don't know how to feel about this story overall, but it's a relief to know that the realities are not as bleak as they may originally appear.

If you are queer-identified, and are looking for someone to talk to or for supportive allies, there are always resources available to you. You can learn more about GLOW centre and its offerings, including a phone line at www.knowyourglow.ca. Counselling Services is always available to you; their offices are open 8:30-8MTWTh and 8:30-5F, located in Needles Hall across from Student Awards and Financial Aid. If you need support and assistance immediately, you can call the KW Distress Line at 519-745-1166. If you'd feel more comfortable speaking with someone from a queer specific service, please contact the LGBT Youthline at 1-800-268-9688. Finally, if you have any comments and concerns about this column, including ideas on topics you'd would like to see, you can contact me at dtaleman@uwaterloo.ca.

Until next time,

(define this (not cool))

SOURCE: <http://imgur.com/a/VxOqG?gallery>



A Farewell to *mathNEWS*

So it has come to this.

After almost three years, roughly 33 articles (give-or-take, since it's 27 via WordPress), a run of four out of five Ambiguous Video Game Quiz victories, some math, a bit of music, more sports, snacking algorithms, laziness methods, some of the most terrible puns ever written, and a myriad of other topics, I'm hanging up my scythe (well, keyboard?) and calling it a career at the end of this term, or at least, with respect to my non-absentee/in-Waterloo **mathNEWS** writing career.

I will never forget the Monday nights spent in the second-floor MC labs (not) typing out articles, and periodically (more often than not) doing such interesting things as watching Tool-Assisted Runs of Pokémon involving code injection, serving ice cream, arguing about what constitutes a sport, and chatting about anything and everything related to neither math nor news. I met fantastic people and contributed to a fabulous (ly satirical (ly humorous)) publication, and ate just about my fair share of free pizza and cookies; the overall **mathNEWS** experience is a glorious one, to be truthful/advertising. Production Night, when I could attend when I wasn't playing in the UW Stage Band or rehearsing for FASS, was ALL the fun, etc. End of Term dinners (I never did go to Laser Quest...) held the same lustre, when I was ever informed as to when they were taking place (whoops! My bad, in reality), and when I wasn't just doing homework or studying while at the event. Ignoring the last Lie Groups assignment and instead going to the Huether was pretty fun last term.

More likely than not, I'll continue to write **mathNEWS** from my abode in Victoria; perhaps I'll actually write about math! Or something. And I'll have no reason to be distracted, since I won't Skype in. ... Hey, that's actually a legitimately decent idea. I should mention that. Or perhaps not; I'll have enough other things with which to occupy my time. Like grad school, etc.

Yet Another Article about Design Project Adventures

*Three terms down, two to go!**

- I know, I'll use threads!
- have Now two I problems.
- "Why are there matrices of Boolean variables in this relational logic solver?"
- Visualizing n-dimensional space is hard. Very hard.
- Apparently, if you execute a jar, the -classpath argument is ignored.
- Metaprogramming is always fun, especially in Java!
- Apparently, as part of its garbage collection, the JVM internally uses the SIGSEGV signal.
- Just the other day, we started bringing in Karnaugh maps and Gray code and graph theory... soon, our design project subsume all fields of study.

notbob

*Contrary to the inserted subheading last issue, it's not "almost over."

I suppose one of my articles would be incomplete without math or sports or puns... Eh, screw it, Cauchy sequences don't converge inside the article given its topology anyways, I wouldn't hit a home run with any of the references, and I would just pun-ish the readers for no reason. Oh, I see what I did there. Was that on purpose?

Lastly, I'd like to bid a fond adieu to the entirety of the faculty and campus; my four years spent at this university were incredible, and I grew as a mathematician and as a person, through the good times and the not-so-good times. Writing for **mathNEWS** has been one of my favourite forms of self-expression here, and for that outlet I am eternally grateful, even given some of my weaker and ill-fated attempts at it, hah. Thus I felt obligated to write a sappy farewell article about it: to tie up loose ends (no Reidemeister moves!), to inform the public that **mathNEWS** will soon have fewer sports references (*you* should write sports articles, now!), and to celebrate a legacy of hopefully at-least-average writing, under an almost-ten-year-old pseudonym. Oh, and perhaps a Streetlight Manifesto reference or fifteen. There were lots of those, weren't there? I guess I'll quote them one last time:

"... It's not your time! And even if it were so, I would not let you go;

You could run, run, run, run, but I will follow close.

Someday you'll say, that's it, that's all;

But I'll be waiting there with open arms to break your fall.

I know that you think that you're on your own;

Well, just know that I'm here, and I'll lead you home if you let me.

She said "Forget me," but I can't..."

- A Better Place, A Better Time ~ Streetlight Manifesto

It's been a blast! All the luck in the future. Cheers!

Joseph Horan, aka Scythe Marshall

The Importance Of Properly If Unsubscribe

You should apologize in a sincere manner and polished

To err is human. It happens often in life because of our actions we hurt the people we intend to hurt or not. My philosophy is that if you have harmed someone then you are in the wrong and you should apologize. But if you apologize, excuse yourself with sincerity!

What you should not do is what the Maine and Atlantic Railway Company did after one of their train derailed causing a huge fire destroyed a downtown and killed more than forty people. You should not not use Google translate your excuse in French! To demonstrate how silly it is to use Google to translate text. I wrote this article in French and I used Google to translate it.

Beyond the Meta

In Response to the Hatmail

mathNEWS recently received some hatmail, which naturally brought us great joy. It was subject to a dramatic reading, followed by appreciation of some bears that were doodled on one of the gridWORD submissions. It has been transcribed below, along with annotations.

Dear Editors,

As a software engineering student, I've always enjoyed my *horrorSCOPES* [*You fool — ObjectED*]. Over the past few years, they've been funny, and some of them were surprisingly accurate. Even generic horrorscopes attempted to be relevant by mentioning a course that was taken by software students.

However, this term I have noticed a decline in the quality of software *horrorSCOPES* [*To be fair, there's been decline in everyone's horrorSCOPES — ObjectED*]. The first one was a generic one about a neckbeard. The next two were even more generic ones about being on a work term. Not a very funny horrorscope, as the main readers are presumably not on a work term [*My year's SE's are on work term. They're the ones who give me ideas — ObjectED*].

At that point, I was mildly annoyed, but willing to forgive, since good horrorscopes are hard to write. Unfortunately, the next horrorscope changed things. It was about failing SE 212, a course that is only offered in the fall. A fact that could have easily been checked [*Facts? In mathNEWS? — ObjectED*], but was not.

For the last issue, I cannot comment on the software horrorscope, because it was not there. It was missing from the page! [*It didn't fit! — GingerbrED*] Have the editors and writer [*Same group — ObjectED*] forgotten that software engineering students are also math students? [*No, but only because I keep reminding them during math events with free food — Zombie Concealed*] Are they trying to exclude us? And the most galling part was the computational math horrorscope [*I blame GingerbrED — ObjectED*], which asked, "Why do you even have a horrorscope?" [*Because we're awesome. And I'm biased. — GingerbrED*]

I understand it's difficult to write good horrorscopes. While I'd be delighted to see a return of relevant and surprisingly relevant *horrorSCOPES*, I can settle with generic and factually correct horrorscopes. I cannot accept horrorscopes that are plain wrong, or the insult of not having a horrorscope at all [*You'll take what you get, and like it! Ok, I'll try harder next time, I promise — ObjectED*].

I miss the days when *mathNEWS* was 90% controlled by software engineering. [*As I mentioned in my final article as editor, "It sucks to be you. You could try to go convince some [software engineers] that they need more work, but that's your problem." — Zombie Concealed*]

Regards,
A Software Engineering Student

How to Omegle

or "Your Guide to Internet Penises"

For those not familiar with this site, Omegle is a free online chat website that lets you chat with absolute strangers. You can choose whether or not you want to add video and you can exit the conversation whenever you like. Since this site is pretty much overflowing with creepers, the "exit the conversation" function gets used quite often. I'm not sure what motivates people to decide to sit in front of a camera naked and show their private parts to random people on the internet—it's mostly penises but there are some boobs out there too—but it can make the experience rather unpleasant.

However, if you're brash and coarse and indelicate like I am, I encourage you to brave the sea of penises and try Omegling to meet some cool people from around the world. Another option could be Chatroulette, but through vast experimentation and research, I have deduced for y'all that it not only requires you to sign up in Canada, but also a member fee, and in America, a penny a conversation. While this function is probably very effective in discouraging the creepers, it also makes it difficult for us poor students to partake. So off to Omegle, where it's a tad more unpleasant but cheap! (Which is essentially how I make all my decisions)

One of the most enjoyable experiences I've had on Omegle was with one of my friends in residence this winter. We always enabled video, because who wouldn't want to see two lovely ladies such as ourselves, and when we came across another fully clothed male, we decided to hang around a bit. We found out that he went to the University of Delaware, had just been initiated into a fraternity, and was bored on a Thursday night. He told us his name at the end of the conversation and since I have a friend who goes to the University of Delaware, I decided to ask her about him later that night. She happened to know who this guy was and had chatted with him at a party the weekend before. Small world, huh?

It also gets tricky when people don't speak English but Google Translate is pretty awesome as far as that's concerned. And while I look at Omegle as a way to meet random strangers and then never contact them again, I have a friend who met someone from England on Omegle one night, decided to friend him on Facebook, and then had daily conversations with him for a year and a half.

And now for a bonus pro-tip! Most people like to just hit the leave conversation button, sometimes without even saying goodbye, but I like to add some flair to my exit. If the stranger shows any sign of being creepy, I shake the laptop while looking terrified and yelling "NOoooo, freak earthquake!!". That way, my conversation partner doesn't know that I don't want to talk to him/her anymore, rather that I am experiencing some strange natural phenomenon and have no other choice.

wibz

A Boring Article

As I was trying to come up with something interesting to write about for this week's *mathNEWS*, I realized that I had absolutely nothing even remotely interesting or exciting to talk about. Now this is not because I'm a boring person or anything, I'm really not, though some people would probably disagree with this statement. I'm simply an interesting person trapped inside a boring person's life. Well that, and I guess the fact that I simply don't have time to do interesting things. Between classes, weekly assignments (that take forever to do), writing for *mathNEWS*, eating, and sleeping, who has the time to do interesting things? I mean, clearly some people do, because there are people who appear to be way less boring than me, but I'll never understand how they do it. I find myself so busy during the day, with class and homework, and by the time I get home, I'm so tired that I just want to go to bed. I guess I could do something fun instead of sleeping, but then I have to choose between a few hours of fun and a day of being miserable and tired due to a lack of sleep. And I always choose sleep over fun, because if I don't sleep, then I won't have enough functionality to be productive the next day, and that's no good, because that would make me even more busy. So you see, I'm not really boring, I just have too many things to do that I have no choice but to be boring.

Sylvia MacIntyre

Nested Design Patterns

Hiya there *mathNEWS*! theSMURF here, and this week I'll talk about nested design patterns and how you can use them to make your code more awesome.

Every developer loves design patterns. They help us write good code, provide a standard language in discussions, and they are pretty powerful constructs. However, one may run into situations where simple design patterns are just not enough. In that case, nested design patterns come to the rescue!

For example, you may wish to generalize the creation of your strategies. In that case, a StrategyFactory is in order. What's that? The construction of each strategy shares many common steps? StrategyFactoryTemplate, and you're done! Let's make it easier to switch between these templates now, with a StrategyFactoryTemplateStrategy.

See how nested patterns make design simple and intuitive!

Singleton, Worker, Composite, Facades, Mementos... the list goes on. Mix and match for great results!

theSMURF

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).

Spirit of Calculus

To the tune of the Spirit of Radio by Rush

Dedicated to MATH 137 prof Edward Vrscaj who always talked about "The Spirit of Calculus".

Begin the day with Vrscaj's voice,
A professor not of business
writes that math that's so elusive
And those Reimann sums make your morning mood.

Off on your way, hit the blank page,
There are pencils at your fingers
For the numbers ever linger,
demanding that you work in solitude.

Indefinite integrals crackle with life
write them down and ramble about energy
solving equations with a lambda wavelength
endless limits, going to infinity

All this math making life hard
Can still be really easy.
Using Wolfram Alpha, is really just a question
Of your honesty, yeah, your honesty.

We used to believe in the freedom of calculus,
But Newton's quotient and endless derivations
Shatter the illusion of infinity
For the words of the mathies were written on the chalk board wall,

Calc is all
And derives with the power of Feynman, of Feynman!

JabARecCow

N Fashion Mistakes that UW Students Make

- Socks with sandals
- Jeans that are too short (i.e. when sitting down and wearing jeans, a person's ankles and heels show)
- Loose plaid shirts worn buttoned up
- Shoes with spikes on them
- Teal pants
- Animal fur themed hats
- Coats that look like Big Bird from Sesame Street
- Orientation week team flags as capes
- Leggings or tights as pants
- (Baseball) caps backwards... when walking outside
- Wearing sunglasses indoors
- Extremely saggy pants that are essentially belted around their knees
- Cute clothes on top and sweatpants on the bottom
- UGGs
- Wearing red and green when it's NOT December

FashiOn Police

It's Time To D-D-D-Duel!

Tomorrow on Saturday July 27th at 2 pm on BMH green, WHIMSICAL, the club devoted to epic silliness, will be hosting a dueling tournament. It shall feature epic battles with Nerf guns, socks, pool noodles, foam swords and more. It's like Humans vs. Zombies but with less stress, less rules, less drain on time and more fun. Also, your mother was a hamster. If this offends you come to the tournament to defend your honour.

BeyondMeta

PS: This is not a Yu-Gi-Oh event. That event will be happening in the shadow realm.

American Living: Seattle Version

I spent my last co-op term working in Seattle, and since this was my first term living in the USA I noticed a lot of differences from Canada. Whether you're starting a co-op term in the States as well, hope to visit someday, or have absolutely no inclination to be contaminated by American germs, hopefully these points will provide you a quick field guide to life in the States, or more specifically life in Seattle.

- The stereotype that Seattle is full of hipsters is not over-exaggerated.
- Take the proportion of beards to clean-shaven among our current age group here (I'm estimating 80-90% clean-shaven) and flip it. If you're intimidated by facial hair, don't visit Seattle.
- SO MANY homeless.
- Starbucks is to Seattle as Tim Hortons is to Canada. The addiction is rampant.
- All the core American banks suck and have horrendous fees. Particularly Bank of America. Seriously, screw you guys.
- If you're hoping to eventually transfer your money out of the USA, do it before you leave the country. Due to a very annoying law, non-American citizens cannot make outbound international transfers unless they are physically present at the sending bank. (Cheat code to get around this: Don't make a transfer, write a cheque.)
- If you're not working for Microsoft, ~~kidnap~~ make friends with people who are. The Microserfs get crazy discounts wherever they go, and they're allowed a +1
- The drinking laws are extremely strict (age 21 is strongly enforced), but ironically there's rows and rows of alcohol in every grocery store.
- McDonalds sells a delicious but potent liquid known as Sweet Tea. I'm guessing they don't sell it in Canada because the sheer quantity of sugar is enough to send you into a coma.
- It really does rain all the time. Don't bring an umbrella though, because umbrellas are too mainstream and only tourists use umbrellas.
- International District? Seattle's Chinatown is 3 hours north and it's called Vancouver.

MuffinED

Russian Reviews: Wargame AirLand Battle

Now with more Laser-Guided Cluster Bombs

Do you want to be a commander during the cold war turned hot? In Wargame: AirLand Battle, you can! Becoming an officer in the NATO/PACT armies will allow you to command dozens of tanks, infantry squads (and their transports), support vehicles (anti-air, artillery), helicopters, jets, and more! You can crush your enemy however you see fit, with armoured might, long-range destruction, and scattered ambushes. Watch as enemies crumble against your defenses, and succumb to your advances. Just don't get cocky, as the enemy will be exploit any weaknesses you show. So bring a well-rounded force and a good plan to start down the road to success.

In this game of 80 – 150km² maps, 2 – 20 players, and 12 nations (including Canada! ^ ^) with 750 units from 1950-1990, battles are large; in terms of units on the field, the size of the battle lines, and the plans needed to secure victory. Having no bases, your income is based on controlling parts of the map, and the units you can deploy are determined before the game begins (instead of through having certain base structures) through constructing a 'deck' of units. Building a deck of units is fun and challenging as you have limits to the amount and types of units that can be selected, forcing you to choose a strategy before the game even begins, and requiring you to bring a balanced fight force.

In a battle though, you hope for the best and make the most of your units, drawing lines in the sand and claiming territories. Calling in logistics vehicles to keep your troops supplied with fuel and ammo (yes, there is limited fuel and ammo), recon units to spot the enemy defenses, and all sorts of units to flank or breakthrough.

If you are interested in leading your forces to victory across Europe in this strategy game of careful thinking and large battlefields (be it in skirmishes or campaigns), check it out on Steam or wargame-ee.com. Watching a nice 10 vs 10 battle should give you a good idea of the gameplay.



Summer Games Done Quick 2013

Speed Demos Archive (SDA) will be hosting Summer Games Done Quick (SGDQ) 2013, a 24-hours-a-day charity livestream, from July 25 (yesterday) to July 29 (this coming Monday). The event will feature a huge variety of amazing speedruns done live by runners from around the globe. Huge amounts of intense skill, patience, and planning will be displayed over these 120 hours of awesome games. All runs will be streamed online for free, and 100% of donations will be going towards Doctors Without Borders. I turn things over to the official promo blurb for a few details:

“This will be the longest and most action-packed SGDQ yet, featuring several big hits that have never been in an SDA marathon before. These include, but are not limited to: Okami, Quest 64, TMNT3, Mega Man 8, Diddy Kong Racing, Castlevania 64, Paper Mario, Pilotwings 64, Final Fantasy V, Pokemon Fire Red/Leaf Green, GTA: Vice City, and the Legend of Zelda: Twilight Princess. Several old favorites will be showcased as well, making this the most unique game lineup yet!

As always, there will be prizes that can be won by donating, challenges for games that can be donated for (such as Watch Me Die difficulty in Doom 64), and bid wars where donors have a voice in the schedule (such as category choice for Super Metroid or which DS Castlevania game is played). Get hype for 4+ days of speedrunning craziness!”

If you would like a taste of what SGDQ can bring, check out some of the Awesome Games Done Quick 2013 speedruns available on YouTube. I personally recommend PJ's warpless Battletoads run (!!!), cfox7's Donkey Kong 64 glitch run, and Cosmo's Ocarina of Time any% run, all of which have to be seen to be believed. The highlight reel (and blooper reel) also give a good overview of what these events are all about. Speaking of Awesome Games Done Quick 2013, in just five days this event raised **\$448,423.27** for the Prevent Cancer Foundation, so get those donations in and tell your friends, and let's try for a half-million “Charity Done Quick”!

More information about SGDQ 2013, and Speed Demos Archive, including the run schedule and donation links, can be found at marathon.speeddemosarchive.com.



Quororque

History: Why?

Fulfill your breadth requirements

Many people in this faculty spend their entire time at University without taking a single history course. Perhaps you have never considered taking one. This is to your extreme detriment. History courses can be boring and hard but one history course is a better estimate for the future of humanity than any psychology, philosophy, or sociology course.

Why care about the future?

You have about 50 more years of it to live through and you better hope it is a *future conducive to your ambitions*. If you are considering being: a programmer, think about how you can ensure that technology continues to be in demand; an accountant, think about why taxes are complicated and why they exist at all; an artist, think about what allows art to sell at prices one can make a living on. If people do not have enough disposable income, consumerism dies and takes technology, accountants, and art with it.

History is full of crucial examples of how humans behave en masse. If you do not understand these, you will not be prepared for when they happen. The consequences are your life; sometimes immediately. For an extreme: Remember those vacation plans to that country? Too bad you didn't see the civil war coming. (You think I'm joking but this happens so often that it's pathetic.)

University is about learning; don't blow it for grades.

E-118

Russian Reviews: Unity of Command

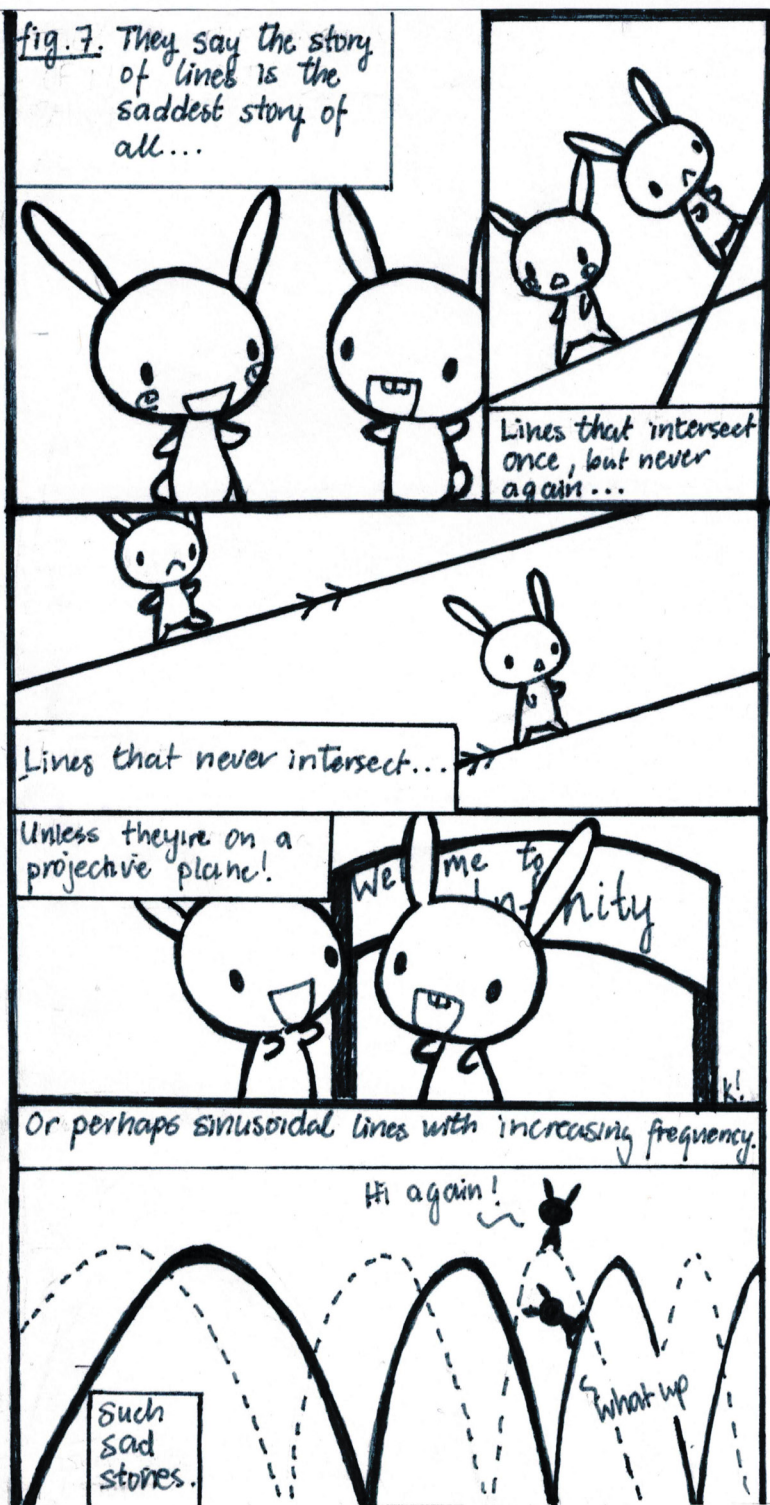
So little supply

A 'simple' strategy game based on the eastern front of WW2, lead the German Wehrmacht or Soviet Red Army in their offensives. Turn-based with hex maps, terrain and supply lines play major roles in how your troops can fight. Encircling enemies will cause them to become feeble and unable to fight, so both sides have to grind each other down while stretching themselves to cut off enemy train lines that carry supplies to the front.

Deceptively difficult as you have very short and rather strict deadlines to capture objectives, causing you to try again and again for a perfect victory (usually resulting in your forces being decimated in a harsh offensive). If you are not aware of the brutality of the Eastern Front, this game will teach it to you (oh god, Stalingrad was such a meat grinder).

If you are interested in carefully positioning troops and making large risks in the name of a breakthrough, check out Unity of Command on Steam or unityofcommand.net.

Soviet Canadian



Awesome Music Genre Fusions That Shouldn't Exist But Do

Rule 34 for music

- French Celtic Rap
- Russian Gypsy Jazz
- Classical Dubstep
- Orchestral Swing Metal
- Electro Country Funk

MuffinED

Subscriptions

Everyone else is getting one...

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Sure, you might think you can just read it on the web. But do you know what sort of computing power you'll have available to you? What if you want to read *mathNEWS* away from the computer? Not to mention a paper copy means you get to see exactly how the editors managed to somehow (yet again) fit everything nicely into an even number of pages. (For that matter, not all filler makes it onto the web.)

Of course, nothing in life is free. But all you've got to do is give us some money to pay for postage (okay, and your address). Still, it's a good deal, have a look at the rates:

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* The "one year" indicates 3 terms that are not necessarily consecutive.

For more information, come by the *mathNEWS* office (MC 3030) to subscribe some time and we'll explain it to you. If you're a bit far off, then send us e-mail to mathnews@gmail.com.

UW Finance Association Stock Pitch Competition

UW Finance Association's first ever stock pitch competition took place last Saturday July 20th 2013. This competition aimed to nurture interest in finance among students. It allowed you to utilize your knowledge and financial aptitude to pitch a stock to a panel of judges comprised of industry professionals from various hedge funds and bank as well as professors. The competition was open to both University of Waterloo and Wilfrid Laurier University and has received overwhelming support from students with 24 teams participating. UW Finance would like to congratulate Hao Qin and Ahad Iqbal for placing first, Anqi Wang for placing second, and Andische Tizhoosh for placing third in the competition.

UW Finance Association

horrorSCOPES

ActSci: You've learned a lot about predicting death in your courses. You decide to show off your skills to your religious cousins.

Your unlucky number is: 20 cult followers, worshipping your skill. Uh oh.

AHS: In your nutrition course, you're learning about celebrity fad diets. They don't seem so bad, so you decide to try one for a week.

Your unlucky number is: 3 pizzas in one sitting. That was a rough seven days.

AMath: Your research into finding the most erotic number has been fruitful, and you hit the bar to test your results.

Your unlucky number is: 2110593. When 2 are 1 and don't pay attention, they'll know within 5 weeks whether or not, after 9 months, they'll be 3.

ARTS: You decide to start your summer vacation early by leaving after your classes are over on Monday. Too bad you didn't realize that the last day of classes are actually on Tuesday.

Your unlucky number is: 2 in-class finals on the last day of class. Whoops.

C&O: You've found a place to live for the Fall term and you're super excited. You've found the optimal location between your workplace, the grocery store and the gym. And it's so cheap!

Your unlucky number is: 3 muggings later, you realized you picked the sketchiest part of town.

CS: Your new Raspberry Pi has finally arrived! You're so excited that you tell anyone you can find, even if they're not in CS.

Your unlucky number is: 10 explanations about why a large pastry has an ethernet port.

CM: You compute the number of warm days left so you can find time to go to the beach and actually get that sexy sunkissed look all the girls lust after.

Your unlucky number is: 2 pasty white legs and a crazy watch tan.

Double Degree: Twice the degrees means twice the exams, and twice the exams means half as much time to study. You try this argument on the registrar to earn more exam prep time, and get a very helpful answer.

Your unlucky number is: -4 extra days to study.

ENG: You decide to get into the Orientation spirit early by colouring your hair purple for your exams. Unfortunately, the dye you used is water soluble and your exam room is veeery hot.

Your unlucky number is: 50% of the page visible through the purple drips.

ENV: You learn that farming meat is not sustainable for the environment, so you decide to go vegetarian. Your next trip to the grocery store isn't as much fun as you thought it would be.

Your unlucky number is: 2.7 pounds of tofu. Joy.

Grad: The summer is almost over, so it's almost time for grad school to begin! You tearily say goodbye to all of your friends and favourite sites in Waterloo.

Your unlucky number is: 2 months until you see it all again. Yay convocation!

Math Bus: You decide to cash in on the recent porn ban in the UK. Before you know it, you're the head of an international porn smuggling ring.

Your unlucky number is: arrest-on-site warrant and enough money to pay for school.

Math Phys: You calculate the amount of force needed to move the tree off your house after the major storm. You're off by an order of magnitude.

Your unlucky number is: 3 downed powerlines.

PMath: Your Topology prof decides to be nice, and says that you can have a cheat sheet. However, you are only allowed to write on one side of a piece of paper.

Your unlucky number is: one 3-foot long Mobius strip.

SCI: You are sad that the cute baby geese have grown up into ugly creatures. You notice that the ducks retain their cuteness as they get older. You decide to put your genetics knowledge to use by creating a goose-duck hybrid.

Your unlucky number is: 100% evil. We are all doomed.

Soft Eng: Disappointed with the lack of quality in *horror-SCOPES*, you write some Hat Mail to complain. The editors disregard your arguments and write an inaccurate meta *horrorSCOPE*.

Your unlucky number is: 1 month until your design project is done!

Stats: Your wagers on when the royal baby would be born didn't pan out. At least you could console yourself with cake, since the little brat was born on Pi Approximation Day. Luckily MathSoc gave out 800 pieces.

Your unlucky number is: \$100 down, 5 pounds up.

Teaching Option: All the back-to-school supplies are on sale already. You decide to stock up on those funky-smelling markers that you had when you were a kid. You don't remember them being so strong...

Your unlucky number is: 2 days of studying time lost huffing Blue.

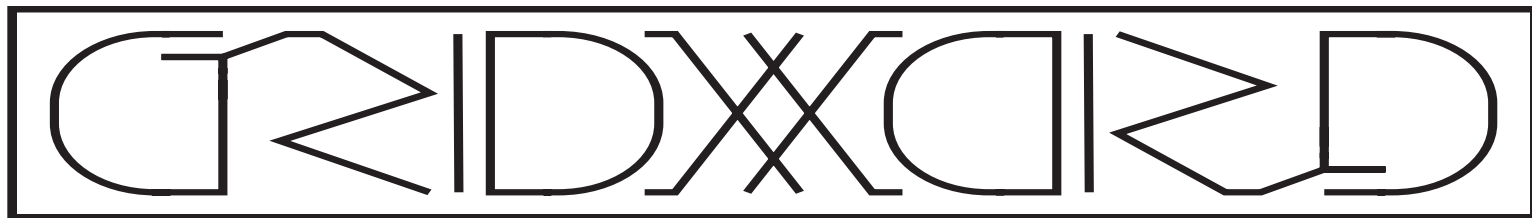
Undeclared: You decide to host an end of term party for all your friends, but can't settle on a good playlist to properly capture the mood of summer end. Ultimately, you end up with all Scissor Sisters, all the time.

Your unlucky number is: 1 shitty titular pun.

Free Pizza Club would like to thank you for your readership

profQUOTES

“How did he know that??? He’s a witch!” Afshordi, SCI 238	“He did the calculations in his head. Disgusting.” Furino, CO 480
“How many of you have used ‘nice’ before? Oh look, only one nice guy in the room.” Tompkins, CS 350	“For this test, you may write in pen, pencil or blood. But you can only use your own blood, not your neighbour’s.” Furino, CO 480
“I couldn’t find a good Wikipedia article about it, so I might have made it up.” Tompkins, CS 350	“So I’m at Zehrs and there’s this guy buying chips. I’m pretty sure I was level with his sternum. I asked how tall he was, and he said 7’4”. I didn’t know humans came that big.” Furino, CO 480
“I’ve got a big drawer of stuff that I no longer have drivers for.” Tompkins, CS 350	“Your laptop has 16 GB of RAM? You must play a lot of games.” Beg, CS 234
“I’ve written drivers for devices and I know this sequence of events that will crash your operating system.” Tompkins, CS 350	“It’s completely normal that you’re completely confused and totally lost.” Ghods, STAT 340
“I’m all grown up, in theory.” Tompkins, CS 350	[about Google page rank algorithm] “I could see myself coming up with this algorithm, but I can’t see myself making so much money off of it.” Ghods, Stat 340
“I guess you don’t really date, a better analogy is a job interview.” Tompkins, CS 350	“Of course, you know all this if you play D&D.” Pei, Math 239
Student: “Mini Kit-Kat or Toblerone.” Prof: “Who me whatcha got. I’ve got a Costco membership.” Tompkins, CS 350	“A d20 could be a weapon. I’m actually afraid to throw this.... I’ll throw it on the carpet! *chunks loudly* it’s a 20!” [<i>Sadly, as we all know, floor dice don't count — ObjectED</i>] Pei, Math 239
“I didn’t think touch worked that way. It’s been a while since I touched something.” Tompkins, CS 350	“The Bowser is just for distraction.” Pei, Math 239
[swears] “You already did my teacher evaluation, so it’s OK.” Tompkins, CS 350	“How do we put a graph on a sphere? Well, here is a drawing of a graph. I’m going to put it on the ground... The earth is round.” Pei, Math 239
“Now a pretty girl comes over, I don’t fix her disk drive. I learned my lesson.” Tompkins, CS 350	“It’s not an official proof so I’ll just write a triangle.” Pei, Math 239
“If you wanna be safe, fill up your memory with pictures of your cat.” Tompkins, CS 350	“For more information, check out Wikipedia.” Pei, Math 239
“That’s the end of the course content. You shouldn’t be applauding, you should be tearing up.” Furino, CO 480	“Proof. This theorem always holds because these two examples!” Pei, Math 239
“What does one say about engineers? Most of your building works most of the time?” Furino, CO 480	“I’d call it the faceshaking lemma but that just gets gross.” Pei, Math 239
“Now we have a long ugly multiplication and we give it to a grad student or a co-op. Or maybe 5.” Furino, CO 480	“Mathematician that can’t count. Ironic.” Pei, Math 239
“Some of this is obvious, and some of this is magic.” Furino, CO 480	“Whenever you see faces the first thing you want to do is walk on them... Graph theory. It gets weirder.” Pei, Math 239



gridWORD Hints

Across

1. Mass confusion
5. Mass of food
8. Thoracic stick
11. Fly
12. Story of your days
14. Liturgical book
16. Of sight
18. Pot
19. Contains Manhattan
20. Luck
22. Long light?
23. Tin
24. Salty shallows flow into Black
25. Burnt dust
28. Caravan
30. Son of Odin
32. Plant compound
35. Sun god
36. Quid pro ____
37. This
39. Roll cloud
41. Sad
42. 40D inscription
43. Bird-smashing sport
47. A brandy
48. Oft a copula
50. Spasms
53. Billy, kid, or nanny
54. To accomplish an action
55. Mum
56. iOS assistant
58. Of tan?
60. Sound of losing air
61. Holy Kodiak?
65. Kinky craving
66. Quill liquid
67. A lot
68. Wick's coat
69. Cantata to play
70. Starts a gossip?

7. A Pacific island
8. A cryptographic algorithm
9. Scottish Johns
10. Void
11. Limitation
13. Ugly fairy
15. Substitutions
17. Singing group
21. Audiovisual
25. Not missing any
26. Snow slat
27. Of touch
29. Zodiac sixths
31. Knitting string
33. Lost or torn
34. Dwarf King Ironfoot
36. Who, in Paris
38. Math building
40. Christ on a cross
43. Ghost-light's habitat
44. Back
45. A mitochondrion has its own
46. Door and ting go-with
49. Void
51. "Island" in Italy
52. Strontium
54. Murky, gloomy, glum, and grim; dismal, dour, dull, and dim
55. Island of many idols
57. Lady-god of pyramid-land
58. Cat's fish
59. Bolt foils?
62. Todo
63. Plus or minus atom
64. For tat

Down

1. Photo or cat go-with
2. Burning Buick?
3. Boxing Muhammad
4. Antimony
5. Most voluminous Mauna
6. Pal, in Paris

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