mathNEWS

math NEWS: ONLY THE BEST OF THE MOST TERRIBLE PUNS



APPARENTLY WE DO COVER ART BY REQUEST NOW???*





mastHEAD

"WHO/WHAT IS YOUR FAVOURITE CRYPTID?" we spend enough time proving things in math, let's just appreciate the unproven.

Happy Friday, readers! We're on Issue 3 already. Wow. As you read this, we will have officially printed half of the issues for this term, and the first day of final exams will only be six weeks away. But just forget about that for now. You probably have midterms to get through still. And if you don't have any left, don't tell me because it will make me jealous.

Fortunately, being about halfway through the term also means that the weather has finally gotten warmer. The first official day of summer is next Wednesday, and it looks like it's going to continue to be really hot out. With that in mind, please stay safe and enjoy the weather responsibly. Wear sunscreen, drink lots of water, etc., etc.

This week we asked our writers what their favourite cryptid was. I have no idea where the inspiration for this question came from, because I'm not the one who came up with the question. I didn't even know what a cryptid is (it's a "An animal whose existence or survival is disputed or unsubstantiated, such as the yeti", in case you're wondering). However, I will try to bullshit something that sounds relevant. Here goes:

It is important to appreciate cryptids because, in a way, cryptids are all of us. We all just need someone to believe in us sometimes. People doubt us. We even doubt ourselves. And it can be hard to believe in ourselves when no one else believes in us. Is that how cryptids feel all the time? I sure hope not. Nobody deserves that, and cryptids must have the same basic desires that we do. We want our professors to have faith that we can pass their courses. We want our parents to support and encourage us without ever doubting our abilities. We want employers to believe we're the best candidates and take a chance on us. We are the cryptids and the cryptids are us. So forget all your doubts, and let's show a little appreciation for cryptids everywhere. Who/What is your favourite cryptid?

> UNDECIDED EDITOR, math**NEWS**

Beyond Meta	Honest Politician
SHAY BLAIR	
	The Enigma Machine
NO	Engineers(???)
VICE MITT	Yes
Camilo Minoz	Egyptian pyramids?
Theodore Bear	mathNEWS
DUSK EAGLE	Bees?
DIMINUTIVE REX	Me!
S, T \in {2K, K \in Z}, 144	Wendigos
DANK	Mr. Panino
e	Trains students outside the trains lab.
KAUSHI	A bad math pun.
UNDECIDED	Fairies ("I do believe in fairies! I do! I do!")
твdED	The editors. The editors are my favourite cryptid. Seriously, guys, are we even real? I dispute our existence. Who would spend so much time hanging out on the 3 rd floor of MC? Who would fill mathNEWS with pointless inane comments and filler? What kind of a Waterloo student would have that kind of time? Nay. Nay, I say. I have a theory that the editors are something deeper, something stranger, something older than the universe - or at least the faculty - itself. What secrets of spelling, grammar and layout lurk behind their distant eyes? Has the editing team ever changed since the inception of mathNEWS in 1973, or have the same few beings switched editor names every few years to throw you off the scent?
VICEROY BUTTERFLY	tbdED
TURNIPHEADED	Domovoi. Or Elvis!
Тне Вавадоок	Bisexuals.
BISEXUALS	The Babadook.

UndecidED originally wrote something to put in this box but then I decided the box should be way bigger than originally intended, so I had to delete her very clever comment and replace it with this. Sorry.

HEATHER STONEHOUSE, mathNEWS EDITOR FOR SPRING 2017 ALONG WITH SHAUNDALEE CARVALHO, CAMERON ROACH

UWFA FIRST GENERAL MEETING

UW Finance Association is proud to present its first general meeting. This event is designed to introduce you to our association and our executives, as well as get you excited about a future in finance.

After a brief presentation we will be having a networking session where light refreshments will be provided.

What's in it for me?

Learn what UWFA is all about!

Hear about our exciting events throughout the term!

Network with the UWFA team and other members!

*A friendly reminder that this is an event for UWFA members only. Sign up and membership purchase (\$10) are available at all of our events.

*Please RSVP on the below link if you plan on attending this exciting event!

https://www.eventbrite.ca/e/ uwfas-first-general-meeting-tickets-34646469523

See you there!

Follow us on Instagram and Twitter: @UWFinance

UWFA EXECUTIVE

I WROTE FOR mathNEWS, AND...

I didn't win friendship, temporary glory, OR free water from the MC water fountains, though everyone else who wrote for the publication in person had the chance to! (And you could too, if you attended Production Night!) I also didn't get free pizza.

I did, however, get the satisfaction that comes from contributing something that might be useful for someone to read, or that might bring a smile to someone's face at least one time. So that probably counts for something? And one of these days, I'll actually write a mathematics article again; potentially when I finish stressing about this claim that may or may not be true. In the meantime, if you want to read about cool math that somehow wasn't mentioned in my entire body of undergraduate courses, go look up the Perron-Frobenius theorem, and bask in its glory, and generality, and applicability. (Then imagine trying to generalize this to the case of bounded operators on Banach spaces, while also allowing the operators to vary, so that it's strings of operators instead of powers. Yeah.)

I think I'd prefer to physically be in MC with everyone, though.

SCYTHE MARSHALL

MC - NOW SELF-SUSTAINING!

In order to combat Trump's decision to leave the Paris Climate Agreement, UW decided to take on a new initiative. MC is now being fueled by a new form of renewable energy: the sweat and tears of math students. Just in time for midterm season, UW is harvesting the copious amounts of sweat produced by students studying for midterms in MC, as well as the tears shed in TC to keep MC up and running.

They then use the underground sewer system to harness the energy, and suction it back through the air filtration system. The increased humidity has boosted the energy production 300% so the beautiful florescent lights can shine on. The uneven distribution of air conditioning between classrooms increases sweat production to create more energy.

The new and improved MC is self-sustaining! The building provides warmth and shelter for students, and the students put their blood, sweat, and tears into the building. We are the backbone of this school. This kind of renewable energy is being implemented all over the world. The country will be running on our sweat in no time.

With all the stress or midterms and the hot summer, MC has more energy produced than we can consume! Extra energy is being shipped off to Laurier to power their classes that have been in the dark for ages.

G-Unit

N FUN THINGS TO DO WHEN YOU GET THROUGH YOUR WORST MIDTERMS AND YOU HAVE FREE TIME

- Write a **mathNEWS** article?
- ??????????

• I can't remember what it's like to have free time.

mathASKS: GRADS

Ahh, graduation. That bittersweet time when you look back fondly on the previous phase of your life, which you are now about to move on from. For many of us who are still here, "graduation" brings to mind memories of the end of high school, when we were all young and naive, and we still thought math was fun and easy. Having experienced that, we can't help but wonder: What comes next after graduation? Legitimate responsibility? Dolla bill\$? A sense of dread at the thought of essentially being on co-op for the rest of your life?? We have no idea, so we turned to the experts: real grads.

UNDECIDED

SHAY BLAIR: DO YOU FEEL LIKE A REAL ADULT?

SkyBlue: God no. Sometimes I'm afraid I'm a real adult, then I remember the meals I make most often are pasta, pizza, and Kraft Dinner (out of laziness, not budget reasons).

Farting Pony: Occasionally I'll have a moment of "I am so adult," then I'll stay up until 3:00 a.m. playing Overwatch or be too afraid to email someone.

ZETHAR: WHO WAS YOUR FAVOURITE DEMON OUT OF THE ONES YOU SUMMONED TO GET YOU THROUGH SCHOOL?

SkyBlue: Lilith, one of the oldest known female spirits/ demons, who refused to be subservient to man.

Farting Pony: Whichever ones don't figure out I've promised my soul to 16 different demons.

VICE MITT: WHAT WAS THE HARDEST PART OF UNDERGRAD?

SkyBlue: The stress and trying to keep on top of everything: assignments, applying for jobs, extracurriculars. Feeling like I wasn't good enough or doing enough, and feeling like I needed to do more to be "successful" was something I had a hard time getting past.

Farting Pony: Pushing through a term when I felt like I sucked at everything (and had what felt like empirical evidence to prove it). Four months feel like forever when everything around me seems to say "failure failure failure."

PASTA KING: IS YOUR SELECTION FOR THIS SAMPLE DUE TO BLATANT EDITORIAL BIAS? (*tbdED: absolutely not why would you say that*)

SkyBlue: I've definitely never heard of **mathNEWS** before being contacted for this and I don't even know what editors are.

Farting Pony: Is yours?

TREMENDOUS: WHICH DO YOU PREFER: INDUSTRY OR GRAD SCHOOL?

SkyBlue: Absolutely industry for me. Research is not something I'm personally interested in and since grad school isn't required for me to work in industry there's little point in me doing grad school.

Farting Pony: I'm going to grad school, but I'm aiming for industry afterwards. I could probably find something with just an undergrad degree (co-op pays off there), but I want some nichy skills that are hard to pick up outside of school. Grad school also comes with TA postions and grants, sooo...

THEODORE BEAR: HOW ON EARTH ARE YOU ALIVE RIGHT NOW?

SkyBlue: Regular sacrifices of cactii to the Cactus God.

Farting Pony: Heavy drinking and being so sleep deprived I can't think further than the next assignment.

DANK: HOW DO YOU FEEL ABOUT ACADEMIC INCEST?

SkyBlue: It depends on why you're staying at the same school for post grad. If the institution is legitimately the best/one of the best for what you want to do, don't compromise on that just for the sake of avoiding "academic incest". Or if there's a particular professor you really want to work with, either because of a good relationship or fascinating area of study. But I do think unless you have a strong reason such as that, it's better to go to different schools and get different experiences/ viewpoints.

Farting Pony: Like SkyBlue says, if there's a good reason to stay at the same school, then don't be afraid too. There's also opportunities to travel to other schools/institutions/ conferences to network and get a broader perspective. Staying at the same school can also mean more funding or opportunities that wouldn't be as accessible to you at a new school. Just remember to do your research and think about what will get you to where you want to go, not where you want to be for even more school.

S, T $\,\in\,\{2K,\,K\in\,Z\},\,144$: IS IT WEIRD THAT THERE'S A SKELETON IN YOU RIGHT NOW?

SkyBlue: Utterly terrifying, I think about that fact constantly.

Farting Pony: I make her dance. She keeps me upright. It's a good match.

KAOSHI: HOW MUCH WOULD YOU SELL YOUR DEGREE FOR? IF YOU HAD TO PAY TO KEEP YOUR DEGREE, HOW MUCH WOULD YOU PAY?

SkyBlue: The actual degree conferred upon me or the piece of paper? (Assuming the actual degree and certification.) The minimum I'd sell it for is the amount of tuition and fees I paid over the 5 years, so I get reimbursement. I wouldn't pay very much to keep it because I'm in Software Development so the coop experience I got was more useful, which I have regardless of if I have the degree.

Farting Pony: ^same. Though also my experience and portfolio from classes. Just let me get my Masters and you can get a two-for-one deal, yeah?

BEYOND META: HOW DO YOU DEAL WITH EXISTENTIAL ANGST?

SkyBlue: Poorly.

Farting Pony: I read fanfiction. So also poorly.

DIMINUTIVE REX: WOULD YOU EAT A BEE?

SkyBlue: Only if it was lovingly prepared by a chef specializing in bees.

Farting Pony: I already answered this. Do your research.

VICEROY BUTTERFLY: ANY TIPS FOR THOSE OF US WHO ARE $^{2}\!\!/_{3}$ THE WAY THROUGH AND FALTERING?

SkyBlue: Take my tips with a grain of salt, because you have to find what works for you. I dealt by compartmentalizing things: deciding what I could handle/complete/deal with and ignoring the rest. It led to things like skipping assignments to study for midterms, but if I felt overwhelmed it helped to figure out what was the bare minimum I needed to do to stay afloat, and everything else was a nice-but-not-mandatory-to-do.

I also found it useful to remind myself how much of something was left in terms of time. If a term was going poorly, I could remind myself it was almost over. Everything past the current term became a problem for future me when I was struggling with the present. Tools wise, I used Google Calendar a lot for remembering where to be along with tasks I needed to do on specific days. And a lot of todo lists organized by which class and whether it was school, club, or job-related.

Oh, and of course the obligatory, if you're having trouble, look up resources the school provides: counseling services, math advisors, TAs, [insert other things here]. Even talking to your profs can help if you're struggling. I promise these people are not scary.

Farting Pony: If you've made it this far, you can try to keep going with your current methods, but you probably don't want to, right? It's stressful. It's time consuming. It doesn't feel like you're in control.

One thing I learned after five years is that it's never too late to make a small change. Maybe put clothes in the hamper. Maybe commit an hour to turning off my phone every Monday and promise I'll spend five minutes trying to finish that weekly assignment that freaks me out so much I want to avoid it like man-eating bees. Suddenly, I'm getting that little weekly assignment done that I wasn't before.

Then I might try making study groups, but the talk is too distracting, so I block a half hour beforehand to do the hard readings and leave group time for questions or easy stuff. The failure didn't mean much because it wasn't much in the first place, and it was easy to adapt to something that would work. For me, I couldn't juggle too many changes at once - that made co-op extra fun - but I could try to adapt and stick to one little change at a time. It's still a struggle, but slightly less of a struggle.

BAMBOOZLE: WHICH FACULTY IS OBJECTIVELY THE BEST?

SkyBlue: The faculty of life∼ <3 (OwO�)

Farting Pony: The faculty of death.

SCYTHE MARSHALL: WHAT IS THE MOST INTERESTING THING YOU'VE LEARNED OVER THE COURSE OF YOUR DEGREE?

SkyBlue: Hard to determine "most interesting". One of the most interesting things I learned about in my classes in NP-Complete problems. The idea that each of these really hard problems can be translated into a form of any other in the set so if we solve one we solve all of them is really cool. One of the really interesting non-coursework things I learned was how to arrange music (mainly for a cappella).

Farting Pony: Narrative structure and theory. Art follows and breaks patterns in order to become something, and narrative is just another art. It's obvious, but I never really understood the implications until I really dug into the theory and applying it to hands-on construction. Also, that living is very expensive.

So there you have it, folks. Real answers from real grads. Stay tuned for more thrilling answers to your most curious questions next time on mathASKS.

NOT ENOUGH COLD

International student here, from South America (where Brazil is located).

So I've been in Canada for six weeks now, and at the beginning (May), the weather was nice for me (except for the rainy days). I mean, if you have the appropriate gear, you'll survive. Now that it's summer though, it's starting to feel almost like my home city.

Apparently, most people here really love this weather. I guess it's because they can only experience ²/₃ months of it each year.

In the end though, against general opinion, I really wish that the temperature would start decreasing (although I'm pretty sure I might regret it come winter).

ANONCANADIAN

SEASON 241 OF AMERICA STRETCHING BOUNDS OF BELIEVABILITY

WASHINGTON - In the 241st season of the hit drama America, the writers have seemingly run out of ideas. Even casual fans of the show will know that, after 8 years of the genial, likeable Barack Obama, the creative team decided to pull a full 180 and install the brash and frankly 2-dimensional Donald Trump in the main seat.

Trump himself, with his reality show behaviour and midnight tweets, seems less like a president and more of a comic-relief character. Between his bizarre handshake power-plays, endless golf trips, the seeming schism with his third wife (third wife, despite his status as candidate of the historically socially conservative Republican Party), the ice cream debacle, and the birther conspiracy, it requires a large suspense of disbelief to accept that his party controlling the house is enough to keep him in office.

The tweets subplot is particularly self-indulgent - are we supposed to believe that for every stupid, selfish, poorlythought-out choice Donald Trump makes, he's tweeted against that same choice several years in the past? That's far too neat a trap for anyone to fall into in real life.

And despite this, it seems as if the writers are trying their hardest to drum into our heads that his entire team is Evil with a capital E. The work of foreign leader Vladmir Putin is the most believable of the lot: they worked in the heavy hinting that he rigged the election, and his history of human rights violations, and that is more than enough for even a casual viewer to understand that he isn't a man to be trusted. It makes his pretense that nothing is wrong and open support of Trump far more interesting, and the American government's difficulties in dealing with it far more believable.

But the villains with whom they have stocked Trump's cabinet fall short of even this moderate standard. They seem to have no idea how a governmental structure works, assigning a ridiculous number of jobs to Trump's son in law instead of investing in developing a host of characters. There are quotes of his shadowy advisor Steve Bannon openly praising Satan and Darth Vader. He appointed an Energy Secretary who wanted to shut down the Department of Energy, and a Secretary of Education who has never set foot in a public school. His advisor Kellyanne Conway, whose job title seems unclear at best, seems to be jetting around the country sowing seeds of idiocy such as 'alternative facts' or imaginary massacres. His press secretary literally hid from reporters among some bushes.

And we're expected to believe little to nothing is happening to stop this passel of clowns? We're supposed to accept John McCain occasionally speaking out against it? We're supposed to believe that Paul Ryan cares more about lowering taxes than the integrity of his country? Forget the Paris Accord plot, forget the healthcare plot, it is unbelievable that no one is taking a step back and recognizing that everything that is going on is very wrong.

It's not all bad. The FBI Director Comey has had some very interesting character development, and the parallelism between John McCain slowly becoming more senile and Donald Trump's theorized descent into dementia could be an interesting choice if they pursue it appropriately. And, don't get me wrong, I still await each new episode with a full bowl of popcorn.

I just miss realism with my drama. I guess I'll have to tune into the new season of EU - I can't wait to see what's going to happen with those British rapscallions!

(Oh, and by the way - does anyone know if the actress who plays Hillary Clinton is okay? You gotta know something is up when they send her character to the freaking woods after losing an election.)

VICEROY BUTTERFLY

mathNEWS: More than just profQUOTES.

A mathNEWS EDITOR LACKING INSPIRATION

N WAYS TO COMMUNICATE WITH "THE EDITORS"

[Note to the editors: Here's my article. Thanks for the pizza. Please don't forget about the "Note to the editors" tags!]

Writing your **mathNEWS** articles from the depths of your personal **mathNEWS** contributor's cave and then sneakily letting them appear on the Wordpress system is fun! However, sometimes you might get lonely, and might feel the urge to connect with people.

Friends are generally a great way to scratch that itch! However, if you don't have any, I will present an alternative solution: communicating with the editors.

The first step is to create something to communicate about. The easiest way to do that is generally to ask them to add completely unnecessary formatting to your article¹, such as making things [Note to the editors: Make this bold!] **bold** or [Note to the editors: this too!] **italic**. If you're feeling particularly adventurous, you can ask for emojis, or maybe the occasional cuneiform letter.

[Look, I know Canada Post is running late, but believe me, your cuneiform letter is in the mail. -TurnipHeadED]

For the second step, there are several ways to initiate communication:

- Write emails! You simply write an email to mathnews@gmail. com, and depending on the subject line, it will show up ... somewhere, I guess? I don't actually know.

- You can sneak up into the **mathNEWS** office in the third floor. Once you're there, you can use your amazing design skills to write whatever you want on a poster, and then pay **mediaDOC** \$1234567 to print it, and hang it on the walls!² If that's too complicated, you can also do the following, easier option: You record yourself saying what you want to say, and then use your engineering skills to fit tiny speakers and accelerometers into the nerf darts belonging to the nerf guns in the office. In about a month, once Humans versus Zombies starts and the darts get fired, the editors can be reminded what you wanted them to do for your article!

- soMetimes, you cAn maKe your tExT Have hIdden meSsages. Don't Be wOrried if your phrasing wiLl be awkwarD.

[I've never wished harder I payed more attention in crypto! We'll have to resort to rubber hose decoding next week. -TurnipHeadED]

- If all else fails, you can still reach the editors by leaving explicit instructions in your article. For example, if you want extra pizza, you can just add a note like [Note to the editors: The following should be printed verbatim!] "[Note to the editors: please give me pizza]". [I'd put your pizza request in here, but I fear nested brackets. Sorry! -TurnipHeadED]

[Note to the editors: can you give me pizza anyways?]

[I'll have my people call yours. Just teach me your decryption algorithm and then sneak their names into next week's article. -TurnipHeadED]

This might sound confusing, but rest assured: The editors can read minds, so they'll do the right thing even if your article is littered with confusing, nested, or seemingly contradictory instructions!

[The editors can make no comment in a public forum about our moral duty to do right, nor any potential telepathy. -TurnipHeadED]

[Haha, try me.-undecidED]

DANK

- 1. Don't be discouraged by the fact that you could just do it yourself!
- 2. To get reimbursed, just ask **mediaDOC** for a receipt, take a picture of that receipt, and put it on a new poster that you hang up in the office!

CLIMATE RESEARCH CANCELLED BY CLIMATE

After the University of Manitoba decided to lead a 17-milliondollar project to study climate change, 40 scientists from different Canadian Universities gathered together, rented the icebreaker CCGS Amundsen, and left Quebec City on May 25th. However, due to worsening weather conditions near Newfoundland, the ship didn't make it to Hudson Bay. Instead, they had to divert from their course, and help fishing boats and ferries navigate through ice.

Most of this ice had traveled there from the Arctic, and the Canadian Coast Guard had to break it themselves, in the Strait of Belle Isle. The surprising amount of ice and the severe weather conditions put the safety of the crew of the Amundsen at risk, and so the chief of the expedition decided to call it off, choosing instead to aid with search and rescue missions. These weather conditions were abnormal, a direct result of the very climate change that the expedition intended to study in the first place.

This is just one example of how Canadian scientists have had to deal with the sudden effects of climate change. It is 2017, and yet there are still some people who see climate change as a strictly political matter that has no factual basis. I guess these are the folks who watched "Waterworld" in 1995, and felt that the movie was so bad that nothing from it could become real — not even Kevin Costner.

SOME NOTES FOR THOSE ATTENDING CONVOCATION

Math Convocation is today! There are two ceremonies, at 10 am and 2:30 pm. (This includes Software Engineering this year!) If for some reason you're reading this with time to kill before the ceremony starts, or you want to keep some things in mind for next time, here are some small things to remember about Convocation.

If you're a spectator, dress nicely, but also so that you don't overheat. The PAC is not the coolest place in the summer. Maybe next year'll be the year they spend your student fees on nice AC, though? So bring a sweater just in case. Also, be prepared to sit through a boring ceremony, with the potential for good speeches from the honorary degree recipient(s) as well as the class valedictorian. It's mostly pageantry and symbolism, though it's nice to have those every once in a while. UW does a good job of it, too; it's worth seeing the PAC set up for this event at least once.

If you're receiving your piece of paper today, congratulations! You should go early to your ceremony (you know, they tell you to show up early; do it!), and wear the appropriate clothes (and footwear!) to go under your regalia. You'll look ridiculous otherwise, and you don't get a re-do on this one. (This is perhaps directed to the afternoon ceremony, since the morning ceremony-goers might be reading this in the ceremony... A bit late for them, potentially.)

If you're getting a Ph.D., double the congratulations! Not just because you're getting a Ph.D. (since that's awesome enough as it is, way to go :)), but also because you get some of the best regalia I've seen so far. The robe colours are fantastic, once you wrap your eyes around them, but the best part is the hat. UW's Ph.D. hat is incredible. Feel honoured that you chose a university whose regalia is this great; there are a non-trivial number of people who grumble bitterly about their university's lack of stylish regalia. (I might be one of them.)

Finally, if you're someone who put themselves up for class valedictorian, good on you for doing it, regardless of if you were successful or not. Try not to harbour ill-will towards the selection process or committee, or to your successful applicant; it's really easy to do so, especially if you thought you should be the person representing your ceremony's group of students (whether it's because you were a good all-around student, or because you think your ceremony is supposed to be the "math" ceremony and not "finance", or because you spent all sorts of time being involved in the math undergrad community and you have no idea who the winner is). The key thing to note about all of these "reasons"? They're all bullshit, and unimportant. The selection committee just finds someone who has a cookie-cutter positive message with a good anecdote or two, and who can present it fluidly; preferably this person can be relatable to a large portion of the students. It's nothing against you; there was just someone else better for this role, probably, especially if the majority of the reading in public that you've done over the past few years has been at

religious services, and especially if you want to say anything interesting. Same with awards; you're likely not winning an award. Don't even think about it.

And that's that! Just, one last thing: try not to use any possible derivative forms of the word "convocation". You will not succeed. This word is more complicated than you know. Google it; I dare you.

SCYTHE MARSHALL

10 TIPS FOR TRANS GIRLS TO SURVIVE THE ZOMBIE APOCALYPSE

- 1. Zombies have no concept of loyalty, so don't underestimate their cruelty! They'll rip their friends apart if it means that you're their next meal. Think of them like TERFS: they don't care who gets hurt.
- 2. Laughter is the best medicine. Make sure to laugh at all of your friends with mortal wounds!
- 3. Despite commonly held beliefs, zombies don't care about the gender binary. Worry more about them tearing your face open than them misgendering you.
- 4. Zombie apocalypses make for an easy way to rob pharmacies. Hooray for easy access to hormone replacement therapy!
- 5. Use your experiences with chasers to aid you in outsmarting the zombies. While I'll admit that they aren't quite the same thing, there isn't much difference between hiding from a fetishisizer and hiding from a zombie. Learn those back routes, girl!
- 6. DO NOT FALL IN LOVE WITH A ZOMBIE! They are dead inside. All of them. I'm serious! They might not misgender you, but they sure might dismember you.
- 7. Don't look for your doctor. They never cared about you.
- 8. There are still no safe spaces. You have to make your own.
- 9. If you do get infected, society won't treat you any differently.
- 10. Remember your skills. You've already survived hell, so who the fuck says you can't survive this? You know dehumanization. You know desperation. Not all of this is new to you.

JUNE 16, 2017

ACTSCI JULY EXAM P WRITERS TAKE NOTE: YOUR EXAM IS CREEPING UP!

ARE YOU READY?

You should've been studying.

You should've been calculating.

You should've been questioning.

You should've been formulating.

Instead you were sleeping.

You were really relaxing.

You were "mentally preparing".

Dare I say procrastinating?

There's only a month left.

You've fallen far behind.

You're lost and confused.

You're in a bit of a bind.

But don't worry about it,

I know what to do!

You've still got some time,

In just one month, I'll rescue you!

Find out how you can get out of your studying funk and reduce the damage caused by your overindulgence in study breaks by visiting http://etchedactuarial.com/uw1.

THE ACTUARIAL RESCUER

N BETTER USES OF TIME TRAVEL THAN IN POP CULTURE

- Food arriving before you make the order
- Kill your parents in front of your younger self to kickstart your origin story
- Just fix yesterday to be the optimal yesterday so you never have to go back too far
- Use it to get more time to read books/play videogames/do assignments

If your consciousness gets sent back not your body

- Use it to be immortal
- Use it to master skills (à la Groundhog Day)
- Make your failed high school relationship(s) work

Yours in timey-wimey, Shay Blair.



Curried Lamb-da (It turns ont CS145 did have a different kind of design recipe).

INTERDIMENSIONAL PORTAL INSTALLATION ON MC 3RD FLOOR BEHIND SCHEDULE

WATERLOO - The portal being installed in the third floor of MC has had its construction schedule pushed back another month. The installation site, formerly a display case with information about the creation of the faculty, is intending to harness the mathematical singularity present in that space to create a portal to access math faculties across the multiverse.

"The possibilities for collaboration are through the roof!" said an unidentified but very excited professor. "It's taken fifty years to get all the permits in order, but I'm very glad our work is finally paying off!"

The singularity, in fact, is the original reason for the founding of the math department here in Waterloo. MC has long harnessed its power to fuel mathematical discovery, although using such an unstable inspirational source has had interesting effects on the faculty. These effects include the unstable nature of MC 5th, 6th and 7th floor; the [REDACTED] in the steam tunnels; and the stubborn human-like entities who seem to haunt the CSC.

The decades-long portal approval process is due to technological limitation, the unending plod of bureaucracy, and the difficulty of getting the Multiversal Government to okay any portal into a world with class 5X dangerous creatures.

Barring further delays, the portal should be open by Christmas. This will allow for several new co-op jobs next Winter term. The Dean of Inter-Universal Studies has asked you to prepare your resumes in anticipation of this, especially people in Bioinformatics, Software Engineering, German Studies, or anyone capable of rugby tackling a goose.

DIMINUTIVE REX

mathNEWS OVERTHINKS HARRY POTTER

Wizards Would Not Stay Secret With Social Media

You have a bunch of teenagers who have grown up documenting their lives on social media.

You have society in general in possession of smart phones capable of high quality video.

There's memory wipes and Photoshop and video editing, but eventually the evidence would pile up.

Benevolent Dictator Wizard Would Happen

Imagine: a Muggleborn finds out they're a wizard and learns all the amazing things they can do. They start questioning why wizards haven't been helping (see below for what they should be doing). But the only answers they get are out of date ("Muggles would burn us at the stake"), insufficient ("It's better our societies stay separate"), or prejudiced ("Muggles are beneath us").

So they decide to fix things. They think about all the ways magic could fix the world, both in Muggle society and Wizarding society. They start working their way to the top with the goal of fixing things. Eventually, they're trying to take over the world, because they genuinely want to make things better. And they're not concerned with keeping magic a secret; they're trying to reveal it so they can help Muggle society.

It's one thing to defy Voldemort using the argument "Muggles and Muggleborns are people too". It's harder to fight someone whose beliefs are "let's use this amazing power to make things better for everyone and easily solve things like world hunger".

Wizards Need to Help Out More

World problems wizards could help with:

- Food shortages (food cannot be conjured but can be duplicated).
- Shelter (duplicate houses).
- Health care, injuries and major diseases. If there are things they can't/shouldn't cure with magic (eg. curing Muggle things with magic causes magical diseases) they can duplicate the medicine.
- Climate change.
- Interstellar travel.
- Travel in general, and all things that are problems because of transportation costs/difficulties.
- Anything that's lost can be retrieved with summoning.
- Crime and trials. THEY HAVE A TRUTH POTION.

Yours in witchiness, Shay Blair

Quotation marks make things look sketchy.

ONE OF "THE EDITORS"

INVESTIGATIVE JOURNALISM! PSYCHIC POWERS: DO THEY EXIST? ARE THEY REAL?

Hello readers, it's Theodore Bear, here again with another heaping scoop of investigative journalism. Since my last article, I ended up ascending to a higher plain of existence, but came back to this world because of the allure of investigative journalism. This week, I'm looking to answer a question on the mind of every single student on this campus: are psychic powers real?

It has long been theorized that humans have latent psychic abilities. I'm here to definitely answer whether humans truly have such powers. In my investigative journalism investigation for this journal, I sought out psychic phenomena in the world to find answers and unlock the secrets of the human mind.

The evidence I found supporting the existence of psychic powers was a strange phenomenon where humans demonstrated precognition, the ability to see into the future. At 6:30 PM today, a group of students arrived at the MathSoc office for the **mathNEWS** production night. When I talked to these students, they predicted that they would receive pizza later on that night. And lo and behold, their prediction came true; not an hour later, the **mathNEWS** editors told everyone that they were ordering pizza. Their precognition was so accurate that they even predicted that some students would be arriving later, and made sure to order more pizza to accommodate those students.

Incredible!

How is it as that these students managed to see into the future and know there would be a **mathNEWS** production night tonight? There is only one explanation, and that explanation is psychic powers.

With proof of human kind's psychic abilities in hand, I decided to research further. I entered the Ancient Archives of Kal-Shallut to see what information I could glean there. However, that investigation didn't turn up much, as it turns out I had been temporarily banned from visiting the Ancient Archives because of my behaviour last semester (It turns out I'm allowed to say the reason for my ban: I got into a fight with another visitor and his army of ninjas that ended up destroying approximately ²/₃rds of the archives from the years 1987.1 and 1892.6. We both were banned for two months and had to fundraise in order to help pay for repairs). That being said, there is a pretty good burger place located a couple blocks from the entrance, so I ended up eating a cheeseburger with lettuce and onions for lunch there.

Undaunted by my setback, I soon discovered more evidence of psychic powers in our world. Humans have an innate ability to perform psychokinesis, allowing to manipulate the world around us using only our minds. I witnessed this strange and unnatural ability with my very own eyes. Through the power of his mind, I saw a man raise something called an "arm", which then reached out and pulled the handle of a door, opening it with only the power of his thoughts.

Amazing!

I decided to seek out more strange phenomena after seeing that incredible display of psychokinesis. I quickly ran into more and more evidence of humanity's link to the psychic spectrum. Soon after, I was attending a conference on the hidden secrets of the world, held by the University of Waterloo's Department of Mysteries. The conference was a prestigious one that is attended by all the major geographical and exploration societies from around the globe. After taking place in such exotic locations as Artemis V and Paris, it was decided that this year's conference would be held in Toronto, to celebrate it being named the most boring city in the world for 47 years in a row.

Anyway, after presenting a paper detailing my search for the Ancient Stone of Nioj, one of the people there approached me and called my name. I was stricken with wonder; how did this woman, who I had never met before, know my name? It was obvious from the start that this lady was clairvoyant, being able to use her psychic abilities to uncover my name without ever having met me.

Unbelievable!

Sadly, I wasn't able to interview her and uncover the full extent of her psychic powers, as I wanted to see one of the panels at the conference. Specifically, the one on the difficulties faced by future human expeditions to the afterlife, and I couldn't seem to find her afterwards.

Seeing these incredible feats performed with the only the power of the human mind has led me to conclude with scientific certainty that psychic powers do indeed exist. These incredible truths have been uncovered thanks to investigative journalism. And now, the question of humanity's latent psychic abilities has been settled with a resounding yes.

THEODORE BEAR

MAYBE I'M A PSYCHIC?

I know what you're thinking. You're thinking "No, you're not. You're not a psychic." Was I right? Of course I was. I also know you're probably only skimming this article as you flip through the pages looking for **profQUOTES**. You're either a math student or a curious outsider. You're a little nervous about an upcoming midterm. And an assignment. You were born during one of the first twelve months of the year. You have a brain and at least one hand. I know you. Maybe I'm a psychic?

BRIDGING THE DIVIDE: APPROACHING CONVERSATIONS WITH DIFFERING PERSPECTIVES

So there you are: browsing the web, and somehow you manage to drift away the from your nice comfortable echo chamber bubble and encounter someone with a different opinion. Not only do you disagree, but you interpret their views as an attack on your person. Not only are they are they wrong, but this is **PERSONAL**. You stretch out your hands, ready to type out how they are completely and utterly wrong.

And all your perfectly crafted arguments go well over their head. You sigh, and wonder why you even bothered to try to reason with someone who is a member of your out-group.

Well, that didn't work. As it turns out, arguments are one of the least effective methods of changing someone's mind. When you argue with someone, they will immediately conjure up reasons as to why their beliefs are correct. So instead of having someone consider an alternative perspective, they are further cementing their already established view.

But let's say you are 100% right, and they are completely, utterly wrong, and you want to change their mind. The first thing you need to do is understand their perspective. And I mean truly understand where they are coming from. Too often, we try to persuade people using reasoning that appeals to us, which is often ineffective because different people value different things, and there are no objectively right preferences.

A better approach is consensus building. Instead of focusing on how your views differ, try to find commonalities. Find the topics and subjects that you agree on, and build a foundation of understanding to then use as a `safe space` from which to challenge and discuss the things you do not agree on.

The other incredibly important thing to remember is that if you encounter a view you disagree with, the other person is in no way obliged to engage with you in this discussion. Arguments, or even civil discussions, about contentious topics are exhausting. If you barge into someone's Facebook status expressing your disagreement, don't be surprised you are not welcome.

There are certain topics that seem to invite shit storms. One in particular is the idea of offense. I am going to describe a typical way this conversation goes and offer a different way to re-frame these conversations.

Party A communicates that idea X is harmful. Party B says that this is not harmful. Communication breaks down. I find that we often only consider someone's emotions valid if we understand the logic behind those emotions. This is unreasonable, as we have limited control over what we feel. What we do control is how we respond to our feelings . Communication that a particular behaviour is bothersome isn't being overly sensitive; it's healthy communication. In almost any relationship, at some point you are going to upset the other person. It's important in those cases to be able to discuss what upset them, and if you get offended at someone communicating their problems with you, then I hope no one ever has the misfortune of being in any kind of relationship with you.

I'm sure there is someone who is going to ask, but what if they are upset about something truly unreasonable? Where do you draw the line? The people we are most likely to offend are people that have radically different perspectives from us. It's easy to be inconsiderate of someone whose views we do not understand. But that is a terrible test of the validity of someone's feelings. The only time you should dismiss someone's feelings is if they have been actively harmful to you. Though it is always useful to apply Hanlon's Razor: "Never attribute to malice that which is adequately explained by stupidity" or "Don't assume bad intentions over neglect and misunderstanding." Though if someone is always upset with you, and dismissed your feelings when you are upset, you have a pretty good reason to avoid that person.

Active healthy communication is really difficult. Hell, I rewrote this article about 4 times, and even now I worry that I haven't communicated my point effectively. Though I am sure the editors will love me for how long it is already.

BEYOND META

N SONGS THAT HAVE SUMMER IN THE TITLE

- Cool For the Summer Demi Lovato
- Summertime Sadness Lana Del Rey
- Summertime Kenny Chesney
- Summer Girl Stereos
- Summerboy Lady Gaga
- Summertime Guys Nikki Cleary
- Summer nights Rascal Flatts
- Summer Calvin Harris
- Summer of '69 Bryan Adams
- In Summer Josh Gad

AN EDITOR JUST LOOKING TO FILL SOME SPACE

A MAGIC BULLET

I have problems. Not horrible ones, like famine, disease, or being on fire¹. But I've still got some. And that's a problem³. But then I realized, I could solve all these problems with magic! All I need to do is learn magic, or spontaneously manifest abilities, or make a pact with some sort of powerful and mysterious supernatural entity⁴. I'm honestly surprised I didn't think of this sooner.

So, option one is to learn magic. I've already learned Magic: The Gathering, so real magic can't be too hard⁵. One potential speedbump is that from what I've seen, learning magic requires schooling, and I'd imagine tuition for wizard school is probably pretty steep⁶. It'd also probably be, like, a bunch of work.

Spontaneously manifesting mystic powers would be ideal, but I'm not exactly sure how to make that happen. One suggestion I received was to just shout faux-latin and gesticulate wildly. Another suggestion was to try and force some sort of superhero origin story. The issue there is that I'd probably need to have dead parents for that, which would be less than ideal. Particularly if I needed to maintain dead parents to maintain my powers, since then I couldn't actually solve all my problems.

So if waving my hands and gibbering doesn't bear fruit, I may have to acquire some sort of mystic patron. Some sort of diabolical pact would be traditional, but then I'd have to give up my soul^{2,6}. Another **mathNEWS** individual suggested Stan Lee as a patron, given his great powers, and he's reaching the point in his life where he should really be looking for an apprentice⁷.

No matter how I go about getting them, I'm really looking forward to having magic powers. With the weather heating up, it'll be really nice to be able to just teleport to campus instead of having to wait outside for the bus2.

Thaumaturgically yours,

s,т∈{2к,к∈Z}, 144

1. Or having to write work reports².

- 2. Like some sort of filthy peasant.
- 3. And now I've got recursive problems, and that's just awful.

4. I've read demons are particularly helpful in that regard.

5. I bet you don't even need to understand stacks for real magic.

6. Maybe I could get crowdfunded?

7. Plus then maybe I could get a cameo in Infinity War.

MARKOVNEWS BEST OF: TEN YEARS OF MATHNEWS CONTENT PIPED INTO MARKOV CHAINS

Did you know that all of Math**NEWS** can fit onto a CD? I'll bet you never wondered this but now you know that it fits, in the event of a digital dark age without the Internet. All the PDF's [well, all of them since 2004 -tbd**ED**] add up to just under 600mb of data. After converting it to plaintext only, its shrunk down to 19mb of plaintext. What better to do with this massive repository of 10 years of **mathNEWS** writing than to push it into a Markov chain to generate nonsensical sentences? Below are some prime outputs of the Markov generation.

"Paranoia doesn't seriously harm you."

"What are the server sending out e-mail?"

"Eventually, I did a lot of advanced humour."

"When inspiration fails, make a huge varied selection."

"Examples of unacceptable problems: • Prove P NP"

"Thus, sex is considerably more healthy substitute."

"We have over 24 hours in a sketch with Roger Abbott on yesterday's episode of Jerry Seinfeld, "95% of all these?""

"Full details available online at http://csclub.uwaterloo.ca/ media/ . 3 CL101: The Idiot-Proof Guide to the Metropolitan Museum of Mathematical Engineering."

"Notice how many lines are super cute?"

"116 No.3 mathNEWS 3 GRADUATING?? It's About Time!"

- "It's better than airline food."
- [Ed Note: Found our new slogan! -TurnipHeadEd]

VICE MITT

Try reading something other than the profQUOTES?

AN EDITOR WHO KNOWS WHAT YOU PICKED UP THIS ISSUE FOR

horror**SCOPES**

ActSci: It's Summer! Lots of outdoor weddings in your large family mean you end up sitting next to uncle Berty while he loudly explains his belief that smoking is good for you. Your unlucky number is: 20 minutes listening to people you can't correct for social reasons.

AHS: Overhearing you talking about your program at the park, a small child learning to read excitedly waves their friends over. Your lucky number is: 6 kindergarteners convinced they can go to school for AAAAAAAHHH's happily yelling.

AMATH: Your friend's younger sibling is coming to school in Fall and will need to pass Econ 101 and 102 in their first year. You can help, right? You got an hour to spare? Your lucky numbers are: 7 minutes checking they can take a derivative, then 53 playing Smash Bros.

Arts: Waiting at the bus stop, everyone's complaining about the heat. But all they know how to say are obscenities and the word "hot". Amateurs. Your lucky number is: 2 cute onlookers impressed with your loquacious and insightful tirade against the weather.

Bioinformatics: Looking for that edge up at the pool, you figure gills and webbed feet are the way to go. But you haven't learned how to do that yet in classes! You'll need a foolproof solution. Your unlucky number is: 1 meeting with an ethics board, where you're forced to explain where you even got a radioactive halibut to be bitten by.

C&O: A family member asks for help with trivial math, which should take you 30 seconds. But surely they wouldn't ask you for something so simple, would they? Your unlucky number is: 32 minutes looking for a trick question where there is none.

CS: You need to git gud. But that requires playing more. But the compute is overheating! Luckily your girlfriend is in chemistry. Your unlucky number is: 2 square feet of broken floor after dropping your phone. Leaky coolant is a bad time with liquid nitrogen.

Double Degree: In a bid to be on time for classes, you continue to hustle between campuses. Your unlucky number is: 31 degrees, plus humidity.

ENG: Engineering is basically art, right? It's hot here. Sue me. See Arts **horrorSCOPES**. Your unlucky number is: >=7 angry complaints about this we'll publish in the next issue.

ENV: It's good the heat makes people care about global warming and raising water temperature. But unfortunately, nobody knows how to fix things. Your unlucky number is: 1 case of berserk llama syndrome.

MathPhys: Your friends are all complaining about how it's hotter than the surface of the sun. You confidently explain that that's impossible, due to conservation of energy. Your unlucky number is: 5500 sweaty degrees to be right about.

PMATH: It's a lovely day! You get up, stretch, eat some breakfast. In the afternoon you check your facebook and see lots of people complaining about it being too warm. It's a lovely temperature! Your unlucky number is: 1 epiphany that you haven't left MC in weeks.

SoftEng: A wrong number and short comedy of errors later, you end up with a summer job in an ice cream truck, and a boss who thinks you have a degree in soft-serve engineering. Your lucky number is: 2 months of not rocking the delicious, air-conditioned boat.

Stats: Looking to prove the heat wave is an outlier, you collect data about temperature trends and plot a beautiful graph to reassure your friends. Your unlucky number is: 30 minutes in front of a window and a melted graph.

Teaching: Over the summer, you try to get your teaching fix by volunteering to help coach kids' sports. Your unlucky number is: 4 quarters of people scoring on their own goal. Which is impressive in curling.

Undecided: Your girlfriend really wants pasta. You really want stir fry. Those can totally both happen, even if you're tired and distracted. Your unlucky number is: 3 minutes explaining why there are water chestnuts, eggs, and green beans in the white sauce.

prof**QUOTES**

SE 463: ATLEE

Who likes mathNEWS more when it has serious articles? [no hands raised]

AMATH 231: MISKOVIC

66 If it's swirling it's not exploding.

CS 466: BUSS

66 Back to mathematical land, where we don't have to worry about people.

CS 360: MARK PETRICK

- **66** Don't pump it down; pump it up instead.
- **66** I've nulled you all to sleep where you are just writing anything I write. There are only 10 more minutes.

CO 353: HENRY WOLKOWICZ

- **66** Gosh this is a mess. I can't even tell what I did.
- **66** Prof: "And that's how I got hooked on MATLAB."

Student: "There's worse things to get hooked on."

Prof: "Yah, that's true. I've done those as well."

66 One of my favourite theorems is, 'A face of a face is a face.' Very easy to remember.

PMATH 446: JASON BELL

- **66** The Nullstellensatz is a very powerful tool, that every millennial should know.
- 66 [looking at a commutative diagram] This sort of resembles a cave drawing from 10000 years ago. Maybe 10000 years from now people will look at this and wonder what it is. But probably not, 'cause I'm gonna erase it.

PMATH 348: BLAKE MADILL

- **66** This is such a nice chalkboard. It flows so nicely with the chalk.
- **66** He died in a duel. That's some super French stuff right there.
- **66** What do I know? I'm just an instructor.
- [Abruptly, in the middle of lecture] --and now my shoelaces have come undone and I must tie them.[Stoops down and continues while tying shoelaces] I just thought

I'd tell you because instructors need to be honest about things.

CS 462: JEFFREY SHALLIT

66 Even though mathematicians take offense easily and like to duel, they're not very good. [...] In fact, we hit with probability p, and miss with probability 1-p.

CS 489: JIMMY LIN

66 Computer is a device for generating heat.

STAT 371: HANY FAHMY

- 66 Make a decision. Like the decision you're gonna make on Thursday. Should you drop the course or not?
- I hope that I didn't waste the whole lecture. That's all that I wanted to say.
- (Student makes loud yawning sound] I'm sorry it is so daunting for you to listen to me teach for an hour and a half... It is equally daunting for me to look at you for an hour and a half."

ACTSC 232: JAMES ADCOCK

66 You don't get paid to repeatedly die.

@STAT 371:



A ROUND OF APPLAUSE FOR OUR NEW EDITOR PLEASE!

Hello **mathNEWS** readers! I'd like to take this opportunity to welcome our new editor, Cameron Roach, otherwise known as TurnipHeadED. Yeah, I don't get the name either. Just don't ask. Anyway, we're happy to have him here to help. We'd like to get to know him a little better, so we asked him the most important questions we could think of. Without further ado, meet Cameron:

1) WHAT IS YOUR FAVOURITE MATH TRIVIA (FACTOID)?

I was told 57 was mockingly called the "Grothendek(sp?) Prime" for a while because the guy with that name said it was prime in a proof and people mocked.

2) WHAT'S YOUR FAVOURITE COLOUR?

I like taupe. They say it's very soothing.

3) ANY OPINIONS ON PANTS?

Leg prisons are an abomination.

4) DO YOU LIKE TURNIPS?

Not to eat, that's disgusting. But they're fun at high velocity.

LAST WEEK'S gridWORD SOLUTION:



5) HOT SAUCE OR NO HOT SAUCE ON YOUR SHAWARMA?

Hot sauce makes it 'warma.

6) WHAT'S YOUR FAVOURITE PRIME NUMBER?

57 [see earlier thing]

7) WOULD YOU EAT A BEE?

Have. Recommend, provided you aren't allergic and it's dead. Don't be like me and go for bee sushi.

8) WHY DO YOU THINK $math \mbox{NEWS}$ contributors seem to be so obsessed with bees?

Honestly I don't see why more news outlets aren't talking about them. Morgan Freeman apparently turned some of his property into a bee refuge. I think that's rad.

9) DO YOU HAVE ANY ALLERGIES?

Yes, but you'll have to get more creative if you're trying to get me to tell you my weaknesses, [Darn, my plan is foiled!-undecidED]

10) WHAT'S YOUR FAVOURITE KIND OF PIZZA?

Meaty and cheesy.

11) DOES PINEAPPLE BELONG ON PIZZA?

Yeah, because the flavour is great. But you should pick it off before eating it because the texture is horrid.

12) IF YOU WERE A PAINT COLOUR, WHAT COLOUR WOULD YOU BE?

"Snot Green" because it's evocative and I wish they still made it.

13) WHY DIDN'T YOU ACCEPT MY FRIEND REQUEST?

Wow, ok. Way to make it personal. [You made it personal when you didn't accept my friend request-undecidED]

PSA: Father's Day is this Sunday. Call/visit/give a gift to/thank/serenade your favourite father(s).

A mathNEWS EDITOR WHO HAS MAD RESPECT FOR HER DAD

gridWORD

gridCOMMENT

Goodness is it warm here in KW; it is most agonizing to have the sweltering heat of summer without the tropical delights brightening up our day. Last issue I had asked gridWORD respondents what it was that they wish they could get here at KW, and received 3 responses. {Letian, Bailey, Reila} didn't respond to the question, {Daniel, Francis, & Theo} responded with "Giant radishes that restore all of your health",—which would be nice, yes—and Christian Ieritano responded with "Reliable public transit (... especially after midnight)", something I wholeheartedly agree with. Given that Christian also gave the only perfect solution to last issue's gridWORD, go badger the editors for a prize.

I have a puzzle. Things have been busy for me so there isn't really a theme, so this means I don't get to expound on it here in the gridCOMMENT. Instead, have this out-of-the-blue

ACROSS

to me

1. Desert nomad's attire 4. Glows 9. A more functional Java? 14. "Pow!" DOWN 15. He married Astoria 16. A reverse dowry? 17. Serving feat 18. Lord ____, 2nd Marquis of Londonderry 20. Pardon 22. Sun disk edge 23. Describes a 3rd-year Undeclared 6. Levels student 7. Edict 26. Oddly odd 29. Caribbean music 30. Carry on 32. Bishop's jurisdiction 33. Pan 35. Ardent 36. Sine ____ non 37. Taking epsilon time 41. Social connections 42. Warren Worthington III 25. 43. Second of April? 44. Above a maj. 45. Pickle flavoring 46. Nordic rug 48. Biblical hairy hunter 50. This country's flag lines eminates from a corner 34. Storm 55. Desire 57. Lithe 58. If you have any of these that you 38. Bit would like to see, do mention them 62. Igbo title 63. Grayish 46. Nosy 64. Arm bones

- 65. Tasseled cap 66. Rhythm for 35D 67. Seasonal songs 68. Japanese demonstrative
- 1. Counters 2. A food, a card game, and a god. 3. Council procedure 4. Teaches ACTSC 232 this term 5. Heavenly Muse 8. Scale part 9. It's a wrap 10. Oreo centre 11. A serpentine line 12. Fall behind 13. Old English character 19. Number of sides on a loonie 21. Office fixtures 24. Crossly __ inhibition: how one would actually die if they were hanged 27. Waste not 28. Assent 31. "____ pales in Heaven the morning star": Lowell 33. Tavern fixtures? 35. Author of "Twenty Below" and "Return in Autumn" 39. Aromatic herbs 40. Silica stones 41. Comes in 17 phases 47. Approvals

gridQUESTION which I randomly came up with when looking around for inspiration: "If you can impose a rule that everyone has to follow for a day, what would you impose (and why?)"

As always, submissions to the gridWORD should be emailed to mathnews@gmail.com or by sliding a physical copy under the door to the mathNEWS office (MC 3030) before 1830 hrs on June 26th, 2017. Submissions should include an answer to the gridQUESTION, for if there is a tie for most correct solution submitted, my favorite answer to the gridQUESTION shall be the tiebreaker. The editors are supposed to hand out prizes to the people such named, although I haven't the foggiest if they've actually prepared and/or handed out prizes to the people. $^{(I)}_{-}$

ZETHAR

- 56. Kind of pool
- 58. Friend of Frodo 59. Apply
- 60. Wine cask
- 61. U.N. arm



Drop your gridWORD solutions off at MC 3030. And yes, we do award points for creativity.

49. Spur

52. Sponge sort

thing

51. Physics prohibits perfect such

53. Gen I fire move with 40 power

54. "Carpe" in "carpe diem"

Ž	

SIIN IIINE 18	MON IIINE 19	THE THAT 20	WED HINE 21	THII IIINE 22	ERI IIINE 23	SAT IIINE 24
Father's Day			First Day of Summer Summerfest Bomber		National Pink Day (so wear your pink math swag!)	
SUN JUNE 25	MON JUNE 26	TUE JUNE 27	WED JUNE 28	THU JUNE 29	FRI JUNE 30	SAT JULY 1

Canada Day

Fee Arrangement

Deadline

ARTICLE OF THE ISSUE

This week, I decided to let our newest editor TurnipHeadED name articles of the issue. First of all, I would like to give UndecidED an honorable mention for her filler article "Maybe I'm a Psychic" because it made me laugh while we were going over the issue one last time and picking the winning articles. This week's Humourous Article of the Issue goes to $s,t \in \{2k,k \in Z\}$, 144 for his article "A Magic Bullet". This is mostly because I want all our readers to know that it's a purely humorous, hypothetical article, and not to try out any of the methods offered in the article. After all, Stan Lee can't hire an infinite number of apprentices. I've gotta make sure there's space for me

(TurnipHeadED has also requested I mention that he was particularly enamoured with the footnotes in the article. I personally feel like we shouldn't be encouraging that author and his irrational penchant

for an absurd number of footnotes (not to mention his obnoxious name which I'm avoiding re-typing), but TurnipHeadED is young and naïve, so I guess I'll let it go this time.) As for Informative Article of the Issue, I will award it to ITSH for Ten Tips for Trans Girls to Survive the Zombie Apocalypse, because I believe this is an important niche that the mainstream zombie craze of five years ago failed to cover, and **mathNEWS** is all about niche articles that no one realised they needed until they saw them.

Honorable mention goes to Vice Mitt for his Markov Chains, because everybody likes a good Markov chain.

Winners can come to MC3030 to pick up their prizes!

ISSN 0705-0410 UW'S BASTION OF ERUDITE THOUGHT SINCE 1973

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TBDED