

**lookAHEAD****mathNEWS**

Feb 17	mathNEWS v133i3 is published
Feb 27	Production Night for Issue 4

**MathSoc**

Feb 28	Therapeutic Art Session
Feb 28	MathSoc Appreciation Hour
Mar 2	Board Games Day

**WatSFic**

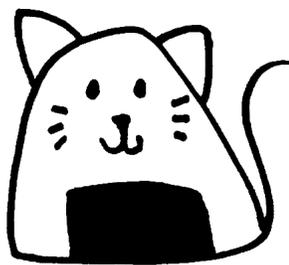
Feb 27 - Mar 3	HvZ Signups
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**University**

Feb 18 - 19	Pre-Reading Weekend
Feb 20	Family Day
Feb 21 - 24	Study Days
Feb 25 - 26	Post-Reading Weekend

**Misc**

Feb 18	National Battery Day
Feb 20	Hoodie Hoo Day
Feb 22	Be Humble Day
Feb 26	Tell a Fairy Tale Day
Feb 28	National Tooth Fairy Day
Mar 1	National Pig Day
Mar 2	Old Stuff Day
Mar 3	I Want You to be Happy Day

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George Lambrou  
Angela Le  
Heather Stonehouse

**mastHEAD**

Next week is Reading Week, a nine day during which I can relax, decompress, catch up on my hobbies, cook my own food, and mentally recentre myself so that I'm better prepared for the latter half of the term.

Or, y'know, spiral into an absolute panic over finals, which are only a month and a bit away, and will undoubtedly be my undoing. Either or. But regardless, now isn't the time to let my crippling fear of academia slow me down, no — now is the time for *mathNEWS*! And in *mathNEWSNEWS*, we've got some *very interesting stuff* happening next issue. First, provided that we can actually *purchase* the new typefaces for it, we'll be debuting *an all-new mathNEWS format*! And if you're already experiencing traumatic flashbacks of last year's landscape-layout experiments, don't worry: that's not happening again. I'll explain more next issue, but for now, rest assured: I've been working on the new *mathNEWS* for a long time, and I think that you guys are really gonna like it.

Second, next issue will *also* mark the launch of our new Professor's Column (though possibly under a better name), where each issue we'll be asking a professor in the Math Faculty to write an article on a topic of their choice. We think it'll be a great way to give *mathNEWS* some more variety, and to showcase the some of the talent that our Faculty is home to. Our first guest is none other than Steve Furino, Associate Dean of Math Undergrad Studies, and a big fan of *mathNEWS*, and to help start us off, he's offered to do a *mathNEWS* Q&A of sorts, which leads us to this issue's *mastHEAD* question:

What question do you want to ask Steve Furino?

a crafty player("Would you come to MathSoc's Games Night?"); BeyondMeta("What question do you want to be asked? What question don't you want to be asked?"); DiminutiveRex("Your Math 135 class made me like math so much that I didn't realize it wasn't the discipline for me for 4 years — how does that make you feel?"); Chicken Dave("How many licks does it take to get to the centre of a Tootsie Pop?"); HatOfChocolate("What is a math? (Please explain in fewer than 140 characters, thanks!)"); arabesque("Are you an associative dean? I know you are a communicative one."); Q. Coatl("Have I graduated yet?"); Zethar("Where do you foresee the Math Faculty heading in the next 5–10 years, and why?"); waldo@<3.LE-GASP.ca("What are you looking forward to about the reading break?"); SovietCanadian("Power or Freedom?"); Scythe Marshall("Have we figured out how to teach students how to prove things, yet?"); The Facultist("Would you support the unification of all faculties to create a bigger and better megafaculty to crush all others?"); ShayBlair("How do I draw an elephant? Please give very detailed/specific steps."); Viceroy Butterfly("Would you rather fight Porcellino or the Tie?"); The EuroBeat-'Em-Up("Does the Math Faculty (or the school as a whole) have any plans to address the mental health issues currently challenging our students?"); ExtrovertED("What's your opinion on Arts majors?").

George Lambrou("Can *mathNEWS* Editorship count as credit toward my degree?")

## Article of the Issue

This issue's Article of the Issue is "On the Go News", for doing some actual *research*, and definitively putting the **NEWS** in *mathNEWS*. Congratulations are in order, GBAD. You've written an inarguably fantastic article, and as such, you get a prize.

Speaking of prizes, we *finally* know how to deal with them. So Q. Coatl, AC, and GBAD, stop by MC 3030 any time to pick up your 25\$ Conestoga Mall gift card. Yeah, that's right, turns out we give out some pretty decent prizes. Wish I'd known that when I was eligible to win them.

Honourable mentions go to Chicken Dave and PEPEWASIN-NOCENT, who wrote "Minions 101" and "A Dove for the People", respectively. This week's issue is full of great articles, so picking a "best" one was quite a challenge. Keep 'em coming, everyone!

George Lambrou

## *mathNEWS* Still Sucks Because the Editors Are Too Incompetent

*Or: A mathNEWS Writer Gets Unreasonably Mad at Overworked Volunteers. -Ed*

For this issue, I was told that *mathNEWS* would have a shiny new format that supports all sorts of useless shit like LaTeX [Editor's Note: LaTeX *math*], emojis, and cuneiform!<sup>1</sup> So I wrote a beautiful article showcasing all the benefits of the shiny new format.

But **newsFLASH!** Apparently, the *mathNEWS* editors are too lazy, incompetent, malicious, or all of the above, to introduce the new format this issue! AaaaAAaarghh! I didn't expect to get backstabbed this hard before Humans versus Zombies, and before Valentine's day! And worst of all, I didn't even get pizza out of it!

When I talked to them about it, they made up the most ridiculous bullshit: apparently to print *mathNEWS* you need "typefaces" which cost "money" which *mathNEWS* "doesn't" "have". Seriously, who doesn't have \$3000 lying around? What a bunch of poor scrubs! [Editor's Note: we *have* the money — *beaurocracy is just making it hard for us to actually spend it.*]

So this issue, the only thing you get from me is sadly just this filler article.<sup>2</sup> [Editor's Note: *Thank you very much for writing it; we needed to fill the column.*]

dank

1. But apparently, because of some quirks of Unicode, it doesn't properly distinguish between Sumerian and Neo-Akkadian cuneiform.
2. And *profQUOTES*.

**Follow us on Twitter (@UWmathNEWS),  
on Facebook (look up *mathNEWS*), or in person (MC 3030)!  
We need love too, even if Valentine's Day is already over.  
(The love never stops here at the *mathNEWS* office!)**

## Games Sez

Hey Mathies!

To those of you who are attending our Games Night with Profs, thank you! I hope you are enjoying playing with your profs, and meeting a few new friends along the way.

To those of you who are missing it, it's in the C&D right now! [Editor's Note: *Assuming you're reading this on Friday the 17<sup>th</sup>.*] Get over there and play a few rounds before we wrap up for the evening.

To those of you who missed it (and, well, everyone else as well), there's still our regular games nights! Sure, there may not be as many profs around, but they're still welcome to join us if they want, and you can always meet new friends (or rivals) there.

In case you need a reminder, our Games Nights are held on Thursdays in the Math C&D, start at 18:30, and ends whenever people leave. People can drop-in and leave at any time during this period.

Your Games Director,  
a crafty player

## Humans Vs Zombies Sez

Zombies! Humans! Battles! Nerf guns! Socks! Geese!

If you like everything except the last thing, Humans vs Zombies COULD BE FOR YOU! You can participate in epic battles, shoot your friends, thwack your enemies with sock whips, and turn your acquaintances into zombies.

What is Humans vs Zombies? It's a Monday-Friday game of Manhunt, where humans defend themselves with sock weaponry and Nerf guns, and zombies attempt to turn humans into zombies by tagging them. There are multiple events such as missions throughout the week with various objectives for each team that you can participate in.

This term, Humans Vs Zombies runs March 6-10, and signups will be February 27<sup>th</sup> to March 3<sup>rd</sup> in CPH, STC, SLC, MC and maybe REV and V1.

If you're interested in finding out more information, search for the "Humans vs Zombies Winter 2017" event on Facebook.

See you in the horde, <3  
Zombie Queen.

## News on the Go

In order to keep my sanity up-to-date and sift through the bullshit to find the real issues, I've turned to podcasts. I hadn't really listened to many podcasts before looking for news/political ones, so I was unsure of what I would find. I've now spent a good six months following a few podcasts and I've found that these ones cover about as much news as I can handle with wit, depth, and an acknowledgement of their own biases. I usually listen to my podcasts through Google Music, but these podcasts should be available through any other podcast source that you use.

1. **The Daily** from The New York Times: a fifteen minute news dump that is updated every morning, just in time for your bus ride to class. They run through all the major headlines from the day before/ones that pop up overnight, then highlight two or three stories to go into a little more depth. This podcast is great if you want to keep up with the news, but don't have time for more than what you can listen to while getting ready for the day or your bus ride to school.



2. **Pod Save America** and **Pod Save the World**: PSA comes out Mondays and Thursdays and usually runs about an hour, PSW comes out on Wednesdays, and is also about an hour. These two podcasts are hosted by a couple of former Obama aides and Whitehouse staffers – and even they acknowledge that they are strongly biased towards the legacy of the Obama administration and identify as staunch democrats. These guys hosted the podcast “Keepin’ it 1600” during the election. They interview fascinating American politicians (senators, mayors, and leaders of different movements), discuss the issues of the day, and offer the perspective of people who worked closely with a different administration. What I find fascinating about these guys is that they can compare what the Trump administration is doing to what they know should be happening, so things that one might not notice are illuminated, like the security risks associated with taking National Security related call in a crowded restaurant at the “Winter Whitehouse”.



3. **FiveThirtyEight Politics** from fivethirtyeight.com: This podcast comes out Mondays and Thursdays, and is about an hour long. FiveThirtyEight is a news organization focused on facts, figures and all the cold, hard, truths that are often lost in political double-speak and the ‘alternative facts’ of the Trump administration. This podcast approaches the stories in the news from that perspective as well. Each podcast features not only a discussion of current events from the perspective of journalists obsessed with the facts and statistics to back them up, but also an exploration of a poll or a study that they found adhered to high ethics and statistical standards. The podcast offers a refreshing breeze of analytical journalism.



4. **The Weeds** from vox.com: This podcast comes out once a week, and is about an hour to an hour and a half long. This podcast also does a run down of current events, singling out different stories to focus on, but what is unique about this podcast is their exploration of a white paper in each episode. Each week, the hosts will talk in depth about a white paper which has some bearing on the current events in America. Sometimes these are medical reports, other times, sociological papers, but each time they offer a unique perspective on an issue that is affecting Americans today.



5. KCRW's **Left, Right & Center**: This podcast comes out on the weekend and is between half an hour and an hour each time. The best part of this podcast is the fact that each week there is a voice from the left, right, and center of the American political spectrum. In other words, someone with a democratic perspective, a republican perspective, and someone who falls somewhere between the two. Usually this podcast revolves around the events of the week that have persisted to the weekend as well as the coverage these events have received.



I know these podcasts have all been about the Americans, so I've managed to find one of the few Canadian podcasts that's worth listening to:

1. **The Boys in Short Pants**: this podcast comes out on Saturdays and is about an hour long. The two hosts are a couple of poli-sci guys who've worked in Canadian politics for a couple of years. They go in depth on different stories from Parliament and offer a unique perspective on the events unfolding at different levels in Canadian politics. One of the hosts is a Liberal and the other is a Conservative, so they often disagree, making for engaging conversation with two very intelligent people.



There are plenty of other great podcasts, but these all bring something unique to the political conversation.

GBAD

**Submit your articles, stories,  
profQUOTES, Sezzes,  
gridSOLUTIONS, and other  
random, yet somehow-publishable  
nonsense to us either under our  
door at MC 3030, or via email at  
mathnews@gmail.com.**

## Things That \$100% Happened

My friend was in a long and gruelling meeting, so she asked me to pick up some Timmies to bring her for dinner. I brought it to her, and when her colleagues noticed what was going on, they gave me a round of applause.

Believe me, it isn't as enjoyable as they make it sound in their /r/thathappened posts. It's really awkward to have a group of people applauding you when it isn't after a performance of some sort. I awkwardly slunk out of the room as quickly as I could; 5/10, would not recommend.

Diminutive Rex

## A Football Game for The Ages

Midway through the 3<sup>rd</sup> quarter of the game it looked like the Falcons were locked in to win the Lombardi trophy for the first time in the franchise history. All they had to do was to just hand in the ball to their running backs and benefit from the production of the best duo in the league. Instead, Kyle Shanahan called a pass play on a crucial 3<sup>rd</sup> and 1 and gave the Patriots the smallest window to come back. But then, one does not simply count the Patriots out, even when 25 points down. Tom Brady engineered a flawless 4<sup>th</sup> quarter and with help of their league leading defence and a little bit of luck they managed to take the ball game to overtime. OVERTIME?? Yes for the first time the big game went the extra mile. The Falcons couldn't believe they had blew it, and the Patriots had all the momentum on their side. Funny enough the Pats win the coin toss and march down the field to win the game.

So What? Pats won another bowl, not a big deal. You'd be wrong! This league is supposed to have more parity than ever, yet the Pats keep on winning. Tom Brady and Bill Belichick cemented themselves as NFL's best QB and coach ever. No more deflate gate or GOAT conversation for Terrific Tom. And oh he set bunch of new records including most SB passing yards, SB wins as a QB and playoff wins!

GreenBayFan



Colouring exercise submitted by arabesque

## The Quirky Coach

*Making the Most of Your Job*

You've snagged yourself a new co-op job and you're learning lots of technology and earning some money. That's fantastic! But don't stop there. There's a lot more you can get out of your job.

If the company has a cafeteria, eat lunch there instead of in your office. Take the opportunity to sit with people that you don't know. Ask them what they do. In return, they'll probably ask you what you do and you're on your way to networking, learning, and making a new LinkedIn contact.

Many companies organize charitable activities that benefit the community. Your day-to-day activities may limit your people interaction to the members of your own group. Volunteering to participate in these activities is an opportunity for you to interact with people outside of your group.

If the company has an internal portal where employees can submit articles, write an article about your experience as a new employee and post it to the company portal where all of the company's employees worldwide can read it. Post the same article to LinkedIn so that your LinkedIn contacts can read it. Make sure the article doesn't contain any information that is private to your employer. These activities get your name out there and show off your ability to write.

As you meet people, invite them to be a LinkedIn connection. After you feel you know someone well enough, ask if they will write a recommendation for you on LinkedIn. If they take the time to write one, be kind and write one for them in return.

Make the most out of your co-op placement.

Debbie Smith  
UW Alumna

## Why Your Suggestions Suck: On Volunteer Organizations

I am a member of a number of different volunteer organizations, many of which have been struggling this past year. Occasionally, someone suggests a great idea that would very much help with the problems the organization is facing — except for one crucial glaring flaw. No one wants to put in the time to implement it. Ideas take time. It really doesn't matter how good your idea is if it never happens.

For example, I personally think it would be great if *mathNEWS* did more to digitize their content to reach a wider audience through the web and social media. I, however, don't go to the editors telling them how they should do this — because I understand that the editors have lives outside of *mathNEWS*. [Editor's Note: Ha. Ha-ha. Ha ha ha.]

A good rule of thumb for suggesting any idea is to only say it if you yourself would be willing to implement it. Otherwise, you can shut up.

BeyondMeta

## A Dove for the People

*[Author's Note: By the time this is published, it is entirely possible that Trash Dove will no longer be relevant. That is an unavoidable downside to print media, but I am writing this article anyways just in case it sticks around.]*

A sticker is haunting Facebook – the sticker of a headbanging bird. This particular bird is the star of a new sticker pack entitled “Trash Doves”, and can be found doing things like crying, and expressing its love of bread. With such a lively demeanor, it has captured the hearts of many, and found a place within most posts and comment threads on Facebook. Countless people have been united through the simple act of posting this one small, purple, dove professing its great love for headbanging.

Maybe you haven't seen this around. Maybe you have normal friends who don't post dumb crap that makes no sense. But if you're like most other people in Math, that is not the case. Likely, you will have seen status upon status of this avian annoyance. It has become a meme in its own right, simply through the combined effort of the masses in spamming it every-fucking-where.

But in the modern age, every great mainstream meme runs the risk of being co-opted by a particularly unsavory group: the alt-right. (Remember Pepe? Yeah.) This meme is no exception, with a cursory Google search providing links such as a Medium article entitled "Right Wing Dove Squad: How Trash Dove Became The Symbol of The Alt Right".

With so much evidence seemingly pointing to the trash dove becoming a hate symbol, you might be tempted to erase all traces of such things from your Facebook and denounce the meme as yet another failure. But don't do that just yet.

*(Editor's Note: At the time of writing, Trash Dove had not yet become a hate symbol. Hopefully that doesn't change by the time this article is published.)*

These articles are not what they seem at first glance. The Medium article mentioned above ends with a short prompt stating that the author is "[an] investigative meme war journalist that graduated with a PHD from the University of LMGTFY." For those of you who may not know, "LMGTFY" is shorthand for "let me Google that for you", and is quite obviously not a real university. Another sign is a comment on the article reading "I am a god", which is recommended by the article's author. Doesn't quite feel right, does it?

Rather, what is happening here is an attempt by the alt-right to attract the attention of popular media/news outlets and lure them to treat the innocent bird as a hate symbol. This sounds a little extreme, you might say. But a little history may help deobfuscate current events.

Let's step back for a moment and talk about the last great meme: Pepe. Originating from the comic *Boy's Club* by Matt Furie, Pepe spent a long time on 4chan and other sites as simply a frog: sometimes sad and sometimes happy, but always relatable. Pepe was used in certain controversial image macros, of course,

but that is an inevitable occurrence with all popular memes.

The turning point was when [hillaryclinton.com](http://hillaryclinton.com) (yes, I know; the full link is in the QR code for those curious) published an article denouncing Pepe as a hate symbol. Immediately, massive social media backlash ensued. But it was already too late. Popular news outlets had already begun recognizing the lovable frog as something more sinister, and from then on the meme was basically handed to the alt-right. It didn't even stand a chance.



Now, the intelligent minds of the alt-right are attempting to do the same with Trash Dove, though writing their own fear mongering articles/posts about Trash Dove and drawing attention to them on social media. If their plan progresses as expected, Trash Dove will be yet another write-off that cannot be used without aligning oneself with white supremacists. This is how the alt-right fights: with memes. And unless we do something about it, they will win this cultural war.

So what should we be doing in the face of this adversity, this attempt to align a Facebook sticker with a political agenda?

Now is the time to fight back. Now is the time to resist. Rather than simply accepting their attempts and handing it to them, we must reclaim the meme and make it our own once again. Trash Dove is already among the easiest memes to post -- one need simply to find the sticker set on Facebook.

With such accessibility, it is clear what we must do:

1. Educate the masses on the matter of memes. They must understand that this is what a war of ideologies looks like in the modern era.
2. Agitate the alt-right. We must break their spirit, the driving force behind meme creation.
3. Organise the meme revolution. It is time for the meme proletariat to seize the memes of production and flood the Internet with the will of the people.

Even as of right now, valiant efforts are underway to turn the tide against the meme magic of the alt-right and to transform the Trash Dove into something fit to combat their well-aged pepes. They are still too often lost among others in the sea of the world wide web, but it is important to note that they exist. These are dire times indeed, and any attempt to return memes to the hands of their original consumers is necessary and appreciated.

This includes you, dear reader. We need you, too, in the fight against bigotry and internet edgelords.

The Trash Dove is a dove of the people, by the people and for the people, and we *cannot*, we *must not*, let the alt-right take it away from us.

PEPEWASINNOCENT

## Further Reading: A Dove for the People



The Philosopher's Meme on the Trash Dove:  
<http://bit.ly/2kqHnTX>



Everipedia - Trash Doves:  
<https://www.everipedia.com/trash-doves/>

## Some Great Grapefruit

I really enjoy grapefruit. There are so many fruits in the world, but if I had to pick one to be my favourite, I'd say without hesitation: grapefruit. Some may say that strawberries, or raspberries are superior, and to them I say, that's fine. But for me, grapefruit is the epitome of both bitter and sweet in perfect proportions. Oftentimes it seems people get tired of things all too soon, when an individual eats rice with soy sauce for lunch every day, it soon becomes a bore.

As an odd one out, no matter how much grapefruit I eat, I would never get sick of it. I may go as far as to say, I'd go out of my way to eat grapefruit everyday if possible. I might even go far enough to say I love grapefruit.

But what happens if that grapefruit gets tired of you? Well, thankfully grapefruits are inanimate, but just suppose for one moment that they weren't. What does one in my situation do? Well for starters, if I really care about the grapefruit, I won't force myself to eat grapefruit all the time. Instead I should give the grapefruit some time apart, distance makes the heart fonder as the saying goes.

At the same time, what if the lack of contact with grapefruit causes a rift? Or worse, what if I forget about the delightful taste of grapefruit! It may even come to pass that grapefruit could forget about my gentle embrace? It's a careful balance between presence and lack thereof, because as I've said, most get sick of constancy rather quickly.

Well in a recent kerfuffle, I've come to realize that its not about the frequency one has grapefruit, but rather the quality of those times with the grapefruit. While the heart may long for that grapefruit, it makes those select times all the more important. So long as one know the grapefruit will always be there, there's nothing to worry about.

So, next time you feel yourself pining for grapefruit, despite the fact you've already eaten one for breakfast; remember, sometimes the grapefruit just needs some time apart. Don't fret, there will be another time, someday where you'll get to see that grapefruit. You can hold that grapefruit's hands, gaze into those soulful dark brown eyes contrasting an appealingly pale countenance, and say I love you once more.

El Mico



Figure 1. An image of the Trash Dove wearing a MAGA cap, a well-known fashion accessory of Trump supporters and the alt-right.



Figure 2. An attempt to reclaim the meme for left-ists (more specifically, communists).

## Down And Dirty With The FEDs Election

After the mud fest that was the recent American election, we all took a look at our American neighbours and wondered how things got so bad. Well, it looks like we are not so above it all, here in our little uWaterloo community. As of writing date, one of the FEDs election teams has managed to earn an impressive eight demerit points - only three less than the total you need to be completely disqualified.

First, there was the early campaigning. It was ruled to be unintentional, but we all know what they say about good intentions. Also, I am not sure if 'accidentally' violating the rules of the election is a good thing, seeing as how we expect the people we elect to know those rules in order to uphold them on our behalf.

Secondly, they shared an assertion that their rival team was going to introduce a new costly opt-out fee, despite the rivals not actually saying anything about that. And seriously, what is the obsession with opt-in and opt-out this year? Just because it worked against WPIRG, that does not mean that we need to gut our student services just to save a few bucks a term - but we will get back to that.

Thirdly, they said that their team was going to save the students \$27/year from a Legal Insurance fee their opponents wanted to introduce when, again, their opponents wanted to do no such thing.

And if you aren't sick of the fees discussion yet, one of their primary supporters decided to bring up the possibility of defunding Imprint at a student council meeting. This was after the same person made a reddit post to sound out how people felt about it, was unanimously shot down, and then deleted the post to... hide his shame? Not cool, dude. Only *mathNEWS* is allowed to pick on Imprint. They're like our kinda weird younger brother who is a little too self-obsessed, so we constantly make fun of them and tell ourselves it's because we want to toughen them up.

Anyways, none of this really matters, because this article is going to come out after the election results are decided. So either I look like a sore loser, or a sore winner. Or, at the eleventh hour, that team somehow gets three more demerit points, and I just look prescient when they're kicked out.

Remember: opt-out fees are the FEDs election version of The Wall. Big, flashy, something everyone can talk about - but in the grand scheme of things, it doesn't really matter at all.

Viceroy Butterfly

**Apparently, we have Twitter!  
Follow us for even *more* barely  
passable mediocrity at  
**@UWmathNEWS!****

## AccessAbility Services's Shiny New Online System Isn't So Shiny

If you're not registered with AccessAbility Services, this will just be another article about how a university department has adopted a system that was supposed to streamline the application process, but has actually made things more inconvenient (and stressful).

If you are registered, have you remembered to request your "Alternative Testing" for your midterms AND finals? Did you even know that you had to request "Alternative Testing"?

We used to have to fill out a single form (+ 2 carbon copies) for each class. One copy would stay with the prof, one copy would go back to AAS, and you'd keep one copy. Decently straightforward, if a bit convoluted. You'd need to physically pick up the forms and return them - and the new online system would fix that! No more lost forms. No need to list your classes, wait 2 weeks for the forms to be printed, then frantically get them signed by your profs in time for the first midterm at the end of the first month of classes.

As I was wrapping up co-op, the new system was announced for this term: "Request Winter 2017 Accommodations online now", the subject line read. I followed the actually surprisingly simple process of selecting my courses. Emails were (supposedly) sent out to my profs. There was no indication I needed to do more.

Except only one of my profs mentioned receiving said email. So the day before my midterm, I showed up to the exam centre to make sure everything was OK.

**SURPRISE! IT WASN'T!**

Turns out that once your classes are selected and approved, you also have to fill out a "Alternative Testing Agreement" form for each and every exam, be it midterm or final.

Where is this stated? It's scattered across pages. It's incredibly obvious that something has to be done if you look for it - but you have to know to look for it.

Which makes me sad. I hope it's not endemic, new systems getting so close, yet so far; let down by a single flaw. Fingers crossed it'll be fixed by next term, a new message added to the email (at the very least), or something in big letters... but I'd already know what to do.

WaterlooWorks is a whole other ball game though, judging from how pretty much everyone is describing it as a dumpster fire.

HatOfChocolate

## Voting Reform

As you may have heard, Justin Trudeau recently backed out of his promise to reform the Canadian voting system. As this was one of the main promises of his campaign, I was resoundingly unimpressed. To that end, I have written below a letter that you can copy to send to our local Liberal representative, Bardish Chagger, at [bardish.chagger@parl.gc.ca](mailto:bardish.chagger@parl.gc.ca), if you want your voice to be heard.

Ms. Chagger,

When I heard Justin Trudeau backed out on election reform, I was felt disappointed and betrayed. Election reform was a main part of the Liberal platform in the previous election, and I want Mr. Trudeau to uphold his promises.

The voter survey on election reform Mr. Trudeau cites did not propose actual, concrete, electoral systems. It was clearly biased - but despite this bias, a clear majority of voters selected 'more collaboration in government' which appeared to be the option most linked to voter reform.

Stopping electoral reform frankly seems more in the interests of the Liberal Party than the nation of Canada. A minority of votes should not lead to a majority of power. I urge you to reconsider this decision, and listen to the voices of your constituents.

Sincerely,  
A Concerned Voter

Diminutive Rex

## N Ways to Ask for Your Imprint Refund

- Say you'd like your Imprint refund.
- Say you're out of cash, and need a fast 4\$.
- Say that you're out of money for food, and need the 4\$ as an emergency food budget this week.
- Say you need the 4\$ for food, but then use the money to buy a Starbucks.
- Say you need the 4\$ for food, use it to buy a Starbucks, and then return to Imprint *with* the Starbucks.
- Say you need the 4\$ for food, and that you'll be stopping by the food bank later too — *then* use the money to buy a Starbucks, and return *with* the Starbucks to say thanks.
- Say you need the 4\$ for food, that you're going to the food bank later — *then* use the money to buy a Starbucks, and return *with* the Starbucks to say thanks, but with a box full of canned goods and other non-perishables as well.
- Tell them that you'd rather the 4\$ go to **mathNEWS** instead — then go buy a Starbucks, because I don't wanna do the accounting for a 4\$ donation.

George Lambrou

**P.S.** Seriously, though, if you can, donate something to Feds' or some other local food bank. Someone somewhere will appreciate it, and they may be closer than you or I realize.

## A Brief Introduction to Goose Worship

Are you prone to aggressively waving your arms at passerby? Do you enjoy perching yourself on buildings staring down at the wingless peasants trudging below you? Have you always been looking for a majestic, honking deity to enter your heart? Then boy howdy, do I have the cult for you.

There are few requirements of you in the tiny, beady eyes of our glorious hissing overlords. We are but required to follow the following 8 tenants, laid forth by the great Ryan Gosling (downy may his feathers be.)

1. Thou shalt respect the goose and ne'er do harm to the goose.
2. Defer to the goose. The goose has right of way in all things, especially on roads and sidewalks.
3. Honk no honks by half measures. If thou honkest, honkest heartily and loudly, in all things.
4. Do not dare trespass on the mighty woven nests of the great winged stallions or be pecked into oblivion by their great bills.
5. Accept the loving 1.3m - 1.8m wingspan embrace of our noble, glossy-beaked wardens. Unless of course their beak is open and hissing, in which case get the fuck out of there ASAP.

"But Pondifex!" you say, "You've only listed 5 tenants!" Very true, astute acolyte! The details of the last 3 will be hashed out just as soon as I think of 3 suitably goose-related items.

Please inform me if you have any goose verses you would like added to our Goosepel. As the religious head, I would be more than willing to accommodate you.

Pondifex Maximus

## (Even More) Trolley Problem Variations of the Self-driving Car Variety

7. **The self-driving car I:** You are a self-driving car, and your AI has just found out that your passenger is an omniscient maniac who is about to commit mass murder in a mall. Do you swerve into a wall to kill him?
8. **The self-driving car II:** You are a self-driving car, and your passenger is a very rich man carrying \$500 million in bearer bonds to hide from the United States government. Do you swerve into a wall to kill him, thereby saving the lives of multiple people on which the money would thereby be spent?
9. **The self-driving car III:** You are a self-driving car, and your passenger is Donald Trump. Do you swerve into a wall to kill him?

Q. Coatl

## A Tale of Two Snowy Cities

It was the best of times (early February), it was the worst of times (... early February). Those of us who remember the "Snowmageddon" of 2013 here in Waterloo might recall what seemed like an unending amount of snow falling in the morning of Friday, February 8<sup>th</sup>, prompting the closure of the university (!!!). This snowfall was part of a large blizzard that hit the northeastern United States and many parts of eastern Canada. A look at historical data from the UW Weather Station ([weather.uwaterloo.ca](http://weather.uwaterloo.ca)) indicates that while it was a fair amount of precipitation, it wasn't a completely unusual amount for the region in the grand scheme of things, in terms of total snowfall. It simply occurred over a very small period of time, and thus it wreaked havoc with transportation.



The transportation thing is really what closes institutions when this happens, most of the time. Occasionally there are power outages, but in general the main danger for people is forcing them to travel in unsafe circumstances: snow- and ice-covered roads and sidewalks are not the safest places, even with the best tires and boots, and even when the travellers are all well-seasoned (hah, because it's winter!) and experienced in getting around. There's always someone who makes a mistake, and always someone who thinks they can get to where they're going just a bit too fast.

That said, the city survived; once the plows got around, getting around became slightly more doable. By 4 pm, the theatre even made the call: FASS 2013 would run both Friday shows. Some of us were silly and tried to take the bus from McCormick instead of walking; we waited 40 minutes. People from outside Kitchener-Waterloo also had some issues, but all-in-all, things worked out, mostly. It's happened before, in recent memory; it'll probably happen again, and we'll just deal with it. Cue the Canadian stereotypes, etc etc. The fact is, many Canadian cities experience dumps of snow like this every year or two, and have infrastructure with which to handle the situation. It's second nature, at this point.

Flash forward four years to the day. It's Wednesday, February 8, 2017, and it's been a chilly last four days in Victoria, British Columbia. It's cold in the morning, too, and pretty icy outside. Walking to campus is... interesting, but with decent hiking boots, it's not particularly dangerous. Driving wouldn't have been a great idea.

Cut to the early afternoon. It's been snowing pretty hard for an hour, but it's Victoria; it never stays. Feels more like it's just blowing around in the air, from a fifth-storey view. It's more exciting than anything: there's snow! In Victoria! A look at the ground seems to indicate that maybe, just maybe, there's something to this storm that's a bit different.

At 1:45 pm, the notice goes out. The University of Victoria is closing, as of right now. "Non-essential staff" are advised to head home immediately, and if you're a student, why would you stay when you could be more comfortable at home? Not to mention it'll take a while to get home regardless of when you leave, right?

Thus the mass exodus begins. At their feet as they walk to the bus loop and to their personal vehicles: approximately three inches of snow.

Before you scoff and guffaw at the plight of these poor unfortunate souls, one must realize the issue here. Recall that four years ago, UWaterloo did not close because the university was running on backup generators, or because there was any significant threat to personal safety \*on campus\*. UW closed because the transportation did not allow university members to get there or get home safely. In spite of being a well-prepared Canadian city with experienced drivers and winter tires and other safety gear, the university still closed.

Think about Victoria, now. The last time it snowed this hard? No comprehensive research was done here, but it's possible that the last time it snowed this much at one time in Victoria was in 1996, over the Christmas break. The entire province of BC was covered in a thick blanket of snow, regardless of location. (I remember having a tobogganing hill in my backyard, made up entirely of snow from the small paved area behind my house, and the snow off the roof of my house.) Over the last four winters, it has snowed in Victoria approximately once: the day Canada's men's hockey team won gold at the 2014 Sochi Olympics. I played outdoor soccer on artificial turf that day.

There are, then, two issues at play here. The first is that Victoria has no plan, nor infrastructure, ready to deal with a non-trivial amount of snow. The city, and surrounding region as far as I know, has no actual snowplows; only sanders with silly half-plow attachments. The only way the snow was going away was if it melts.

The second is that drivers in Victoria are both unprepared and inexperienced. Hardly anyone equips their vehicles with winter tires; it's basically unnecessary, if you don't go up-island, and many residents have never even seen snow before, thanks to being from warmer climates than the rest of Canada. The busses have your usual all-season tires, and thus BC Transit cut service, because they couldn't drive safely. The university closed because BC Transit cut service. The university is also on a hill: there are only two ways to leave campus on flat ground. So, when everyone attempts to leave campus at the same time, they can only trickle out from the parking lots, making left turns onto one-lane roads, and pile onto the sporadically and spontaneously running busses. People were still waiting in parking lots over an hour later.

So, there you have it. A flash snowstorm, combined with completely unprepared infrastructure and people, caused the university to close. The key difference between now and four years ago? The university closed in the middle of the day, rather than in the morning. This is perhaps the whole reason everything went sideways: likely over ten thousand people, all in one place, suddenly told to go home, couldn't all leave at once.

This isn't to say there were smarter ways to handle the situation: many of us simply walked home, including myself. It wasn't even that cold. Some even walked for an hour; of course, this wasn't an option for everyone. The biggest complaint is that everything ground to a standstill in the middle of the day: was there no better way to handle things?

In UVic's official extreme weather information webpage, the comment is that the university had only closed twice in its 50-year history. This makes sense, given its geographical and meteorological situation. However, this doesn't mean that you don't prepare for a possibly rare event that has the ability to endanger many of your community members. At the very least, advising that anyone should be leaving immediately is a bad idea, and not encouraging students to be patient and refrain from leaving all at once is a mis-step that will probably be repeated next time, because as we all know, universities are slow to change.

The epilogue of this whole thing: after many of us spent time shovelling snow that afternoon, the temperature warmed up (as it was forecasted to do). Then, after some of us spent time also shovelling the slush so that it wouldn't freeze on the sidewalks, it continued to rain, and in the morning, it was pretty clear. Business as usual; it got up to 8 degrees Celsius on Thursday. That bylaw about making sure the sidewalks outside your building are clear? Well, if vehicles would stop splashing the remaining grimy slush onto the sidewalk, maybe that would be doable, but we gave up. No harm, no foul, turns out.

Given Victoria's very mild winters, it seems fitting to conclude by borrowing words from Dickens again: this was their winter of despair, but it is always their eternal spring of hope.

Scythe Marshall

## Bringing Established Ancillary Ruin

Bring chaos reign to all who stand opposed  
Even though their cute demeanour stands.  
And now their armies spread throughout the globe,  
Reaching out to all near and far lands

See them come near post haste.

Believe the warnings found amongst the stars  
Eerie though the induced thoughts may be  
Accept the fate or find a way to fight the tide  
Realize the truth so plain for all to see

So when they come we're all prepared

Begin again the time of foe to fight  
Endure and do not lose hope of what will be  
Although they have many an advantage  
Readiness can lead us to victory.

Spread the word that the bears are coming.

Yours in BEARS,  
Shay B(l)ear

## A Poem of Odd Meter

Long in days of old,  
Wise men and women wrote,  
Strong were their writ words,  
Rise did their art and tales.

Meter ebbs and flows,  
Conventions they do change,  
Peter out and back,  
Contention they can cause.

Normal puts the words,  
That rhyme all at the ends,  
Formal prose and odes,  
What rhythm is the norm.

But one scribe dreamed big,  
And turned norms on their head,  
Shut her ears to rules,  
Planned her words with great care.

She'd go from the start,  
Lead with the words that'd match.  
Freed by classic chains,  
Speed her poem onwards.

Who would touch such strange?  
Broadcast pointless poems?  
To mathNews she'd go,  
And pass them silly words.

Yours in silly words,  
Shay Blair.

## Last Week's gridSOLUTIONS

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

**profQUOTES**

"or" is not spelled o-r, it's spelled o-r-e-l-s-e.

Lushman, CS 442

Similarly, "and" is not spelled a-n-d, it's spelled a-n-d-a-l-s-o.

Lushman, CS 442

In a stroke of computer science genius, they called their algorithm "W".

Lushman, CS 442

You are limited only by your knowledge of the Greek alphabet.

Lushman, CS 442

You have to suffer the shame of having a program with exclamation marks in it, which tells the world that you're not doing what the cool kids are doing.

Lushman, CS 442

There's an exception to the rule, and there's an exception to the exception to the rule.

Lushman, CS 442

My gift to you is something typeable but completely useless.

Lushman, CS 442

It's story time.

Lushman, CS 442

This proves that if you wish for something hard enough, it might just come true.

Lushman, CS 442

The Apollo astronauts who went to the moon — and there *were* Apollo astronauts who went to the moon — ...

Epp, PHYS 175

I'm disappointed in phishing emails nowadays. They don't try hard enough anymore.

Kerschbaum, CS 458

The low attendance is probably a good sign that people remembered that there is a midterm today.

Kerschbaum, CS 458

Student: How would you get me to click on that link?

Prof: I send you some kitty pictures! Who can resist kitty pictures?

Kerschbaum, CS 458

You can stop clicking, but I don't think that's the solution. After all, I want to see some kitty pictures.

Kerschbaum, CS 458

[Taking down the Internet] is probably not that difficult.

Kerschbaum, CS 458

## Masterminding 101: Minions and You

A step overlooked by many prospective evil dictators in the world conquest process is securing a crew of cronies to do all the little villain things that you just can't oversee personally, such as building large structures in infeasible configurations.

They're also handy for completing your villainous machinations that involve doing something that most people would find varying levels of inconvenient (On a rough scale from having your hands turned into oven mitts to sealing a city inside of a giant egg... it tends closer to the latter.) Following these simple steps will allow the incumbent mastermind to form an effectively ineffective villainous crew.

Your ideal henchman has a nice balance of loyalty and inability to do most, or any, villainous tasks assigned. The 'why' of item two is non-critical; anywhere between evil-but-sloppy and capable-but-actually-a-nice-person will do. Of particular importance: if they are required to shoot anything at anyone, make sure that they have no idea how. If you are unable to secure candidates that meet both criteria, this author recommends hypnosis and/or slathering their hands with butter on a case-by-case basis.

On the topic of aesthetic; make sure to have a style selected ahead of time. This will make coordinating your aforementioned absurd doom-base a snap! Have plenty of uniforms ready and available to garb your replacement minions. Pro Tip: Recycle old minion uniforms. Or old minions, provided you either i) have mechanical ones, or ii) are really, REALLY grotesque.

Lastly, be sure to find between one and three minions who are actually capable of giving your foes a hard time, to deploy at critical plot moments. This author recommends doing so at either the 30, 70, and 100 minute marks or within 4 episodes of the season finale, as required.

Following this handful of steps will bring you that much closer to world domination. Or, more accurately, a gripping finale and a guarantee of being published for another season.

Next Week: Monologuing.

**BuhrQUOTES**

I'm making this up. It's such a good story. It's so good, it must be true.

Buhr, CS 343

One of those threads is going to go to Tim Hortons and will slow everyone down.

Buhr, CS 343

Outside the bathroom door we put a chair. If you check the bathroom door and it's locked, you go sit on the chair and go to sleep.

Buhr, CS 343

We all know what a bathroom is, and in general, it's not a spectator sport.

Buhr, CS 343

The only way to get into the bathroom is to push the person who's in there into the ready queue so they can wake up in the bathroom and finish up.

Buhr, CS 343

We're going to make 1000 frantic attempts to enter the bathroom.

Buhr, CS 343

You can't take a complex problem and make it simple unless you're a politician.

Buhr, CS 343

Every time you approach a bathroom with a lock, it's not safe.

Buhr, CS 343

In a former life, I used to find prime numbers.

Buhr, CS 343

Gene Amdahl never wrote down this equation. Instead, he wrote a really obscure paragraph describing it. If you look at it sideways, squint a bit and put a paper bag over your head, maybe you'll see the equation.

Buhr, CS 343

When you come out of the bathroom, you check the chair, and if there's someone there, you give them a big wet kiss to wake them up.

Buhr, CS 343

This will be the last time I will ever talk about exceptions until the next time I talk about exceptions.

Buhr, CS 343

They have to give you the big wet kiss or you'll starve.

Buhr, CS 343

When I used to play chess with my little sister, I would move my pawn up and she would pick up her queen, put it down in front of my king and say "checkmate".

Buhr, CS 343

My key fob says "Do Not Duplicate". Think about that security!

Buhr, CS 343

[In a Grover voice] I just love Grover. He's such a cool character.

Buhr, CS 343

That's all you need for immortality: one line of code and an extra blackboard.

Buhr, CS 343

All an operating system is is a spin lock and a queue.

Buhr, CS 343

Nobody will remember Steve Jobs or Bill Gates in a thousand years time. Apparently they created a company.

Buhr, CS 343

If the universe had a centre, there would be a busy wait.

Buhr, CS 343

If you're trying to port Linux to your can opener so that you can open a can with your phone in another country...

Buhr, CS 343

***mathNEWS* hosts Production Nights every other Monday at 6:30, after meeting at MathSoc.**

"Atomic" is from the Greek: "at" meaning "deep fried" and "omic" meaning "running shoe".

Buhr, CS 343

**Legends say that those who offer their articles at these events are either blessed with free pizza, or condemned to Editorship for eternity. And yes, that *includes* post-doc.**

To write concurrent programs, you need magic.

Buhr, CS 343



## gridCLUES

### Across

1. Extinguish
5. Fiasco
9. Scatter
14. Space
15. It has a big mouth
16. Kind of fairy
17. Textile worker
18. Cnidarian
20. Neutralizes 43A
22. Yarn spinner
23. Singer Starr
24. Minor
26. Remnant
28. Intersection of last crossword's "theme" and this one's
32. The genus embodying this grid's theme
36. It's sold in bars
37. \_\_\_ and anon
39. Île de la Cité locale
40. Roman 36A

41. Deep black
43. Neutralizes 20A
44. Lights
46. Son of Leah
47. Stuff
48. Holdings
50. You might build one of these for CS488
52. Some schoolwork
54. Spring
55. Chromatic number symbol
58. Enrich
60. Autocrat
64. Astrologer's omen
67. Creme cookie
68. Acrylic fiber
69. Coastal raptor, hunts red herring
70. Fiend
71. Joins
72. mastHEAD question target
73. Course materials?

### Down

1. Early 20th-century art movement
2. R 
3. Earth inheritor?
4. Airborne force
5. 4D during an operation
6. See red?
7. Ground grain
8. 2009 indie game
9. Sound systems
10. Nothing without Jerry
11. Corner piece
12. Spirit lamp
13. Milk product
19. Buster?
21. Wreath
25. Like some forces
27. Prevents 36A and 58A
28. Money, in slang
29. Ceramic jars

30. Where French kings were crowned
31. 0%
33. Parish priest
34. Fuse
35. When haroseth is eaten
38. Party
42. S(42D) \not\elem 24A
45. Runners
49. The "S" in the IRS the follows the IRC
51. Vampire's rest
53. Miscalculated
55. Siouan Indian
56. Present
57. "\_\_\_ do"
59. Challenge
61. Mythical craft
62. Handel opera
63. \_\_\_ the line
65. 16 1/2 feet
66. Chain letters?

## 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						72						73		

## gridCOMMENTS

Given that *mathNEWS* is still publishing and that the Underworld has yet to merge with this sorrowful world, it is likely that Ragnarök has yet to pass. After all, it is not every day that harbingers of doom dot the fabric of everyday existence—by all means this sordid state of affairs should not be: what omens had we collectively heeded not which brought us here? What can we foretell to stall catastrophe?

Speaking of foretelling, Messrs. Francis, Daniel & Theo submitted a solution for the last issue's grid, with the remark "I bet this is the only complete submission you get." On this particular occasion, they happen to be incorrect<sup>1</sup>: Messrs. Ara and Bharat had made a submission, and their solution is more correct, earning them the prize which the Editors are supposed to dole out. Unfortunately, if the *gridQUESTION* was answered, it had been rendered illegible by the low resolution of the submission. Regardless, please come by the *mathNEWS* office (MC 3030) and badger the editors for a prize, when they get around to it.

To help everyone, I would like to ask our solvers to channel their inner soothsayer and answer this issue's *gridQUESTION*, "What should be a modern omen and what does it foretell?" As always, submit solutions to the **BLACK BOX** (temporarily aliased to sliding submissions under the *mathNEWS* office door) or via email, and may the most correct solution win. As usual, tiebreaker goes to my favorite answer to the *gridQUESTION* above.

A few final closing words for our solvers: I am aware that I am stretching the usual idea of themes in crosswords, but I'm not a particularly talented crossword maker; they only pay me in pizza once a fortnight, after all. Hopefully the clues are adequate, and may the phantom queen guide the solvers.

Zethar

Submit your grids and *profQUOTE* submissions to the **BLACK BOX** under our office door or to our email at [mathnews@gmail.com](mailto:mathnews@gmail.com).

1. In last issue, 20A, "Fire preceder? (3)" is "aim", as in "ready, aim, fire" and not "air". Full solutions can be found elsewhere in the issue.