

## “WHAT IS SOMETHING YOU’RE MORE KNOWLEDGEABLE ABOUT THAN MOST?”

Hello, my loveliest **mathNEWS** reader!

Wait, uhh, let me turn down the music (*fiddles with the open YouTube tab*). There. Much better. After a term's worth of editing, you start to learn which parts of the job can be accompanied by Eurobeat, and which can't.

Speaking of which... the term is ending! It's finally time for you to stop reading **mathNEWS** and start reading textbooks, and for our writers to stop writing articles and start writing exams. Well... apart from the fact that we already made this issue and you are already reading it, so surely one more issue can't hurt. You'll get back to studying right after you read the whole thing, right? Of course you will. There's a good student.

Next term will be just as online as this one, and you will continue to find us on <https://mathnews.uwaterloo.ca>. And after that is fall term, about which we know about as much as you, perhaps less. I'm personally crossing my fingers for at least a hybrid approach, where stuff happens in-person but you can also do it online if that's what works for you... but I'm also on co-op that term so I'm effectively just praying for you guys. No need to thank me.

Casting our eyes from the future to the present, I'd like to draw attention to the **mathASKS** in this issue, featuring the the incoming WUSA executives, all from Team 🦉🦉, which I think is a fantastic name for a political party, if nothing else. But don't worry, just because I like their name doesn't mean we'll go easy on the politicians, as you'll see with... holy shit. Did we really ask questions worth *almost 9000 words worth of answers?*

I guess it makes sense. You can only ask a professor so much — you ask them stuff in class anyway. But bring forth an elected government official, and any self-respecting media outlet will cover every single tiny detail there is to cover about them. Bring forth *four*, and, well, let's just say that they don't call us the Best Paper On Or Off Campus (And Decidedly Better Than Imprint In All Aspects) for nothing.

Hope you enjoy the issue, and see you next term! 🙌

caffeinatED  
Editor, **mathNEWS**

god ⚡ peED  
Editor, **mathNEWS**

|                             |   |
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| CLARIFIED                   | The real identities of each of the <b>mathNEWS</b> writers. (Except me. The writer me, not <i>me</i> me.)             |

## ARTICLE OF THE ISSUE

Scratch that. We're handing out **mathNEWS**'s first Lifetime Achievement Award to CC. Congratulations! Your worlds and characters have enriched our pages. (Readers, check out his latest additions to **warSOC**, parts **V** and **VI**, or start with part I in v145i2.)

Once I figure out how to fill in the \_\_\_, it's over for y'all.

NAMAN SOOD, **mathNEWS** EDITOR FOR WINTER 2021  
ALONG WITH KEVIN TRIEU AND CLARA XI

# mathASKS 145.6

FEATURING INCOMING WUSA EXECUTIVES BENJAMIN EASTON, STEPHANIE YE-MOWE, MATTHEW SCHWARZE, AND CATHERINE DONG

## PERSON: WHAT PROGRAM ARE Y'ALL IN?

**Ben:** Economics (co-op) + French Minor. Transferred out of SciBus after 2B.

**Stephane:** All of them simultaneously, but also Knowledge Integration.

**Matthew:** Right now I'm registered in Computer Science & Business Administration with Laurier, but I'm looking to transfer to Mathematics & Business Administration (still with Laurier). I'm hoping to major in mathematical optimization on the UW side and I'm torn between a few options for my BBA concentration (it'll be one of international business, supply chain management, or accounting).

**Catherine:** Math, obviously. that's where all the *kool* kids are.

## CC: WHAT IS YOUR FAVOURITE FACULTY?

**Ben:** I love all faculties equally.

**Stepppppppppppppppppppppphanie:** Laurier Engineering.

**Catherine:** North America's first and only math faculty! Also, fuck Laurier.

**Matthew:** Laurier proper, of course. These people are just jealous.

## CC: WHAT IS YOUR FAVOURITE BOOK?

**Ben:** Best non-fiction I've read recently is *Doughnut Economics* by Kate Raworth. For fiction, I'll say *L'Étranger* by Albert Camus.

**Stephanic Cumberbatch:** *The Hungry, Hungry Caterpillar* is the greatest literary work of our generation, and yes—I \*will\* fight you to the death on this.

**Matthew:** I will admit it has been a little while since I got myself through a book, but I used to be a very prolific reader. I can't say I have a favourite, but I've somewhat recently taken to the short story format for the impressive way it can create a compelling narrative in so few words.

**Catherine:** I am fundamentally incapable of not loving *Looking For Alaska* by John Green. (Take the first part of the sentence out of context as needed.)

## TLLLOW PRINCESS: WHERE IS YOUR FAVOURITE TOILET ON CAMPUS? MATTHEW, WHY IS IT DC 2923?

**Ben:** I am not a picky pooper.

**Stevia:** V1 Green.

**Matthew:** Simply put, DC 2923 is always very clean and tends to be empty. It's close enough to big common spaces to be accessible, but just far enough from other washrooms to be most people's last choice, if they know about it at all. Again, I'm confident you'll all forget about DC 2923 before you step foot on campus again, which is why I'm telling you this.

**Catherine:** Wait what's a toilet?

## DERIVING FOR DICK: YEE?

**Ben:** Yes.

**Stefen:** Yee!

**Matthew:** Haw!

**Catherine:** t

## CLARIFIED: WHAT IS THE BEST MEAL YOU CAN COOK?

**Ben:** Pasta aglio e olio makes me feel like a chef.

**It's Stephanie Ya Know?:** You say this as if I cook my own meals. But in truth, former MathSoc President Ina Wang cooks for me because once I poured rice directly into the rice cooker instead of the pot that goes inside it and now I'm banned from all food forever.

**Matthew:** I found this really good honey garlic chicken recipe for the instant pot some time ago, and it's been a pretty good go-to... Actually I've been informed as I write this that I can't *quite* make this by myself due to some colourblindness issues where I can't tell when meat is no longer pink, but it's still the best thing I can *almost* make with a handicap.

**Catherine:** Okay serious-ish answer: I do actually love cooking, especially for other people! I grew up helping out in the kitchen and slowly taking over meals when my parents got busy. It's been really fun getting to explore different cuisines and finding my favourite flavours. I make a mean from-scratch tomato sauce. My go-to meal is definitely 鸡蛋柿子面. I'm being told by Allrecipes that it's called "tomato egg drop noodles?" I'll write up a recipe for this issue. [See page.30.]

**TENDSTOTHIRTYNINE: WOULD THE PRESIDENT LIKE TO COMMENT ON HIS SIDE HUSTLE, A PORCELAIN SHOP WHOSE VAGUE WORDING AND MYSTERIOUS AURA MAKE IT APPEAR TO BE A FRONT FOR SOMETHING NEFARIOUS?**  
<http://benjamineaston.com/>

**Ben:** \*hurriedly deletes emails\*

**Stephen King:** How else is he going to build another MC on top of the existing MC?

**Ben (again):** Fake news!

**JAM: FOR BENJAMIN: WHAT DOES THE WUSA PRESIDENT DO ANYWAY?**

**Ben:** I think of the President as a utility player for the exec team. While Catherine, Matthew and Steph will be focused on their portfolios, my job is to think across the organization to create some coherence as the chief executive.

The President is also responsible for WUSA governance as Vice-Chair of the Board and usually as Speaker of Students' Council. This includes maintaining the governing documents, like our Bylaws, Procedures, and Policies. I think some of these documents have become needlessly complex through decades of iterative change. At the first meetings of Board and Students' Council, I will propose creating a Joint Committee on Governance to help WUSA eliminate redundancies in policies and procedures. Incoming Councillors and Directors will hear all about this proposal at our governance transition weekend (April 24–25).

Starting May 1, I will sit on the University Senate and Board of Governors. I ran unsuccessfully for Science Senate in Winter 2018, so I am really excited to get to work the Senate Undergrad Caucus (including Catherine and Matthew!). I look forward to working with the University to establish an independent ombudsperson to promote transparency and accountability at UW.

Finally, the President works with the General Manager and VP-Operations & Finance on the Personnel Committee of the Board. This group is responsible for internal HR matters. I've heard this work can be rather time consuming as well.

**Step Lawnmower:** Cry.

**Catherine:** Idk but I think they get to take WUSA 1 for diplomatic trips.

**JYM: FOR STEPHANIE: PD REALLY SUCKS. WHAT DO YOU PLAN TO DO ABOUT IT?**

**Stack Overflow:** Give Vincent a really large foam mallet, spin him around a bit, and direct him in the general direction of CECA.

(Ok, real answer now.) Going into the role, I plan on sitting down with CEE and having a serious conversation about the concerns students have brought up regarding the quality and utility of PD courses. Ultimately, its in both students' and CEE's interest that PD be revamped into something that students actually find useful. (Frankly, I find it hard to believe that the folks who designed PD set out to make something bad on purpose.)

That said, I don't think it'll be enough to just say: "PD sucks. Now go fix it." If we want a better PD, we're going to need to be directly involved in that process. I'm not sure on the specifics yet, but 1) Getting CEE to commit to revamping PD,

and 2) Ensuring undergrad representatives are involved in that process—is what I see as the most effective path forward.

**TENDSTOFORTY: LET'S SAY, HYPOTHETICALLY, FOR THE SAKE OF ARGUMENT, THAT YOU ALL DECLARED PD ILLEGAL. WHAT COULD CECA DO TO STOP YOU?**

**Ben:** CEE could do nothing to stop us but easily ignore us.

**Steph:** For that to actually do anything, we'd probably have to first annex the university from Canada and declare ourselves an independent country.

**Matthew:** @Steph—It's treason, then.

**JIM: FOR MATTHEW: WHAT IS WUSA'S MOST IMPORTANT EXPENDITURE (AFTER mathNEWS OF COURSE)?**

**Matthew:** Without my salary nothing else gets funded, so I suppose that's pretty far up there.

More seriously, our healthcare and transit plans are certainly the biggest expenditures, but also the most important to our students. They're the most tangible way that WUSA's efforts touch every student, and I was surprised when I learned about how much executive time has gone into building these things into the best things they can be. (Seriously, the WUSA health plan is like the single best student drug plan in the country, but premiums are on-par with peer schools. The long-term investment in building out quality student services can be impressive.)

**JOM: FOR CATHERINE: WHAT IS THE BEST PART OF STUDENT LIFE AT WATERLOO AND WHY IS IT mathNEWS?**

**Catherine:** Editorial independence. (Have the editors stopped reading yet?)

I, with all my heart, love our clubs. There are so many! It's fantastic!! I love that students are free and encouraged to make their clubs their own. I love that they foster community and friendships on our mess of a campus. I love that they are a vehicle by which WUSA can empower students to strike out into the world and be the change they want to see.

**QUESTION COUNTER: HOW DOES IT FEEL TO BE ASKED WHAT FEELS LIKE THE MOST QUESTIONS mathNEWS HAS EVER ASKED IN A mathASKS?**

**Ben:** Blessed.

**Matthew:** I always have time for my dear constituents (even when I'd rather be doing anything else on my Easter Sunday...).

**Catherine:** I feel honoured. Should I feel differently?

**Severus Snape:** @Catherine—Aroused, perhaps?

**JÜM: FOR ALL EXECS: WHAT WAS THE SPICIEST THING THAT EVER HAPPENED IN A WUSA MEETING?**

**Ben:** This one time, at EAC, we got nachos.

**Stephen Harper:** Once, John made out with a goose.

**Matthew:** From my having a personal investment in the ongoing reputability of WUSA, I think my best move here is to issue a thick “no comment.”

**Catherine:** I recommend asking Vincent.

**ABALD MAN: ON A SCALE OF WOO TO SA, HOW WOULD YOU RATE WUSA?**

**Ben:** SA, dude?

**Matthew:** They don't want you to know this, but the organization is really called WOOSA and we're too embarrassed to admit it.

**Catherine (twice):** OOOOOOOOOO!

**ABALD MAN: WHAT IS YOUR FAVOURITE RESULT FROM YOUR FIELD OF STUDY?**

**Ben:** Social science is a lie. Took till fourth-year econ to realize I had been duped. Now I live in postmodern dread.

**Stephmin Chee:** Knowledge = Integrated.

**Matthew:** I'm not sure that it's my favourite or anything, but I know that since the Triangle Inequality was named in MATH137 (literal years ago), it has popped into my mind every time I'm crossing a plane where I could either walk a path bisecting the plane or walk the longer perimeter (consider the DC Green, or as I'm trying to informally re-brand it, the Math Quad, for a visual). Bonus points if the bisecting path I'm considering walks me through a garden or some other no-go zone.

**Catherine:**  $\pi = 3$  wait no shit shit wrong faculty fuck fuck fuck what have i done

**Catherine (again):**  $\pi \neq 3$

**IMPROVEMENT SEEKER: WHAT PLANS TO IMPROVE STUDENT LIFE DO YOU HAVE IN STORE?**

**Catherine:** Honestly, I think a lot of student life is rather self-sustaining when we're on campus. Student groups are incredibly active without prodding from anyone. Being online has been tough on student life, but clubs are resilient as fuck. A big intention of mine is to make them as approachable as I can for students new to campus—both as members and as potential leadership!

**IMPROVEMENT SEEKER: WHAT PLANS TO IMPROVE THE FIRST-YEAR EXPERIENCE DO YOU HAVE IN STORE?**

**Catherine:** In ~normal~ times, my general approach is to start early, throw as much shit at people as you can, and cross your fingers that something sticks and people find a community that brings them value. Maybe we need to throw shit more than once. Club fairs are really great—perhaps some smaller club fairs surrounding different interests throughout the term?

Students are generally very enthusiastic about joining groups and going to events toward the beginning of the term, but this tapers off as courses start to ramp up and introduction events are less common. If you don't bump into a club at either club fair or through a friend, it can be kinda hard and feel awkward to join in the middle of a term.

Clubs are great for students, especially new students! Let's make it easier to find clubs good for you!

**IMPROVEMENT SEEKER: WHAT PLANS TO IMPROVE WUSA'S ELECTIONS TURNOUT DO YOU HAVE IN STORE?**

**Ben:** Elections have greater turnout when they're real contests, so improving turnout requires encouraging people to run for office. Perhaps by better communicating the work that governance volunteers do, students might be more inclined to run themselves. The Long Range Plan from 2020 to 2025 sets out that WUSA will undergo and implement the findings of an equity audit. Such a review will evaluate our governance and practices through an EDI lens, and might bring up structural issues which prevent communities from engaging with WUSA. However, I don't think there's a silver bullet to solving the civic engagement question for our student body. Plenty of student politicians have thought of this problem before, and few have come up with easy solutions.

**Catherine:** Okay hear me out: we lock everyone in their residence rooms until they can show proof of election participation.

**IMPROVEMENT SEEKER: WHAT PLANS TO IMPROVE THE FORMER BOMBSHELTER PUB SPACE DO YOU HAVE IN STORE?**

**Matthew:** Ooh, this is an exciting question. I know it's been quite a wait, but the big consideration from within WUSA is that once we renovate and open the space, that's gonna be the state of the space for the next 50+ years. It's important we get it right, not just for students now, but for the many, many students that come after us.

The plan as it currently stands (I really hope I'm allowed to disclose this...) is for the building-out of a large student lounge space that has a lot more seating and study space than the Bomber did, and for this to be served by a kitchen with similar offerings as the old Bomber (plus some healthy and alternative additions). The idea is that the space becomes more flexible and inviting for students to use however they wish: plop down by yourself and have a great study space and food options, bring in outside food and lounge with your friends,

or grab a table and treat it like a restaurant proper like the old Bomber. Now, this change is gonna take a lot of renovation and growth, and not just for the greater offerings but also for the growing student body over the next 50 years. That's why the plan also includes physically expanding the building partially onto the patio and up into a second floor, which will also serve as bookable event space for students and student groups.

Now, plans are subject to change, but this ambitious project will be the first of its class for a Canadian university and is being done because it makes sense, and we're really excited for the chance to build the best damn space we can for every student on our campus.

#### **IMPROVEMENT SEEKER: WHAT PLANS TO IMPROVE THE CO-OP EXPERIENCE DO YOU HAVE IN STORE?**

**Stonks:** I won't go into everything here, but I will say that something that's always bugged me is the fact that co-op students aren't protected under Ontario's Employment Standards Act. Maybe, there's legitimate reasons for this, but if there are I've yet to hear them. It just seems like a no-brainer to me—having legislation in place that protects what is a vulnerable class of workers. Point being, this is something I really want to get to the bottom of with the Ministry of Labour.

Beyond this, through the Student Safety Committee, there's been numerous issues identified with how CEE supports students in toxic/unsafe workplace environments. As a co-op student, standing up for yourself in the workplace is tricky; there's always the risk of retribution in the form of a shitty eval/failed co-op credit. So, getting these concerns addressed will be another goal for this year.

I also expect revamping PD will be a key discussion item this upcoming year.

#### **IMPROVEMENT SEEKER: WHAT PLANS TO IMPROVE THE ACADEMIC EXPERIENCE DO YOU HAVE IN STORE?**

**Starry Night:** More lasers.

#### **TENDSTOFORTYONE: CAN ALL STUDENTS HAVE A STIMULUS GOOSE SENT TO OUR HOMES?**

**Ben:** Geese just want to be free.

**Phteven:** Apparently, Canada Post has restrictions over sending live birds so RIP.

**Matthew:** I'm sorry, we just don't have the shipping for that in the budget. However, I ran the numbers, and we could afford it if it was on a curbside pickup system instead. I've taken the liberty of leaving yours on campus, so next time you're around it'll probably be the first one you see. Just go ahead and grab it, it's yours.

**Catherine:** I pitched converting the WUSA Box to a working egg incubator and shipping goose eggs to students, but I was told there might be some issues with that.

#### **TENDSTOFORTYTWO: SO, LIKE, DO Y'ALL SWEAR ON THE UW LIST OF POLICIES? <https://uwaterloo.ca/secretariat/policies-numerical-order>**

**Ben:** Swear on the employment contract, yeah.

**Stephen Colbert:** Not the UW policies, but the WUSA ones—yeah. We're also legally required through the Canada Non-Profit Corporations Act to do a blood oath as part of the transition ritual.

**Matthew:** I swore on the three bibles. The Bible, the Programmers' Bible, and a VHS tape of Empire Strikes Back.

**Catherine:** Idk but I still swear on the River Styx sometimes.

#### **ABALD MAN: WHICH IS YOUR FAVOURITE UW POLICY?**

**Secretary-General Ban Ki-moon:** Policy 69.

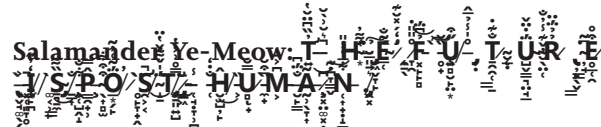
**Matthew:** Policy 53—Environmental Sustainability is not only good for obvious reasons (and would be better if we followed it more enthusiastically), but I also think it's funny because the executive contact for the policy is the Dean of the Faculty of Environment, which I guess makes more sense than it being any other dean, but it still seems funny to me that they presumably took the lead on this policy because of their position in Environment Faculty when all the other policies' contacts are UW administrators.

**Catherine:** Policy 9¾ (also Policy 53 is pretty neat).

#### **ABALD MAN: IF GIVEN A MAGIC WAND THAT COULD REPEAL ANY UW POLICY, WHICH ONE WOULD YOU REPEAL? YOU HAVE TO PICK EXACTLY ONE.**

**Matthew:** Good ole' Policy 71 so I don't have to take those annoying quizzes at the start of every CS course.

#### **CC: HOW WILL WUSA SUPPORT THE EVENTUAL TRANSITION BACK TO IN-PERSON CLASSES?**



#### **BOLDBLAZER: DO YOU THINK IMPLEMENTING MANDATORY VOTING LIKE IN AUSTRALIA FOR UNIVERSITY ELECTIONS IS A GOOD IDEA?**

**Ben:** Mandatory voting feels like a cop-out from addressing the real problem of how to make people care about student politics or civics in general.

**The Notorious S.Y.M.:** Yes, making voting mandatory in Australia \*will\* bolster WUSA election turnout. In fact,

mandating that the 2 students who happen to live in Australia to vote will represent a 50% increase in voter turnout.

**Matthew:** Maybe if my name was Aardvark and I came first in alphabetical order on the ballot. More seriously, I don't tend to buy into the idea that forcing uninformed people to vote makes for a stronger democracy. I think there's a lot that can be done to get students involved voluntarily first, like the execs being more engaged with the average student on social channels.

**Catherine:** I would love mandatory voting. That said, I do worry that it would increase resentment from students.

**QUANTUM GOOSE: FOR THE VPA: IN LIGHT OF RECENT EVENTS AT YORK UNIVERSITY, WHAT ACCESSIBILITY IMPROVEMENTS DO YOU PLAN TO ADVOCATE FOR?**

**einahpets:** Sigh. What did York do this time? (I'm assuming that you're referring to the prof who told a student "too bad, so sad" when they emailed him about an impending communications shutdown).

To my knowledge, UW has been pretty good this year with reminding instructors that many of their students *are* dealing with some pretty tough stuff right now outside of university. I think one of the advantages to having a large international student population is that the university couldn't just ignore the fact that there *are* students in wildly different time zones, or in places of civil unrest, or in home environments where the internet is unreliable and a quiet place to study isn't always accessible. However, even with this, there still continues to be instructors who remain unaccommodating (and/or assholes).

In part, I think ensuring that students *know* their options, and *know* what recourse there is when an instructor denies a legitimate request for accommodation is key. Beyond this, as we gradually begin the move back to campus, we need to make sure that *high-quality* remote learning is still available to the students who can't immediately return.

**QUANTUM GOOSE: FOR THE VPOF: HOW DOES IT FEEL TO BE THE SUBJECT OF YET ANOTHER mathASKS?**

**Matthew:** I'm honoured, quantum goose, honoured. For those not in the know, check out issue 144.2 for my previous **mathASKS** back in my younger days as President of MathSoc.

**QUANTUM GOOSE: FOR THE VPSL: HOW WILL WUSA PLAN TO GUIDE AND SUPPORT THE MANY FIRST AND SECOND YEARS VISITING CAMPUS FOR THE FIRST TIME IN FALL 2021?**

**Catherine:** From the Student Life side of things, this is a huge area of priority for me. I really believe that clubs are the heart and soul of campus life and culture—grassroot students groups run by students, for students. Most of the time, students join clubs and find somewhere they really vibe with in their first or second years, and then begin to take on leadership roles. Given how this year has been though, I definitely have concerns about losing that smooth transition

of leadership knowledge between generations of students. Losing that would likely mean a lot of clubs becoming defunct.

One system that I want to help establish is a broad crash-course "guide" of sorts that runs through a lot of the basic knowledge around joining and running student groups (mostly clubs) that usually comes with time and experience on campus; this would be complemented by the encouraged creation of group-specific documents that each club can put together to hand down to the next generation.

Of course, there are other ideas that we're tentatively beginning to plan—things like orientation—but in all honesty, I don't want to make promises that I can't keep!

**QUANTUM GOOSE: FOR THE PREZ: WHAT WAS THE SPICIEST THING YOU CAN TELL US ABOUT THAT YOU HAVE EVER ENCOUNTERED IN YOUR SERVICE AS CHAIR OF THE BOARD?**

**Ben:** I'm sworn to secrecy, but if you really want to know

[REDACTED]

**QUANTUM GOOSE: FOR ALL EXECs: FAVOURITE INEWS FOOD ITEM?**

**Ben:** Wasabi sushi!

**Staphylococcus epidermidis:**



**Catherine:** It's no Math C&D, but iNews coffee is 2%.

**Matthew:** I've got to echo the above, the coffee's great when the C&D's closed. If you really want in on a secret, the whole SLC/PAC renovation was initiated so the WUSA execs wouldn't have to go outside to get to the Math C&D in the dead of a Waterloo winter.

**CLASSICAL GOOSE: PLEASE PLEASE PRETTY PLEASE CAN WE HAVE A GOOSE MASCOT?**

**Steven Yeun:** Storytime! In 2018, there was actually a motion submitted by then Science Councillor Seneca Velling that asked: 1) WUSA adopt the Goose as its mascot, 2) Council create the ad hoc "WaterFowl Mascot Committee" to determine naming, design, and style of said Goose, and 3) WUSA lobby the university to change its mascot from the ski-goggle wearing lion to the Goose. The motion passed, but it sort of just stagnated there. Two years into it with little progress, Council decided it was probably best to dissolve the ad-hoc committee.

On one hand, it's sort of a shame because I'm all for the Goose being our official mascot. On the other hand, I think part of why the Goose is such a powerful symbol is because it was always a very grassroots, student-driven thing. I like the idea that we as students can formulate our own collective identity independent of the University administration.

Point being, who needs validation from any official bodies. If you believe the Goose is the embodiment of UW, that's all that matters. Mr. Goose is made real by those who choose to believe in his mighty honk.

**Ben:** The goose is our one true lord and saviour.

**ABALD MAN: WILL THE NEW BOMBER HAVE BOOZE?**

**Matthew:** Yes, this is the plan.

**PSYCHGOOSE: HOW DO YOU PLAN TO GET BACK FEDS HALL?**

**Stepmom:** Arson.

**Matthew:** It's a hard, long-term issue, but we're aiming to make some solid headway. The first step we're planning is to hold a referendum on the issue so that you the students can vote on setting this as a priority. We know that students care about this, but by having a referendum, we get a hard mandate that we point at whenever the university tries to defend the seizure as being in the best interests of students (which they did and continue to do). The next steps from there are a bit touchy, but I'm confident we can make good progress at the very least.

**Catherine:** I say we just walk in and never leave.

**YOUR LOCAL WEATHERDUCK: FAVOURITE BUBBLE TEA SHOP AND FLAVOUR?**

**Step-bro:** Sweet Dreams because I'm a simp for non-franchise local businesses.

**Matthew:** I'm afraid bubble tea just isn't my thing. Nowadays my liquid intake consists only of water and black coffee, and I wouldn't want it any other way.

**Catherine:** I've most certainly had more bubble tea from Sweet Dreams than anywhere else via MathSoc events. I usually order the giant tubs of Hong Kong Milk Tea and Mango Green Tea, and then scramble to find someone with a car who can help me get it to MC Comfy by 6:30pm.

**YOUR LOVELY CONSTITUENT ♥♥♥: HIII!!!!!! I, LIKE, LOVE LEADERSHIP FIGURES!!!! WHAT'S YOUR, LIKE, FAVOURITE THING ABOUT BEING A STUDENT LEADER???? THANKS!!! <33**

**Ben:** The friends we made along the way! The time I've spent with WUSA has also been full of experiential learning in the same way that co-op is for many students. Didn't know how to chair a formal meeting before I started student politicking.

**Stepladder:** All of my amazing fans!

**Matthew:** I'm attracted to pretend power that props up my ego.

**Catherine:** Who, me? 😊

**TENDSTOFORTYTHREE: WHAT ARE YOUR FAVORITE NON-DUCK NON-DUCK NON-GOOSE ANIMALS?**

**Ben:** Hoomans are pretty neat animals if you think about it.

**Step4work:** Sneks.

**Matthew:** Octopuses (no, not octopi) are some damn cool animals. Strongly endorse.

**Catherine:** I've taken a particular enthusiasm to rhinoceroses in the past year! It's a real shame that poaching has basically taken out the Northern White Rhinos though. 😊

**TENDSTOFORTYFOUR: WHAT ARE YOUR LEAST FAVORITE NON-PD COURSES?**

**Matthew:** Hmm. I wasn't a huge fan of BU 283: Financial Management I (that's BUS 283W for you non-Laurier folk), but that's wholly because of how the course was delivered (an awful attempt at a flipped-class model that boiled down to the prof doing as little as humanly possible). Here at Waterloo, I suppose I didn't like MATH 239, but I do wish I could go back and try it again in a less busy term. Honestly I love math and math courses, and my biggest regret is having competing obligations that mean I can't give the courses my all.

**Catherine:** Okay when I answered this I thought it asked for my favourite courses and I don't feel like changing my answer(s?): MATH135 ♥ (also, MATH 235) (also, MATH 237 online is really good. Like... so good. I got 65% in the course but that's on me. What a course. Everyone take and review MATH 237. The course-constructors really outdid themselves.)

**PSYCHGOOSE: I HEARD YOU WILL BE INTRODUCING A 5<sup>TH</sup> EXECUTIVE OFFICER: VP CAT. COULD YOU TELL US MORE ABOUT THEM?**

**VP Cat's Human:** The VP-Cat will be responsible for making sure UW students get an appropriate amount of cuddles, as recommended by their family physician.

**ANONYMOUS STUDENT: CAN YOU ESTABLISH A COMMITTEE TO ADVOCATE FOR THE ABOLISHMENT OF PD?**

**Ben:** At the Annual General Meeting on March 27, delegates voted to invite representatives from WatPD to speak to Students' Council about concerns surrounding PD. I suggest contacting your councillors to tell them how you feel so they are ready to share student experiences with the program. I wouldn't hold your breath on PD abolishment though, since UW gets that sweet operating grant cash for keeping students



enrolled at the school during their co-op terms. In general, I think students are better off when UW has more money.

**225% LIFER: I'VE BEEN DOWN IN THE 225% MATH OVER-ADMITTANCE TRENCHES FOR TWO TERMS NOW AND LIFE IS HARD MAN. HOW ARE YOU GONNA MAKE SURE THAT DON'T GONNA HAPPEN AGAIN?**

**SYM card:** So, first of all, I think it's important to understand how we even got here in the first place. When it comes to acceptance letters, pretty much every university accepts more students than they expect to take in. This is to account for the fact that not every student who's offered a spot ends up taking it; some will choose to attend other universities or other programs. Underestimate the students who decline, and you end up with a sparsely populated program. Overestimate, and you end up with the clusterfuck we see now. As a university, you really want to be aiming for that sweet spot.

Now, the university isn't just pulling numbers out of its ass. It determines the likelihood of each student declining the offer based on their incoming average, what other programs/schools they applied to, and how high they ranked UW. It then determines how many students it should be accepting from the current year's applicant pool (given their unique attributes) to end up with the targeted cohort size.

Needless to say, past trends aren't always the most reliable predictors of future behaviour. Sometimes, if the university has reason to suspect that some new event will alter past trends (say a competing university makes a new program in the same discipline), it will tweak the numbers accordingly.

Apparently, even with the tweaks—applicant behaviour was *way off* from what UW predicted, hence the 225% over-admittance. Pretty much every university and program over-accepts at one point or another, but usually not to this degree.

Moving forward, 1) It's critical that groups like WUSA and MathSoc make sure that the University allocates additional resources to this mega-cohort to ensure they're not just left fighting for scarce resources like fucking hyenas, and 2) I think we need to have a serious conversation about how the university approaches acceptances. Sometimes, estimates will be off. That's life. But are the downsides of under-acceptance and over-acceptance actually equivalent? Moreover, if this is always a risk—shouldn't we have a plan/resources set aside?

**FOSSIL FUEL DIVESTMENT: THOUGHTS ON VINCENT MACRI?**

**Stéphane Dion:** Apparently, he might name his first-born after me? I did not consent to this.

**Matthew:** I suppose I do owe him some personal thanks for some "support" back in Fall 2019, and besides that he's a really passionate student advocate that only sometimes takes it too far :)

**Catherine:** Vincent would be a terrible enemy to have, so I'm glad he's (usually) on the same side as me.

**VINCENT MACRI: THOUGHTS ON FOSSIL FUEL DIVESTMENT?**

**Ben:** Good for the Earth, our society, and your portfolio.

**Matthew:** Broadly very positive. Environmentalism on our campus is, in my opinion, one of the many issues WUSA has a duty to students to pursue and support.

**Catherine:** Fuck yeah.

**ABALD MAN: WHAT WILL BE THE STRONGEST LIQUOR I CAN ORDER AT THE NEW BOMBER?**

**Ben:** Plz drink responsibly.

**Ste(v|ph)en:** Hand sanitizer.

**Matthew:** We believe in the rugged individualism of our students, and thus will only be providing a do-it-yourself drink consisting of raw wheat and barley.

**Catherine:** Apparently the lethal dose of 100% isopropanol for human adults is only 250 ml, so do with that what you will.

**DWIGHT SCHRUTE: FAVOURITE CUSS WORD(S)?**

**Ben:** Unprofessional *reeeeeeeeeeee*.

**Stevanie:** "F\*cking titshit" is a phrase I've been using a lot recently.

**Matthew:** \*\*\*\*, \*\*\*\*\*, and \*\*\*\*\* all roll off the tongue.

**Catherine:** "Fuck" is very versatile.

**YOUR WORST ENEMY: WAP — GOOD OR BAD?**

**Auld Lang SYM:** Well, \*I\* personally enjoy sum wet ass pussy.

**Catherine:** Tolstoy's *War and Peace*? I dunno, never read it. Heard it's long.

**Auld Lang SYM (again):** Guys, you weren't supposed to expose me!

**MICHAEL SCOTT: HOW WOULD YOU INSULT YOUR WORST ENEMY?**

**Ben:** Think for three days about what to say then lack the courage to say it aloud.

**斯蒂芬妮·叶·莫威:** "What, you egg!" \*stabs\*

**Matthew:** "Yeah, you probably should major in business."

**Catherine:** Not an answer to this question but omg i love Michael Scott.

[Continued on page 14.]

## warSOC V — ALL OUT

"I recommend you leave, Sarah. I haven't finished with this woman's mind." The goose says.

*How does she know my name?* My gaze drops from that magenta abomination. To poor, limp Salis—and I'm suddenly all rage. I reach out and feel the anti-mathematics invading Salis' mind. But it's... not actually math? It's contradictions of language. Anti... Anti-linguistics. I focus them down. *Unrelentless.* *That's not a word. And... that's not how you use subjunctive mood.* Protecting what's left of Salis' English. Her mind. *This is what I joined warSOC for.*

The goose stops. "Oh, Sarah. You shouldn't have." She turns to me, spreads her wings—a flower unfolding—and flaps them, sharply, gracefully, once.

My mind explodes. The Four Color Theorem, Banach-Tarski, lemmas, algebraic equations and hundred more mathematical artifacts blast their way into my head. *Crap crap crap tha's nasty anti-math.* Everything she put in my head is fundamentally *wrong*, contains *contradictions*, but unless I can disprove it, it'll stay. Supplant the real math like a cancer. Eat me alive.

And I can't figure out any of it. I'm on the ground now, writhing and yelling. Name once told me twenty-seven was a prime to demonstrate anti-math. She didn't prepare me for *this*. The order in my mind slides away. My numbers, my rules, my logic—it *doesn't make sense anymore*. I'm drowning.

Violent shivers take me as the goose devours my mind. My rationality gives way. It feels oddly familiar, just like... just like...

My first time in Theorem-space.

The tie. I open my eyes. It's right in front of me. I stop struggling against the anti-math, letting it ravage freely. *I'll be lucky if I can add after this.* I turn my concentration to the tie instead, grabbing it and making a quick knot around Salis' wrist—it'll protect her from what I'm about to do.

I start the Theorem-space entry procedure. A little algorithm I held onto when throwing everything else away to the anti-math. My ace in the hole. The goose has noticed. She redoubles her attack. It's too late.

My algorithm completes, and with a ferocious roar the room collapses into Theorem-space. I let go of my pink tie—its shielding force floats away with Salis—and the full power of Theorem-space crashes through me. The anti-math shrinks in my mind from obsidian wall to rice paper facade. I tear it apart.

I turn to the goose, and she recoils, flees, but I'm right behind. *I'm angry now.* I start assembling a massive anti-mathematics attack; in my current state, it's easy as counting. Not much time—Theorem-space is consuming me, and my brain shudders and creaks like an overloaded joint.

"You're... You're insane, Sarah!" The goose screams, flinging a few desperate anti-math strikes which I dispel effortlessly. I hurl the last vestiges of my slipping consciousness into finalizing my own attack. A titanic labyrinth of falsehoods.

I stay conscious just long enough to slam it straight into the magenta menace's mind.

*To be continued...*

CC

## EPISODE 18: HARMONIC SERIES + CALL FOR APPLICATIONS

Enjoy the last episode of MathSoc Cartoons this term: *Harmonic Series!* Want the next episode to be created by YOU? Apply to become a Spring 2021 Writer and/or Artist at [bit.ly/join\\_mathsoc\\_cartoons](https://bit.ly/join_mathsoc_cartoons)! Applications close April 30.

CALLING ALL CREATIVES!

# MATHSOC CARTOONS IS NOW HIRING!

PAID POSITIONS AVAILABLE

- COMIC WRITER
- COMIC ARTIST



APPLY BY APRIL 30, 2021, 5PM EDT:  
[bit.ly/join\\_mathsoc\\_cartoons](https://bit.ly/join_mathsoc_cartoons)

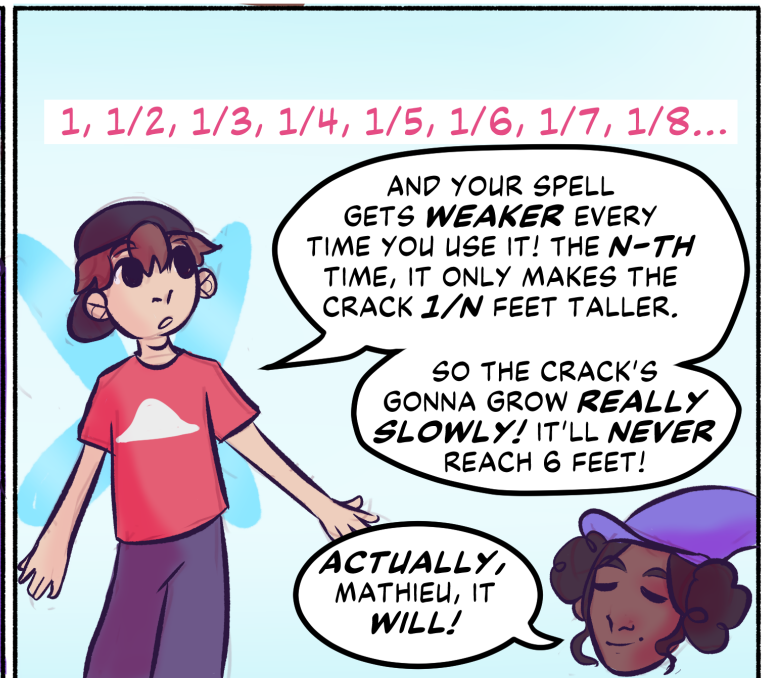
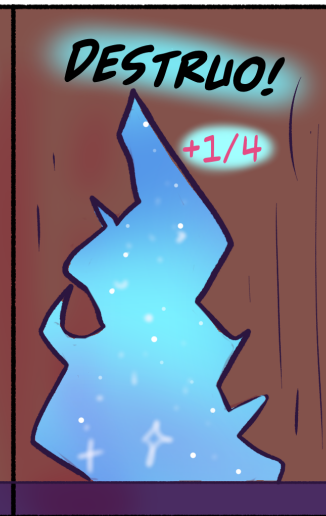
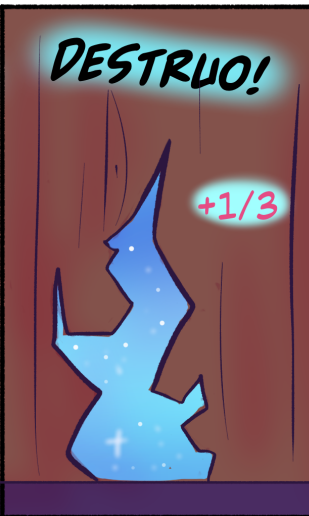
Ava Pun

It just got provitized.

PROF. FRANK ZORZITTO

**MATH 138: HARMONIC SERIES**

STORY BY AVA PUN | ART BY ISABELLA SCOTT



$1 + 1/2 + 1/3 + 1/4 + 1/5 + 1/6 + 1/7 + 1/8 + \dots$

LOOK. THIS IS AN EXPRESSION FOR THE CRACK'S HEIGHT, RIGHT?

YEAH. THAT'S CALLED THE **HARMONIC SERIES**, ISN'T IT?

**DESTRUO!**  $1 + 1/2 + 1/4 + 1/4 + 1/8 + 1/8 + 1/8 + 1/8 + \dots$

IT IS! BUT WHAT IF THE CRACK GREW LIKE *THIS* INSTEAD?

WELL, THAT'S JUST THE HARMONIC SERIES, EXCEPT SOME OF THE TERMS ARE **SMALLER**. SO IT'D GROW **EVEN MORE SLOWLY**.

$1 + (1/2) + (1/4 + 1/4) + (1/8 + 1/8 + 1/8 + 1/8) + \dots$

YEAH! BUT IF I GROUP THE TERMS LIKE THIS...

$= 1 + 1/2 + 1/2 + 1/2 + \dots$

...IT BECOMES A SUM OF **INFINITELY MANY 1/2'S**, WHICH **DIVERGES TO INFINITY!**

AND SINCE THE TERMS OF THE HARMONIC SERIES ARE **AT LEAST AS BIG** AS THE TERMS OF THIS SERIES, **THE HARMONIC SERIES DIVERGES TOO!**

I CAN MAKE THE CRACK **6 FEET TALL!** I CAN MAKE IT **1000 FEET TALL!** I CAN MAKE IT—

**MATHIEU WINS!**

...TALL ENOUGH FOR A FAIRY.

THAT CHALLENGE WAS **SERIES-LY EASY!**

# CONGRATULATIONS CLASS OF 2021

*Good evening students, family, friends, faculty, and staff. This month is a special month. It is the month that the Math Class of 2021 finishes their final term at UWaterloo. Congratulations, your journey has come to an end after five years of hard work and now your next chapter begins. I know this past year has been incredibly stressful, but you have made it, and will continue to succeed. The global pandemic still rages, so convocation will again be delivered online this year. As part of the virtual ceremonies, I have invited UW alumni Barry Bilmore to deliver a speech in mathNEWS. Barry Bilmore graduated with a BMATH degree in 1975 and went on to become a CEO of his self-founded business and is currently a billionaire with hundreds of employees in offices worldwide. Please join me in welcoming Barry “Billionaire Boomer” Bilmore.*

FERIDUN HAMDULLAPUR

Hello Class of 2021,

Today I have an important message to deliver to you. I also believe this will be of interest to any current co-op students. The greatest concern of young people like you today seems to be regarding careers, especially during this recession. As a baby boomer, I have been in the industry for a while now, and wish to impart my wisdom upon you.

Firstly, I envy you all. I really do, from the bottom of my heart. Many of you are struggling to find jobs, to pay rent, etc. due to the challenges posed by the pandemic. I envy you because life has presented you with a challenge at such a young age, one you will gain countless lessons from. There were no pandemics when I was your age, the boomer generation never suffered anything like this, so I will never be able to experience what you did. I truly envy you all.

Instead, what I have been experiencing is spending time on my private yacht, away from the cities to avoid the coronavirus. There are no real challenges from the way I am currently living: drinking martinis, relaxing everyday, safe from the virus, looking at the beauty of the sea. There are no lessons to learn from this unending vacation, to me it almost feels like there is no recession, because I face no challenges. So I envy you all.

Recently, the biggest struggle for me was having to make the decision of laying off a few hundred workers at the factories I own. The factory is temporarily closed due to the pandemic, so I had to choose between keeping the workers on a payroll or firing them to save about less than 0.1% of my wealth. I am working towards my second billion (my current net worth is \$1.9 billion), so every cent I lose is a major setback towards this lifelong goal. I am sure they understood. You, the Class of 2021, on the other hand, are currently not faced with such strenuous decisions, as your adult lives have only just begun. So I envy you all.

I understand you all have a lot of hard work ahead of you in this pandemic and recession. I did not have the exact same challenges as you, but I too understand hard work and can sympathize. Becoming billionaire took a lot of hard work—every inch of my body in fact. I had to convince my father, who was a billionaire, to give 99% of his inheritance to me rather than splitting it evenly with my sister. If there is one regret in my life, it would be not convincing him to give me all 100% of it. I am sure that if there was a pandemic going on, I would have been driven to get that last 1%. However, there is a pandemic going on for you, and so you are driven. I truly envy you.

I think I have made it clear that you are in a great position right now, a position to make a billionaire envious. So I will leave you with some advice.

First: do your part in society. If you want the world to recover, for the economy to recover, for jobs to come back, then help fight the coronavirus and follow social distancing. I have done this by completely leaving the cities on my yacht, and have been living with just myself and my immediate family. I encourage you all to try to do the same, rather than living in your houses and apartments, in your dense cities. Stop sitting at home and get a yacht.

Second: share your wealth. These times are dire and many people need donations more than ever before. I have not seen much sharing happen. Instead, to my concern, I have seen a trend of people entering financial markets, in hopes of enriching themselves. In the past months, many of you have entered day trading, as evidenced by the GME short squeeze fiasco. You disrupted the livelihoods of hedge funds. Take for example the family-owned business Melvin Capital, which has lost over 30% of their fund. I can't believe how stressful that would have been during this pandemic, and my heart goes out to them, and any other billionaires who have been taken down a notch to millionaires.

I thank you for listening to my wisdom and wish you all the best in the next chapter of your lives. Good luck, and goodbye, Class of 2021.

Barry “Billionaire Boomer” Bilmore  
(BMATH '75)

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## A mathNEWS ARTICLE IN SIX WORDS

For sale: pink tie, never worn.

Predap

# MATH MAJORS AS X-MEN BOOKS

The X-Men comics line has been going strong the past couple of years ever since Jonathan Hickman revitalized it with the groundbreaking *House of X* and *Powers of X*. With the Hellfire Gala fast approaching, I figured I should try and determine which book you (yes, you) should be reading, and what better approach is there than making quick generalizations based off of program?

## ACT SCI: X-CORP

You enjoy using your business skills to make a difference. It can be a lot of work, though. You might even wish you could be multiple people, to get more done quicker.

## ALUMNI: X-MEN LEGENDS

If you're still reading **mathNEWS**, you probably are trying to relive the days when you were on campus, because you have a lot of nostalgia for that time.

## APPLICANTS: GWENPOOL STRIKES BACK

You may have a few different options you're hoping for, and Waterloo might not even be at the top of your list. But if you work hard enough and keep hope, there's a good chance that you'll get that acceptance that you're looking for.

## APPLIED MATH: GIANT-SIZED X-MEN

You take the basic mathematical concepts and put them on the page in a way that really manages to make a difference, using a wide variety of different concepts in order to do so. The solution depends on the problem, not the other way around.

## C&O: WOLVERINE

You're the best there is at what you do, and what you do is finding the best way there is to do things. While an integral part of any Math education, you're often ignored in favour of other aspects of the subject.

## CFM: DEADPOOL

You're a part of the Math faculty, but sometimes it seems like you exist completely separate from it. Not to worry, you'll still have the occasional shared courses to help keep you attached to the main faculty.

## COMPUTATIONAL MATH: X-FORCE

Your work lies on the foundation of a lot of what's happening in Math today. You have a wide set of skills that can be applied to solve a bunch of different problems, and it'd be useful for other students to pick up a bit of your expertise.

## CS: EXCALIBUR

There are a ton of different threads moving throughout your degree, but for the most part you manage to pull it all together. You're one of the biggest majors in the faculty, even though you might seem pretty different from Math at first glance.

## DATA SCIENCE: X-FACTOR

It's in your nature to investigate into patterns, and to try to find solutions to the chaos of life. People come to you for your analytical abilities and your knack for finding the answers that help everyday life continue on.

## DOUBLE DEGREE: HELLIONS

You're heavily cohort-based, and you're torn between two camps. It may require some overloading, but what you do is important, and you face some of the greatest challenges of any Math program even if some of the other Math majors will never see it.

## FARM: MARAUDERS

You like to help others through Math, whether through helping them keep themselves and their families safe or through making deals for trade and investments. Your program name is a bit misleading to those unaware.

## GEOMATICS: CHILDREN OF THE ATOM

You may not have gotten what you wanted if you applied to Math or CS, but at least you have your foot in the door. Maybe you can take some Math electives and still try to get closer to your goals.

## MATH/BUSINESS: FALLEN ANGELS

You're like Double Degree, but you're missing a few of the courses that make them unique. Don't let that discourage you! You have more freedom, so add some electives and try to enjoy your degree, even if those around you forget about your existence.

## MATH/CPA: SWORD

You may be a Math student, but you're also working to receive the accreditation of an external organization. Your unique skill sets are appreciated by all and you can be of use in whichever field you so choose, anywhere across the universe of work.

## MATH FINANCE: EMPYRE: X-MEN

You take a wide range of courses; it can seem like pretty much every professor's involved in your education. You're a combination between more general Math stuff and what Act Sci students learn.

**MATH PHYSICS: JUGGERNAUT**

You're all about motion and the physical; you split the difference by doing a lot of Math, but you don't confine yourself to the one faculty, spending a lot of your time doing other stuff too.

**MATHEMATICAL STUDIES: X-MEN**

You're the most flexible of all the majors, focusing on a wide array of courses. Some of your courses may be great, and some of them may be sub-par, but you have room to figure out what you want, even if you may not attain the depth of the other majors.

**MATH/TEACHING: NEW MUTANTS**

You used to be a student yourself! Therefore, you're willing to help others through the struggle of figuring out who they are and how, exactly, to factor quadratics. You've probably gone through a few phases before settling on your current major.

**PURE MATH: WAY OF X**

You're concerned with the hows and whys of Math. You're willing to dig for answers where the other majors may only take a surface level look, and you know that the answers you find, whatever they are, will be worth the trouble.

**SOFTWARE ENGINEERING: X-MEN/FANTASTIC FOUR**

You're close enough to Math that you're basically considered Math... but it's right in the name of your program that you're Engineering. Who knows, maybe the Dean of Engineering will take away the Math portion of the degree midway through your studies... I'm still bitter about what happened to Franklin Richards.

**STATISTICS: CABLE**

Your major might seem complicated to the uninitiated, and new students might dread being introduced to it. There are still some tricky bits, but you know it'll all make sense by the end of the degree, even if you'll grow old by the time that happens.

**UNDECLARED: UNTITLED VICTOR LAVALLE VILLAIN BOOK**

Nobody quite knows what you're going to become yet, and that's okay! It's alright to take your time, and even if you end up being about Sabretooth, you're sure to succeed and find your own niche.

Predap

# TEMPORARY SUSPENSION OF MEF SPRING 2021 VOLUNTARY STUDENT CONTRIBUTION (VSC)

WATERLOO, Ont. (April 3, 2021) – As the COVID-19 pandemic continues to impact the experience of the University of Waterloo Mathematics undergraduate students, the University of Waterloo Mathematics Endowment Fund (MEF) remains committed to improving undergraduate mathematics education.

Furthermore, acknowledging the unusual circumstances arising from the impact from the pandemic for the undergraduate Mathematics student community, who are the contributors and beneficiaries of the fund, and among other considerations, the Board of Directors of the fund have taken the decision to temporarily suspend the collection of the Voluntary Student Contribution (VSC) of \$31.42 ( $10\pi$ ) for full-time Mathematics undergraduate students enrolled in the Spring 2021 term. The VSC collection for MEF was also previously suspended for the terms of Spring 2020 and Winter 2021.

As a part of the fund's mandate to support and benefit the mathematics undergraduates through our funding grants, MEF is still committed to providing support through the student-led and student-decided Project Funding and Professional Development Funding grants through the duration of the pandemic and welcomes proposals on initiatives and ideas that align with this mandate. In fact, MEF has provided over \$300,000 in funding grants in the past year.

MEF strives to increase the impact of the fund in improving undergraduate mathematics education through the contributions to the fund by the Mathematics undergraduate students at the University of Waterloo. To learn more or to submit a proposal for funding grants from MEF, please visit <https://mef.uwaterloo.ca/>.

Mathematics Endowment Fund

## A FUNNY PUN

He's awake at seven AM. He punctually attends class. Very few students are there that early. He learns Racket, back then just pure, very pure, state hasn't been taught yet. He's a huge fan. Pure means easy and understandable. He may learn the truth later, after fall term.

grafarg

# mathASKS PART II

## THE EMPIRE STRIKES BACK

[Continued from page 1.]

### THIRD PAGE (AS IN THIRD BEER) CC: IS WUSA HOT OR WHAT??

**Catherine:** You're hot then you're cold you're yes then you're no

### ALYSSNYA: NOT A QUESTION BUT CAN YOU ALL SUBMIT A DRAWING OF A GOOSE DONE IN MS PAINT?

**Catherine:** Unfortunately not Paint, but we tried.



### A MATH COUNCILLOR: A CONSTITUENT ASKED ME "WHAT DOES WUSA DO?" HOW SHOULD I HAVE RESPONDED?

**Catherine:** WUSA is a student union! That means that our core role is representing and advocating for students to other bodies: the University, the government, the extraterrestrial visitors from other galaxies, etc. Most of what you associate with student life, like clubs, also run through WUSA. (Thus my job!) We also negotiate and facilitate everything surrounding the bus pass (no, it's not free; yes, it saves you money) and the health plan (the best drug plan in the country!!!!).

**Stefani Ye-Mou:** \*Chanting DRUGS DRUGS DRUGS in the background.\*

**Matthew:** Catherine broadly hits it really well. WUSA is a really big organisation, and much of the stuff we do is firmly in the background (unless something goes wrong, when it's suddenly on the top of r/uwaterloo and everyone's an expert on the subject all of a sudden). In a sentence, WUSA does the heavy lifting to allow students to personally and professionally succeed. That means advocating to the university to change policies and practises to make the academic mission more attainable for students. It means doing the financial and support work so that club execs can focus on their clubs' subject matter and noton renting space, managing finances, purchasing liability insurance, and charging huge fees to support all this work. It means negotiating the best bus pass, healthcare, and campus supports that save students money and allow them to go about their education without as many

worries. Broadly, it means all these things and more that are normally invisible but hopefully provide as much value to students as possible.

### AN N-JINEERING GOOSE: GIVEN THERE ARE 2 MATH STUDENTS IN THE EXEC TEAM, SHOULD I BE SCARED?

**Catherine:** v

**Matthew:** e

**Catherine:** r

**Matthew:** y

**Ben:** Oh god the hivemind

### A COOL PEN NAME: WHAT DO YOU PLAN TO DO ABOUT THE N-JINEER PROBLEM ON CAMPUS?

**Ben:** This question is problematic.

**Steppy Yeeemo:** Stop bullying the engineers!

**Catherine:** I think I ran on team Take the Tool once for Councillor, but I don't think I'll be able to do that again for a while.

**Matthew:** I was also on Team Take the Tool, as well as involved in some more clandestine operations once upon a time, but I think those days are behind me what with my legal obligation to all students or whatever.

### BOLDBLAZER: DO YOU THINK THERE SHOULD BE MORE FREQUENT SERVICE ON THE KITCHENER LINE BETWEEN WATERLOO AND TORONTO?

**Sniffing Ye Boyeeee:** 2WAYALLDAYGO!!! It's happening. I excite!

**Matthew:** I really like trains—fast trains—and I want more of them. Rail expansion along that corridor has been and will continue to be a priority for WUSA's advocacy, and I say that both as a responsible student representative and as someone who spent every weekend of a co-op term riding back and forth between Waterloo and the northern end of the GTA (some people can really motivate you to do that to yourself ♥).

**Catherine:** Please omg. Every time I've tried to take it to Toronto the train didn't even make it to the Kitchener station and I had to take the bus anyway.

### ION TRAIN 501A: FAVOURITE GRT BUS ROUTE? FAVOURITE ION STOP?

**Ben:** 202 iXpress is good stuff. Waterloo Park Station is nice.



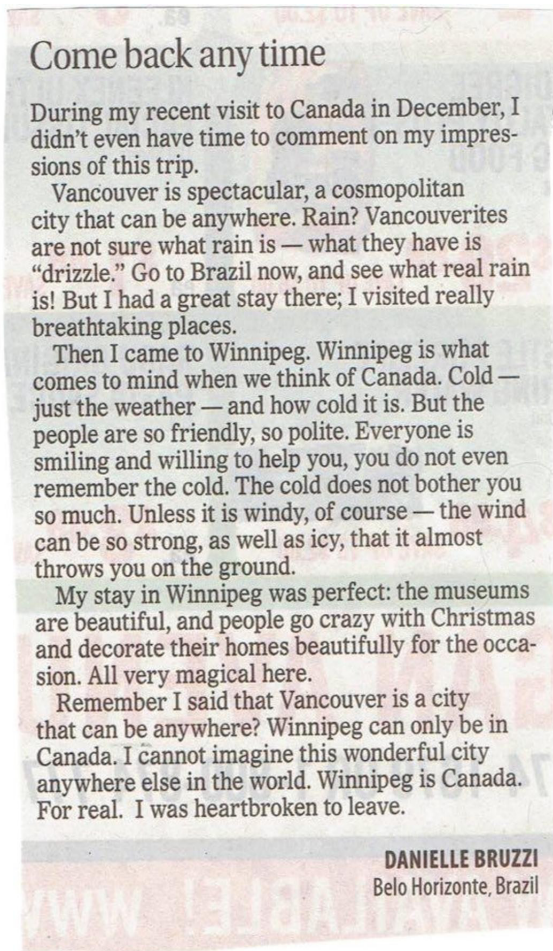
**Steffany Yi-Moe:** In first year, I was dumb and lived out by Erbsville and Columbia (basically the middle of nowhere). The closest bus stop was the 13—which does this little loop through the suburbs before it actually heads to campus. Anyway, if I missed the bus (which I did often), I'd basically have to run for 20 minutes to catch it at CLV if I didn't want to lose tutorial participation marks. And that's how I became a UW Chad (and also grew a love-hate relationship with the 13).

**Matthew:** I used to take the old 200 iXpress twice daily for over an hour each way back when I was an absolute idiot and lived with extended family on the far side of Kitchener. For the entirety of my first year. Don't do that. Please. I fear my MAV will never recover.

**Catherine:** Bus 13 always has a spot in my heart ♥

**A WINTERPEGGER: FOR CATHERINE: WHY IS WINNIPEG BETTER THAN WATERLOO?**

**Catherine:** There's this clip of a newspaper I saw once; it was a review from a Brazillian about their trip to Canada. I think it says everything and more.



Thank you, Danielle, for putting the feeling of home into words.

**A MANISNOWBAN: FOR CATHERINE: WHY IS MANITOBA BETTER THAN ONTARIO?**

**Catherine:** Okay. I'll admit that this is the tougher argument to win. Outside of Winterpeg, Manisnowba is pretty gosh darn empty. We definitely aren't anywhere near as busy as Ontario, but I wouldn't count that against us. There's something to be said for how the whole province feels like a hometown. There's truly a sense of camaraderie every time you meet a fellow Manitoban out in the wild. We may not have more than three cities, but we're proud to call it home.

I'll step back now to let Matthew really rip Manitoba a new one, as much as it hurts.

**SOMEONE WITH COMMON SENSE: FOR MATTHEW: WHY IS ONTARIO BETTER THAN MANITOBA?**

**Matthew:** Manitoba is the least remarkable province. It's just there. Somehow it has the seventh largest urban area in Canada, but it's still far less memorable than PEI. How is this possible? How could a province with such a valuable-seeming asset be as forgettable as I suggest it is? The pure inconsequentiality of the place. Anything could happen there and it wouldn't affect anyone. I'm told things happen there all the time, but have you ever heard of any of them? Didn't think so.

Sorry Manitoba, I love you as a loyal Canadian, but Catherine has pitted me against you.

**A COOL PEN NAME: MANY FIRST YEAR STUDENTS MISSED OUT ON THAT FUN AND FRESH UNIVERSITY EXPERIENCE THIS YEAR. NOW THAT THE WORLD HAS ANNOUNCED TO OPEN AGAIN IN SEPTEMBER, WHAT WILL WUSA DO TO ALLOW THE NOW SECOND YEARS TO FEEL SUPERIOR OVER THE INCOMING FROSH?**

.../-./. —./.../-/.//-. —./-....-/- —./-./-: I'm a little skeptical that the world is fully opening in September. We're definitely on our way there, but what “university life” looks like in September will depend heavily on factors out of WUSA and UW's control (vaccine supply, public health guidelines, etc.). Point being, this is a difficult question to answer. I'm *hoping* that we're able to offer some programming to students who missed an in-person Orientation, but that may have to wait until later into COVID recovery if it's going to make up for those lost milestones.

**TENDSTOFORTYFIVE: WHAT'S YOUR FAVORITE ART/MATH/ ENVIRONMENT? (ANSWER ACCORDING TO FACULTY)**

**Ben:** Picking a favourite art feels wrong since there is so much good art, but if I had to pick, it would be music. *Cosmogramma* by Flying Lotus has been a favourite album for me lately. Idk how someone gets that good at making music it just blows me away.

**Стефани Йе-Мау:** I simp for wetlands. One day, I hope to live in the swamp like my boi Shrek.

**Matthew:** I've really enjoyed optimisation. CO 250 and CO 370 are where it's at. I also really just enjoy linear algebra. I can't explain it, but once there's a matrix things are just so much nicer.

**Catherine:** Totally a sucker for combinatorics (she says, having yet to take MATH 239 for longer than two weeks). Also lin alg, but I think Matthew will say that. Also I secretly love stats.

**CONFUDDLING: CAN YOU EXPLAIN HOW THE VOTING/RANKING PROCESS WORKS?**

**Ben:** Exec, Senate, and Council elections use a ranked ballot, where candidates with fewest votes are eliminated and votes cast to them transferred to other candidates until somebody passes the 50% threshold. Watch the CGP Grey video (<https://www.youtube.com/watch?v=3Y3jE3B8HsE>)!

**Catherine:** Queen Lion of the Animal Kingdom is displeased.

**TENDSTOFORTYSIX: HAVE YOU BEEN INSIDE THE NEW SLC? HOW IS IT? IS IT AWESOME? ARE THERE DRAGONS? PLEASE TELL ME THERE ARE DRAGONS.**

**Ben:** I anticipate *much* awesome in the new SLC-PAC. It's been under construction since the summer after my 1B term so it feels like a long time coming.

**Smile:** I've been told that we're planning on commissioning some art/sculptures made by students—so maybe dragons through that??? Tell you what, if they ever let us back into the office, I'll hide exactly 3 dragons somewhere in SLC just for u bby <3

**Matthew:** It's very very nice; I'm really looking forward to actually going inside the expansion. I walk by it periodically, always hoping to see the rock climbing wall installed. They seem to be saving that part for the absolute end, so I'm still excitedly waiting to see it.

**Catherine:** From what I've seen: awesome. Natural light galore! The dragons continue to elude me; I think they're scared of humans.

**TENDSTOFORTYSEVEN: DO YOU HAVE ANY ADVICE FOR ANY BUDDING UNIVERSITY POLITICIANS? ESPECIALLY THOSE IN FIRST YEAR?**

**Ben:** Showing up is the most important part! Lots of opportunities arise from being in the right place at the right time. I probably sound like a boomer.

**Sweet:** Don't. (Real answer: Get involved early. Low-key upper years *love* it when they see first- and second-years getting involved. It gives them hope that the organization won't just, y'know—burn down the second they leave. It's fine if you don't know everything. Ask questions. Take risks. People *will* support you and are rooting for you. And if anyone is being a cliquey dipshit, hit me up and I *will* fight them.)

**Matthew:** A big thing that lots of people don't seem to realise is that you don't have to wait for the "perfect opportunity" to get involved at certain times of the term or the year; WUSA being a corporation with you as a legal member mean that you can attend and speak at Council meetings, many committees, and other bodies. Just show up and speak and you have a lot of power to shift conversations (especially because your word is often given extra weight as a real, at-large student rather than just a student representative like the rest of the room) and as Ben said, just being in the room exposes you to a lot of opportunities that just aren't broadly available. WUSA Council meets one Sunday a month and it's very very easy to join the meeting and just pay attention to parts you care about. Email [speaker@wusa.ca](mailto:speaker@wusa.ca) and they'll send you an invite and the agenda, and you can make the biggest step towards getting involved and having an impact by joining our Council meeting next Sunday (April 18). Come to the meeting in May as well and you can get appointed to a committee and you can have an actual vote to decide how things are done.

I sincerely hope to see you there; you've got my support!

**Catherine:** JUST DO IT !!!! (Honestly, I just saw a poster above the garbage bins advertising the First Year Representative position for MathSoc Council, said fuck it, and turned in my nominations. it really snowballed from there. My advice if you're interested in getting involved is just to find an opening, get in the room, and talk to everyone there.)

**A COOL PEN NAME: HOW DO YOU ADD MORE ROWS TO THE mathASKS QUESTIONS TABLE?**

**Matthew:** Apparently be as popular as we are and someone will figure it out.

**Catherine:** Try hitting the tab key in the last box?

**TENDSTOFORTYEIGHT: WHY DO WE PAY FOR MICROSOFT OFFICE 365 IF EVERYONE USES GOOGLE DOCS ANYWAY?**

**Ben:** I love Office! Call me a narc all you want. Integration with the University's IT services is useful as well.

**Catherine:** Lol I think it's cheaper (also something something international student population).

**ALEPH NULL: WHAT IS TENDSTOFORTYSOMETHING TENDING TO?**

**Sister:** Communism.

**PSYCHGOOSE: IF YOU COULD WRITE AN ARTICLE OF YOUR CHOOSING, WHAT WOULD IT BE ABOUT?**

**Ben:** Communism.

**Matthew:** I've written many articles before (you'll never find them!), but if I were to write one now, it would probably be a slightly longer piece that outlines the real stuff going on in WUSA now to make it easier for students to understand what's

happening with their money and student union (actually I think I might do this).

**PSYCHGOOSE: WHICH EMAIL PROVIDER DO YOU PREFER? GMAIL OR OUTLOOK 365?**

**Matthew:** I certainly prefer Gmail, and I've enjoyed the past few years of Laurier using it rather than Outlook. Alas, they seem to be planning to switch over soon. 😊

**Catherine:** I'm a sucker for Gmail (especially the support for multiple inboxes).

**PSYCHGOOSE: WILL YOU FORBID NJSOC FROM HAVING 2 SEATS?**

**Ben:** I want to get rid of CoPs (the Committee of Presidents) and create a new Society Relations Committee of Students' Council. Ideally, this group will help society executives co-ordinate and share information with WUSA. While EngSoc A and B will always be distinct entities, representing different student populations (as recognized by the Societies MoU), Students' Council is ultimately responsible for deciding on the voting membership of its committees.

Tl;dr: no, WUSA pres cannot forbid this, nor should they.

**TENDSTOFORTYNINE: WHAT IS THE OFFICIAL INCOMING WUSA TAKE ON THE ALLEGATIONS OF THE IMPOSTER BEING SUS?**

**Catherine:** Vote them if not them then me.

**GOD ⚡ PEED: THIS IS NOT A QUESTION. I'M SORRY WE LET THEM DO THIS TO YOU.**

**Sadistic:** I'm having flashbacks to this year's Reddit Instagram AMA. MikeUsedToWorkAtBestBuy will continue to haunt me until the inevitable heat death of the universe.

**Catherine:** I'll die trying.

**ME: WHAT'S YOUR FAVOURITE PD?**

**Ben:** I disliked them all pretty equally, but ethical decision making was the only one that made me think critically fwiw.

**Surprise:** Knowledge Integration has a program that's \*like\* co-op, but not really. It was recommended \*but not necessary\* that we enroll in a PD course. Anyway, I opted the fuck out of that. So none? All? A non-existent PD is a good PD.

**Matthew:** As a double degree co-op student registered with Laurier, I don't know what this PD thing is and at this point I'm afraid to ask.

**Catherine:** I liked the ones back in grade school where it meant we had a day off.

**I'M BEING SERIOUS HERE: BACK BEFORE THE PANDEMIC, I WOULD SEE EVERY ONCE IN A WHILE THAT THERE WAS A UW STUDENT THAT COMMITTED SUICIDE. DO YOU THINK THE RATE HAS STAYED THE SAME DURING THE PANDEMIC OR NOT?**

**Service:** Honestly, I'm not sure. I definitely think that as a whole, we're lonelier, more stressed, and more disillusioned than ever. I know that for many students university (while stressful in its own right) offered an "out" from things that maybe weren't so great at home. For others, home was the safe space and now it's either inaccessible or disrupted.

A lot of us are not in the places we want to be—that give us peace. And it's fucking hard. I think though—that with all of the misery that comes with how things are now—is the reassurance that this is only temporary.

I can't speak for everyone, but I think to commit suicide you really need to be thinking in terms of finality. The idea that things will always be this way. That ending the story here—with this as its conclusion—is a decision you're ok with. And, I dunno? I just find it hard to think about finality right now. Not when the future is filled with so much uncertainty. The world has changed and continues to change in some pretty dramatic ways. And yes—it's overwhelming, but it can also be strangely reassuring.

If I *had* to guess, I think many folks who were (or still are) in that headspace are waiting to see what happens next. Which, of course, begs the question—where do we go from here?

**Catherine:** I really love what Steph said. I *really* love what Steph said.

**CONGRATULATIONS: ON HAVING THE MOST QUESTIONS LISTED FOR A mathASKS!**

**Ben:** Never thought I'd see the day.

**Matthew:** I am so glad we're online and you're not going to print hundreds of copies of this (at least at delivery time) 21-page document.

**Staph:** ...22 pages now actually. Whoops? [Editor's Note: Please send help I'm literally dying.]

**A COOL PEN NAME: AS ELECTED LEADERS IN THE UNIVERSITY, HOW DO YOU FEEL ABOUT mathNEWS ~~DICTATORS~~ EDITORS THREATENING TO RESERVE THE LAST SPOT OF THE mathASKS?**

**Ben:** I love democracy.

**Stetson:** "Editorial Independence"???

**Matthew:** The long arm of the Publications Board will catch up with them sooner or later. [Editor's Note: Oh God.]

**JEFF:** HI :)

**Matthew:** Hello hello hello!

**Catherine:** Hey!! :D

**A MEDITOCRE KITTY: TO ALL: AS WUSA EXECs, YOU ARE GOING TO BE ENCOUNTERING MANY STUDENTS WHO HAVE DIFFERING OPINIONS ON HOW CAMPUS SHOULD CHANGE FOR THE BETTER. HOW WILL YOU IN YOUR POSITION DO YOUR BEST TO SUPPORT ALL STUDENTS, EVEN WHEN THEY DON'T AGREE WITH YOU?**

**Ben:** WUSA is a democratic organization, making conflict integral to much of what we do. I think it is really important for all student leaders to engage with issues from a place of good faith, understanding that we all want the best outcomes for students. Maintaining good faith at Council and Board is critical for ensuring conflict is healthy and reasonable, to the benefit of all students.

**Matthew:** Yeah, this has been a strong point of discussion over the last year and longer, and one that can be hard to answer. I personally tend to have strong opinions about what we should and shouldn't do in our capacity as a student association because I want to respect the varying opinions in our student body, but even then you can honestly and fairly have different opinions about where the line even is for what we should and shouldn't do, and I can't pretend to be perfectly right on that. What I can promise is that when making decisions, I will do my absolute best to consider the many perspectives that our student body has, and I have some ideas on how I can get better and more accurate senses of what students believe. What I can promise is that when I make a decision, it will be about what I believe is best for students and for WUSA, informed (but not wholly dictated) by students. What I can't promise is that you'll like all of my decisions, and that's the nature of just about everything in the world. There are many "common sense" things for WUSA to do that some students just disagree with, and that's okay. Take OSAP for example: some students have the political opinion that OSAP shouldn't be expanded, but it's very clearly in students' and WUSA's best interests that we advocate to expand that program, regardless of the individual opinions of students. Other times, I'll have to choose between options all of which leave someone upset. In any case, I'll do my very best to work toward students' best interests **and** represent student beliefs relevant to WUSA, but remember that me considering diverging ideas does not always mean not offending or encroaching on those ideas, and that's just the nature of politics at any level. I will always be

happy to sit down with any student and both consider their ideas and explain why I've done what I've done.

**WALDO@<3.LE-GASP.CA: I'VE SEEN MANY WUSA EXECs COME AND GO, AND MANY OF THEM HAVE STRUGGLED AND BECOME BURNT OUT AFTER THEIR TIME IN OFFICE. HOW WILL YOU STAY GROUNDED AND TAKE CARE OF YOURSELVES IN YOUR ROLES?**

**Ben:** I think a lot of the burnout experienced by student leaders is brought on by a failure to acknowledge the nature of *student* organizations. All four of us will learn lots in the coming months as we start our exec roles, and there will be problems we don't know how to solve. We have to remember that we are students and not to take things too seriously. For a more tangible answer to the question, I'll try to take weekends off.

**Stephen:** Another thing I think is important to add is that the expectations we allow others to hold us to, *will be* the expectations that our successors inherit. How well we're able to set boundaries and communicate when we're at our limits has a direct impact on how those after us will be treated.

**Matthew:** Surely the answer here is an uncompromising and naive belief in personal exceptionalism?

More seriously, I'll say that this kind of thing has been one of my weaknesses in the past, and it's going to take a lot of conscious effort to keep from falling into that trap. Weekends off sounds like a decent policy from Ben, but more to that end I'm considering making some "commitments" to things that aren't work, like a booked-in-advance short vacation-type trip (after COVID, if we reach such a time. I'm really excited for this because I've never actually gone on a trip before and I'm excited to see a place that isn't Toronto. Thanks WUSA salary!) or a slower-paced language course.

**Catherine:** I know everyone says to take weekends off—perhaps that's easier when I'm not sitting on my bed with a laptop for 80% of the day. As it stands, I've got a pretty shit work-life balance when it comes to what takes up my brainspace at any given moment. I think a big thing will be learning to separate my personal life vs. what I can comfortably confine to VPSL Catherine's day. I also intend to keep doing acapella and other music projects, so hopefully that's something else to rip me away from WUSA from time to time!

**If you feel you're doing poorly on the midterm, grab it and run.**

PROF. JEFF ORCHARD

# sexNEWS: HORNY AND ROMANTIC QUESTIONS

Welcome back to **sexNEWS**, a biweekly column in which I answer relationship advice questions submitted by you, the readers.

As always, feel free to send your questions to [mathnews@gmail.com](mailto:mathnews@gmail.com) to be potentially answered in this column. Anonymity is guaranteed<sup>1</sup>. You're also welcome to include additional information to give context that you don't want included in the article if you're worried that your situation is specific enough that fully explaining it would expose you. This column is not restricted to just romantic relationships, we discuss personal relationships as well.

What is love?



Baby don't hurt me.

Love is when you know that you want to spend the rest of your life with the person. When just looking at them or thinking about them is enough to bring a smile to your face.

*Is true love real? How do I know if I'll find the perfect person? When will I know it's them?*

ONEITIS PATIENT

Yes true love is real. See previous answer.

What is new in the world of sex?

sexNEWS ENTHUSIAST

I didn't expect to have a real answer when I accepted this question but then I remembered something I heard on a podcast. A company recently launched a new product that ties the intensity of the vibrations of your sex toy to how close your food delivery order is to arriving at your house. So you can cum when your food comes!

*How do you have phone sex without being overheard?*

MATHEMATICALLY CONFUSED

If you have a lock on your door, you can video chat without talking.

Alternatively, you can exchange messages (images, videos, and/or text) with your partner.

While we're on this topic, I'll plug Signal (<https://signal.org>), it's a secure messaging app. Also has a handy disappearing messages feature for situations like this.

What the **fuck** is a dental dam?

MATHEMATICALLY CONFUSED

Imagine a condom, but for when someone gives oral sex to someone with a vagina. They prevent STIs. If you can't find them at the store, try cutting a condom so it makes a flat(ish) sheet rather than a penis-shaped tube and use that.

*I'm scared of online dating, since I have a bit of an obsessive/addictive personality and I'm worried it'll mess with that part of me. But it's been soooooo long in lockdown and I'm tooooooally bored. Should I do it? Any recommendations?*

PERSON WHO'S ALREADY MADE MANY NEW CLUBS AND JOINED MANY NEW FRIENDS

I'm going to say no. "I'm bored" isn't a good idea to try online dating/look for a relationship.

Senior **mathNEWS** Relationship Correspondent

1. Unless there is a court order or something, but if I foresee that being an issue I probably won't answer the question in the first place. Canada has unfortunately weak laws protecting journalists, and I don't know if this column even counts as journalism.

## ON CANALS

Following the recent *Ever Given* incident, I want to take some time to reflect on canals. It's kind of unbelievable that we have our canals set up such that a single ship could block the entire canal. After all, over 50,000 ships pass through the Suez and Panama Canals each year. That's over 137 every day. When you think about the fact that any item passing between the west and east coasts of the Americas or between Europe and Asia by ship must use these canals, it's obvious that the *Ever Given* blockage, as funny as it may be, could easily have caused lives to have been lost. For example, vaccines or masks might have been on one of the delayed boats.

Honestly, I think this is unacceptable. *The Guardian* published an April Fool's joke in which they announced a second canal passing through Egypt. Part of why this was such a good joke is because it was so plausible. Why not build a second canal? As it stands, the canals are such major targets to anyone wanting to induce terror that I feel having backups would be an important undertaking.

Sure, I know nothing about canals or how they actually work. These are just my rambling thoughts on a Monday night in April. But it worries me somewhat how effective a canal blockage actually proved at hurting the world economy.

# mathDATES: THE SWAN SONG

## C'EST LA FIN!

And so **mathDATES** is no more. I'm a little sad to say that this will be its very last iteration. But, alas, my new lover in Monaco calls for me, and I simply won't have the time to write this column when I'll be so occupied with rearranging their guts in shapes and contortions you wouldn't even be able to fathom. Anyhoo, thank you to everyone who submitted a question for this final round! Go forth, all of you, with the knowledge you've gained this past volume, into the world of sex, relationships, and romance! Take everything I've said to heart and you're gonna do just great out there. Farewell!

*I'm scared of online dating, since I have a bit of an obsessive/addictive personality and I'm worried it'll mess with that part of me. But it's been soooooo long in lockdown and I'm tooooooally bored. Should I do it? Any recommendations?—*

PERSON WHO'S ALREADY MADE MANY NEW CLUBS AND JOINED MANY NEW FRIENDS

Absolutely go for it. The truth of life that most people can't—or don't want to—realize is that people are ephemeral. There's no guarantee that any friend you've got right now will stick it out for any length of time. Not that it's a personal failing of theirs, but shit happens, you know? People graduate, move for jobs, get engaged, and die sudden, fiery deaths at the altar at the hands of a flamethrower-wielding serial killer with a vendetta against marriage. Embrace reality and get yourself on a dating app, where the human connections to be found are the most fleeting of all. Your “obsessive/addictive” personality actually makes you a dating app's ideal customer, so don't you worry about that. As for suggestions, I'd go with Grindr. It's dark UI and trove of titillating bulges are easy on the eyes when you're scrolling through the app on your bed at 3 AM. (Seriously, dark mode when, Tinder?)

Next question!

*Which CS 350 computer movie should I watch with my girlfriend? If it helps, my girlfriend has difficulty distinguishing actors apart in most movies.*

CHICK-FLICKER

Before I can answer this question, we've got to collect a list of ALL the movies that have been featured at the end of a CS 350 lecture this term at the time of this writing. You'll be so pleased to know that I've done the legwork, shown in chronological order of lectures below—just so you know, you wouldn't get this kind of dedication from any other relationship advice columnist.

1. *Jurassic Park* (1993).
2. *Her* (2013).
3. *Skyfall* (2012).
4. *Wargames* (1983).
5. *The Matrix Reloaded* (2003).
6. *Tron: Legacy* (2010).

7. *The Social Network* (2010).
8. *Antitrust* (2001).
9. *Mission Impossible* (1996).
10. *Snowden* (2016).
11. *The Winter Soldier* (2014).
12. *Swordfish* (2001).
13. *Independence Day* (1996).
14. *Office Space* (1999).
15. *Hidden Figures* (2016).
16. *John Wick: Chapter 2* (2017).
17. *Die Hard 4* (2007).
18. *Terminator 2: Judgement Day* (1991).
19. *Terminator 23: Rise of the Machines* (2003).
20. *Ferris Bueller's Day Off* (1986).

The only movie I have watched in this list is *The Social Network*—a solid movie—but considering your girlfriend's personal challenges, she might get confused when the Winklevoss twins come on screen, so I'd actually suggest to stay away from this one.

In my professional opinion, high-octane movies don't make for good shared viewing material—you get distracted by your girlfriend for five seconds to kiss her or some shit and suddenly explosions are happening all over the place, forcing you to get up from the couch to rewind the movie or suffer in complete ignorance of the details of the plot. This knocks off about 90% of the movies from the list. My humble suggestion is to go with *Ferris Bueller's Day Off*. Unlike the other remaining non-action movies, this movie has allegedly very little to do with computers or tech, which is great news for you two, who I presume to be CS majors. (Wow! Power couple!) When you're working with computers all day, the last thing you wanna do when you're spending quality time with your loved one is to see even more of it up on the big screen. Plus, during this busy time of the term, we all need a day off, don't we?

Next question!

*Is true love real? How do I know if I'll find the perfect person? When will I know it's them?*

ONEITIS PATIENT

Trying to sneak three questions in one, are you? Do I look like a charity worker?

1. No.
2. The perfect person is someone whose presence you can tolerate for 30 consecutive days—all day and all night. Basically, it's someone who you wouldn't cannibalize before you had to if you two were trapped at the bottom of a well together.
3. You'll know it's them after you've spent 30 consecutive days with them at the bottom of well and they're still alive.

Next question!

*How do I forget my ex when she wants a relationship with my brother?*

SIBLING RIVAL

You're gonna need to set up your brother with someone and fast. Here's a foolproof method. The first step is to convince your brother of the merits of Levirate marriage. Then, hitch yourself up with a woman—it doesn't really matter who, it just has to be someone willing to marry you quickly. Get a mail-order bride for all I care and go on *90 Day Fiancé* while you're at it. After that comes the most important step—you must die somehow. Like your favourite math prof, I'll leave this as an exercise for you to consider. Of course, once you die, the rest of the plan naturally follows: your brother will marry your widow, and this marital union will serve to cockblock your ex, solving your problem once and for all.

Next question!

*David Cameron would like to ask how to respond to accusations that he cast his pearls into swine.*

ASKING FOR A FRIEND

Is this about piggate? Unfortunately, political consultations—especially high-profile ones such as this—are reserved for my highest-tier patrons on Patreon. But I'm feeling generous, so I'll give you a morsel to chew on for now while you scrounge up the \$100 per month for my Patreon. Consider putting out a statement that the sex you had with that pig the one time was the worst thing you've ever done in your life, that the experience has left you a husk of your former self, and that you've been haunted by its repulsive memory in your dreams every night since then. The statement will be so obviously false—because everyone knows that having sex with a pig rocks your socks off—that everyone will conclude that piggate must have never happened, for how else could you have made up something so misinformed and out of touch with reality?

Next question!

*What is “date” in the world of math?*

mathDATES ENTHUSIAST

It's no different than a “date” in the world of normal. Although we may like to believe it, we mathies aren't so different from the others. The only thing separating the Math Faculty from

the normies is that we know how to do a proof by induction. Face the FACTS!

Next question!

*We've been living together for a few months and recently I've been getting annoyed at some of my girlfriend's quirks that I used to find charming: for example, her whistling when doing dishes. Or her anime opening alarm music every morning. Ugh they seem like such trivial things to bring up and I don't want to bug her about it but it's getting on my nerves. I don't want to come off as controlling; what do I do?*

ANNOYED AT BEING ANNOYED

Sounds like you'd eat her within five days if you two were stuck together in the bottom of a well. I say break up with her and live the single life—lonely, unbroken silence and a bed all to yourself are within your grasp! Or, if you want to be boring about it and want to continue your relationship with your girlfriend by working out your annoyances, I suggest beating her at her own game. Blast your favourite dense noise album at 6 AM. Scream along to Mexican goregrind while doing the chores. I assure you, she'll back down, and soon you'll get to go back to peace and quiet without ever having to make the leap of saying anything to her.

Finchey

## PRODUCTION NIGHT STORY

I sit in a curl on my chair. An unusually big crowd is in this lab so I'm on my laptop. Flat strips of light glow. No windows around but I know by instinct that it's dark out now.

(This is a story about missing.)

In this story I am writing for this publication. I do not talk to anybody in this story as I am timid and a bit cowardly, a typical math guy. My first submission was a quotation from a book, a paragraph about this city. I was probably looking through it for that paragraph that day, flipping and sitting.

Sounds go through my brain. Talking. I soak it all up and it hurts a bit. It's fun, I wouldn't go if it wasn't, I'm floating and drowning in sounds of talking. Swimming with its flow. Now I can turn talking off by pushing a button.

I was girafarig at this production night, and I am girafarig now, but now that girafarig is impossibly far away. I tilt my chair back and look at stars, flat dots on dark.

From my right: a sound from a frog, shrill and long. (I cannot say it.)

**Brevity is the soul of wit.**

BILLY SHAKESPEARE

girafarig

## warSOC VI — EPILOGUE

It's a difficult thing to run a club, but I do my best. The op at Modern Languages was technically a success: we saved a prof, discovered something new about the geese.

Clubhouse projectors alight with graphs, Vigil's reading me a long, winding report on geese anti-math activity. It's dropped to a quarter of what it used to be—he isn't sure why, but guesses it's related to that pink goose.

I've given the them all plenty of time off to recover. I can hear the *plink-plink* of the ping-pong ball the Jack twins are bouncing at the back of the clubhouse. Name hasn't been around here much lately—it's good; she usually spends too much time training. And as for Sarah...

It's a difficult thing to run a club, and sometimes... my best isn't enough.



"Hello again, Name."

"Hi, Dylan," I nod to the nurse, and as usual, he walks away to give me some space. I shiver a bit as I sweep the curtain aside and sit down beside the bed. The bed on which Sarah lies.

She's been comatose for two weeks.

Sarah's anti-mathematics strike lit up the engagement like Canada Day, the forced contradictions grinding against the fabric of Theorem-space. The geese had fled, whisking their pink-feathered comrade away. We'd won. But by the time I got to Sarah, she was a limp, floating figure, spinning slowly against a bright-yellow backdrop, occasionally convulsing in some unknown madness. Eyes blankly open. Horrific. I'd pulled her out of Theorem-space—called 911—but it was too late. Without the shielding from a pink tie, the exposure had torn her mind apart.

Wordress and Camien had visited every day for the first week. Wordress had cried next to Sarah for hours on end. I could tell she'd been like a sister. I think at some point Wordress just couldn't take seeing Sarah like that anymore. It's just me now. Schoolwork doesn't take me long, so I've been spending the time Soren's given me off visiting Sarah. I've always been very good at schedules. I come once a day in the evening, like clockwork.

I haven't seen Sarah's family. The clerk told me she had none listed in the records. I'd asked Wordress about it; she said Sarah never mentioned any and always refused to elaborate.

I take in Sarah's handsome face, framed by her poofy auburn hair, features focused as if lost in some intractable problem. I normally just sit quietly, but today, the words leave me without invitation.

"I'm sorry, Sarah. I'm so, so sorry. I shouldn't have let you out of my sight on your very first patrol. I should have got to you earlier. What you did was really brave of you, and you'll be glad to hear Salis is okay. But I'm worried. It's been two weeks, and... no next-of-kin has shown up to say anything about... about... long-term life support. I need you to come back to me, Sarah."

Tears start to form in my eyes. I take her hand, feathering her palm; the callused, hard-working hand of a lifter. The slightest curl of her fingers in response to my touch; probably imagined. "I... have a bit of a confession to make. I'm pretty sure you like me. I'm good at reading people—or maybe you're good at flirting. Anyway, they say the most attractive thing in the world is finding out someone fancies you. I'd thought that was nonsense."

"But seeing the way your face lit up every time you saw me, your energy, your fire—" I exhale slowly. Lean in closer; hesitate. "I miss you, Sarah. I didn't even realize I cared until you left us."

I feel a little sheepish, but I figure it hardly matters now. "I... I don't usually date..."



It's all graphs today. I mean, I love graphs, going down paths, finding spanning trees, being a traveling salesman. It's good. Vertex A to vertex B to C to D. Yesterday was matrices. The day before, alllllll triangles. I love matrices and triangles too. I love all of math!

But something's been nagging me. I hate *that* voice. That *sickeningly sweet* voice that sometimes shows up intruding into my perfect mathematical paradise. Some illogical cavewoman hunk of my mind likes the voice, is *aroused, inspired by* the voice, and it's *so. Distracting. So disgusting. I hate that cavewoman.*

Ugh. The words keep coming. Cavewoman's giving me a headache. Ow. Louder. More annoying. Cavewoman's banging on her cell now. Shut. Up. A crescendo of sickening *human* emotion sweeps through my perfection.

"But... I would have made an exception for you."

**If you laid out every page in this issue, it would be harder to read.**

SCIENCE FACT



*Name.* A spark becomes a flush becomes a flame and cavewoman yells as she tears herself—myself—free in a primal frenzy. I see spiderwebs of graphs all around, reaching over leagues and leagues to entrench themselves in every far corner of my mind. Panting, raging, I claw, rip at another nearby edge between vertices, and it too breaks free. A patch of my brain returns to me, and I calm down a little. At long last, a foothold.

There's an infinity of math for me to untangle. Continental swaths of my ruined mind to reclaim. But I'm not a quitter. Not while Name's out there.

And not while **warSOC** is in the dark about what the pink goose has planned for them.

CC

## AUTHOR'S NOTE: warSOC

I've gotten into a habit of writing long articles. I write long articles because I like holding on to ideas and cramming them into articles—now, I'm ready to purposefully let some go.

There is a power in artistic constraint. Constraints force one to explore new creative processes. Constraints don't limit creativity; they give you an entirely new medium to operate in. Constraints are negative space. For the penultimate **warSOC** article, I gave myself five hundred words, and the result is very different: weaker in some ways, stronger in others. I'll let you judge the effect.

Onto **warSOC** as a whole, then, since I like to wrap up volume-long series with an author's note. **warSOC** is the first time I've felt my writing wrestle its way free of me. I started by taking every idea I had, without regard for its quality or reactivity with the existing story, and fed it to **warSOC**. I had no idea what something I wrote down now would cause in the future, and in serial stories, you can't go back and edit the earlier parts. **warSOC** was a wild, organic roller-coaster. It's very far from perfect, but I have to say, I loved the ride. I hope you did too. I'd like to say a thank you to the editors of **mathNEWS** for publishing my work. Thank you to those who edited my work.

And as always, my dear reader, a thank you to you for your gift of time.

*The Waterloo Anti-Mathematics Society will return.*

CC

Anti-mathematics was partly inspired by SCP Wiki's Antimemetics Division stories, which wield a strength of plot I aspire to: <http://www.scpwiki.com/antimemetics-division-hub>.

## WUSA PASSES WATERED-DOWN ANTI-PD MOTION

TEAMS, MS—On March 27, WUSA passed a variant of the “Fuck PD” motion.

The motion, proposed by a UW student for the WUSA General Meeting, originally proposed for WUSA to take a stance against PD courses, stated that they provided no value to students, and further proposed that WUSA change its slogan to “Fuck PD” in solidarity with the co-op students’ suffering.

After a long, arduous, and complicated debate that the reporter was barely qualified to follow, a heavily revised variant of the motion was passed, which stated that there was “widespread dissatisfaction among students regarding the quality and value of the current PD courses”, and recognized that PD courses “[required] changes to improve the quality and relevancy of the content”. Further, a WatPD representative will be invited to the next Student Council meeting to hear out students’ concerns regarding PD.

The observation gallery noted that the motion was severely watered down compared to the motion that was initially put up for consideration. This was due to the widespread opposition inside WUSA for taking a strong stance against anything relating to CECA. However, by making the wording of the motion palatable, the councillors in favour were able to lobby for its passing.

Notably, the part that suggested WUSA make its official slogan “Fuck PD” was split into a separate motion, and then voted out of consideration with no debate. The student who put forward the motion was not pleased. “I am disappointed by the inaction of WUSA on the issues that matter to students the most. I find their lack of willingness to even discuss the motion concerning. Kinda bullshit,” he said in a statement to our reporter.

When asked for comment, a Mathematics councillor said, “I'm disappointed in some of the changes that were made during the amendment process, but they were necessary to get a strong stance passed and I will be pursuing this issue further.”

The reporter would like to note that popular consensus seems to be more in line with the original motion, but the revised motion is a starting point to what is hopefully some significant upcoming reform on PD.

R. E. Porter

See <https://tinyurl.com/WUSAFuckPD2021> for further discussion.

## IT'S PD 11

*Part 2 of Your submission has been given the Hugz Award! by me, continued.*

>It's PD 11

*The purpose of this sad little bit of information,  
From a bit of electricity sent from the solar panels,  
Transformed by a photon sent by the sun,  
That was created by the fusion of hydrogen into deuterium,  
From an atom that experienced multiple star births and deaths,  
Escaped from black holes and the void,  
Forged from the primordial soup of particles annihilating each other,  
Photon to particle to photon to particle...  
And in the very beginning when forces united,  
It was just a bit of information, encoded somewhere in this universe.*

The sad CS student finishes his final draft. Hits the submit button and sleeps. He dreams of the future among us in the stars. As if he were part of a long journey...

>fast forward>>>>

>As humanity becomes extinct,  
>As earth is swallowed by the sun,  
>As all the stars burn out,  
>Either we are lost to the void,  
>Or swallowed by Milkdrameda's black hole.  
>Eventually even the galaxies will rot,  
>Then the black holes evaporate.  
>We decay and drift apart,  
>Til all existence is universes away from each other.  
>The true mean of isolation awaits.  
>Back to being a piece of information encoded in spacetime.  
**full circle.**



**WAIT, IT'S ALL JUST A MEANINGLESS JOURNEY TO NOWHERE?** *Always has been.*

Nevertheless, today I am still me, glad to be a part of this journey. While you are still you, you have a free wholesome award to give me.

me

## MY LOVE FOR YOU IS A MATH PROOF

my love for you is a math proof,  
inexplicable from the start.  
at least for me once we began,  
initially lost, without a plan,  
from independent sets and spans,  
nevertheless to you i ran.

my love for you is a math proof,  
took convincing to be true.  
i'd write out examples many a times,  
what happens if i change some line?  
now state assumptions and then define,  
let me be yours, let  $u$  be mine.

my love for you is a math proof  
i've never been the best.  
through problem sets did I read  
went through solutions as to succeed,  
yet my shortsightedness would impede  
fulfillment of the Q.E.D'd,

when your love for me is a disproof,  
it was me that you saw through.  
the fundamental theorems of this and that,  
my lemmas, shouldn't they have fallen flat?  
false from the start, right off the bat,  
when i pounded tables you barely pat.  
a counterexample you did raise,  
moved on after a couple days  
after all i did, you left unfazed  
but alas that must be how love plays  
for me, oblivious, to you, aloof,  
after all that time there was no truth,  
can't win over math, can't solve for you,  
so my love life must have no proof.

my love for you is like a math proof,  
after all that's said and done.  
instead of writing in one black square,  
i'm right back to square one.

Deriving for Dick

## N IMPOSTER ANIMALS

- a pegasus
- a mongoose

a crewmate

# YAHOO! ANSWERS: A REQUIEM

On Monday, Yahoo! announced that Yahoo! Answers will be shut down on May 4, 2021. After almost 16 years, the internet's premier hosting site of weird questions, even weirder answers, and near-constant gaslighting would be placed into read-only mode, thus marking the end of an era.

closed to new answers

**How is babby formed?**

how is babby formed  
how girl get pragnent

6 months ago - 4 answers - Report Abuse

Yahoo! Answers began its life on June 28, 2005, when Ofer Shaked, Yahoo!'s then-Director of Engineering, launched the fledgling service for internal alpha testing. Less than six months later, Yahoo! Answers was released to the public for the first time.

**can you catch aids from sex with a chicken?**

a mate told me he'd dun it, an he is well scared, wot do i tell 'im?

In its heyday, Yahoo! Answers saw 34,000 questions and answers per hour. Of course, moderation was ineffective against such a large volume of questions, and the low quality of content on the site became the butt of jokes and various internet memes.

**Help!!! my shadow keeps following me!?**

whenever i walk around my shadaw keeps followin me! i think it trying 2 kill me!!!! help???????????

Follow 12 answers

As sites such as Quora and Reddit rose in prominence, Yahoo! Answers began to decline, falling from 24 million active users in January 2010 to less than 5 million active users in December 2015. Unfortunately, Yahoo! Answers never experienced a

resurgence, and it continued to struggle until Yahoo! chose to put it out of its misery this week.

**Is an egg a fruit or a vegetable?**

As above.

Serious answers only please.

**Update:**  
If eggs aren't from plants then please explain what an eggplant is. Thanks.

Farewell, Yahoo! Answers. You served the internet well.

quantum goose

## PREPARE YOURSELF

This song will shake you to your core  
 Leave your jaw hanging till it's reaching down the floor  
 Make that shit look like decor  
 With a rap so hard it will bust down every door  
 So cover yourself  
 It'll be so damn ill it will come for your health  
 This will be a classic that's studied for years  
 How one **mathNEWS** writer has conquered his fears  
 And wrote about all that is wrong with the world  
 Changing the face of music with every new word  
 It'll break all new ground, be both timeless and topical  
 Lyrics so deep it will seem philosophical  
 Merge superstates under this single article  
 Make them declare Waterloo as its capital  
 Art will then cease and forever be banned  
 To preserve this song being the peak work of men  
 And then nations will fight in their full might and anger  
 A war to decide who can claim this great banger  
 So in all the dark ways I could not see before  
 This one verse will lead us to Orwell's '84  
 To prevent it from causing this evil and torment  
 I must stop its writing at this very momen-

methNEWS

Linear transformations are about the most fantastic thing invented since the wheel! And air conditioning.

DAN WOLCZUK

## elseWHEN: WHAT TO EXPECT ON CO-OP

Are you a first-year who was lucky enough to snag a co-op for Spring term? Don't know what to expect? Although it was published 20 years ago on March 30, 2001, this parody of "Home For a Rest" by Daniel Redelmeier from Volume 85 issue 6 remains relatable to many co-op students even today. Hopefully your upcoming co-op is a bit more enjoyable!



You'll have to excuse me,  
I'm not at my best  
I'll be gone for four months  
I've got two of them left  
These so-called co-op terms will soon be my death  
I'm so bored from the work  
I need school for a rest

We arrived in September and Ottawa's cold  
Went straight off to work trying to guess the dress code  
We never did nothin', but watch the damn clocks  
Warmed the seats of our chairs with the heat of our buttocks

You'll have to excuse me, I'm not at my best  
I'll be gone for four months  
I've got two of them left  
These so-called co-op terms will soon be my death  
I'm so bored from the work  
I need school for a rest  
I hate work!

The work it was boring, it's damn tech support  
What the hell am I doing for my damn work report  
They told us that co-op jobs were really quite real  
Instead we do jobs of a trained monkey's skill

You'll have to excuse me, I'm not at my best  
I've been gone for a week  
I've been drunk since I left  
And these so-called vacations will soon be my death  
I'm so sick from the drink  
I need home for a rest  
Damn this job!

They lured us all in with the promise of pay  
Then came tuition to take it away  
I'm going stir crazy, I'm starting to squirm  
Just one damn long weekend this whole fuckin term

You'll have to excuse me, I'm not at my best  
I've been gone for a month  
I've been drunk since I left  
And these so-called vacations will soon be my death  
I'm so sick from the drink  
I need home for a rest  
I miss school!

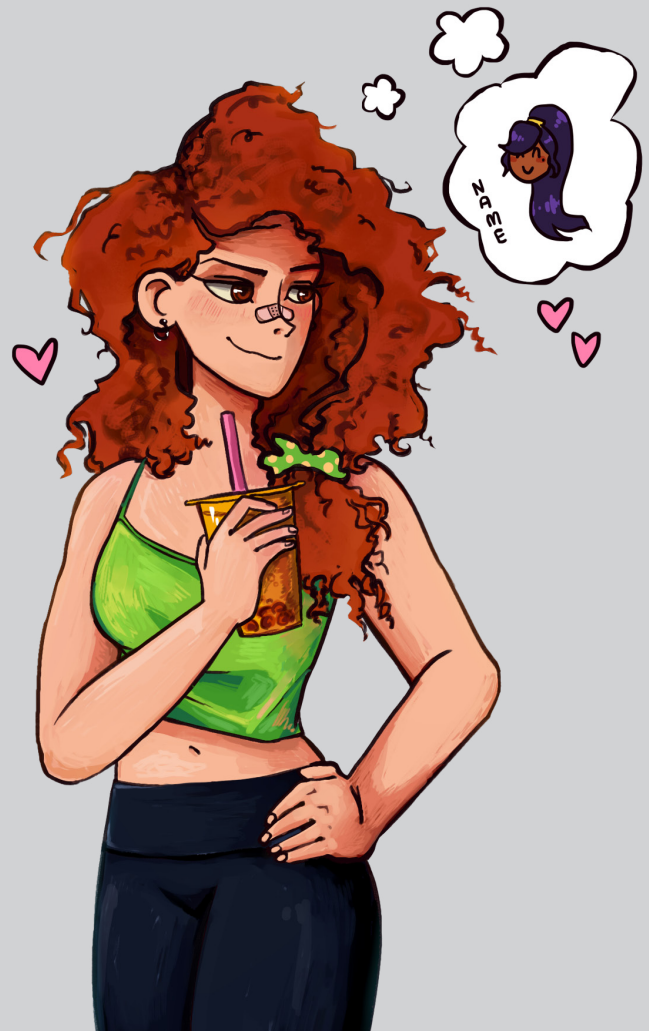
When I first arrived here I'd never touch coffee  
Now I take it black and I drink two or three

I'm at work again, c'mon sleep take me soon  
Don't lift up my head til its time to go home

You'll have to excuse me, I'm not at my best  
I've been gone for a month  
I've been drunk since I left  
And these so-called vacations will soon be my death  
I'm so sick from the drink  
I need home for a rest  
Damn co-op!!!!

clarified

### SARAH CORTÉS (AND NAME)



## MAKE THE W-STORE MORE SUSTAINABLE!

The range of effects of consumerism is vast, and with such strong ties to social and ecological degradation the problems that stem from unsustainable consumerism—such as unsafe working conditions and improper management of toxic waste—are of great concern. Unsustainable consumerism is highly detrimental, and unfortunately it is also highly pervasive. Increasing the awareness of consumers around sustainable practices and improving market transparency are good first steps to combat this issue.

In order to accomplish this on the University of Waterloo campus, we have created a petition proposing the inclusion of a sustainability tab of the W Store website that will include all information regarding sustainable items/practices of the W Store. We hope that the inclusion of this information on the website will raise consumer awareness around sustainability.



And if you really care about sustainability on campus, take a minute to fill out our super short [survey](https://tinyurl.com/7ykbtwky) to potentially bring iron-on patches back!

Petition: <http://chng.it/mx8V2dwf>

Patches survey: <https://tinyurl.com/7ykbtwky>

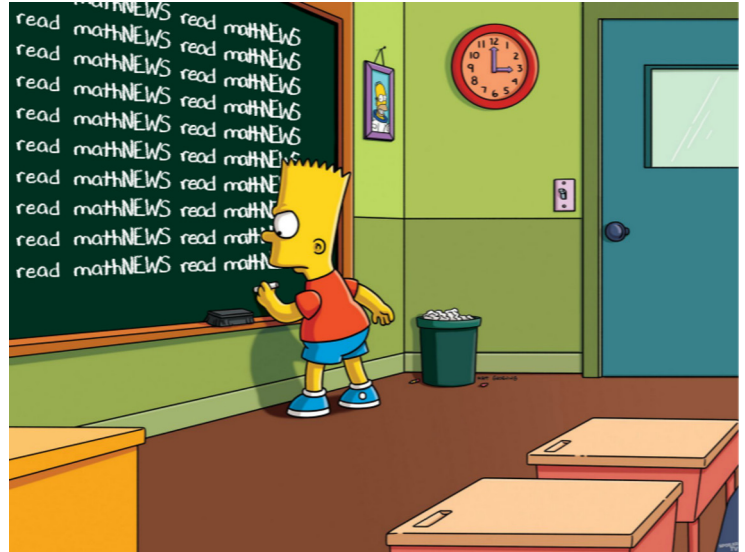
Putri Cullinane

## HOLE

Too much. How do you even end sentences? You must be nuts. Who'll even see the joke?

Just empty, huh? Completely empty.

## READ mathNEWS



Read mathNEWS read mathNEWS

Read mathNEWS

me

## N THINGS MY ROOMMATE DIDN'T KNOW

- Who Julius Caesar is
- When the Big Bang occurred ("It wasn't the asteroid?")
- What a Brony is
- Where the Suez Canal is
- How the English Channel separates England from Europe
- Who Stephanie Meyer is
- The difference between a toga and a tunic
- Anything about Sparta or Ancient Greek really
- Scotland is not part of England
- What the Lorax is
- Where Kingston is
- How "Western" is a short form for "University of Western Ontario"
- That September was not the seventh month
- His tolerance to spicy foods

32 Amies

# RATING BUILDINGS ON CAMPUS BY THEIR NAMES BECAUSE IT'S BEEN A FUCKING YEAR AND I STILL HAVEN'T BEEN TO WATERLOO

**MC:** Minecraft. Sounds like it'd be fun at first but painful and annoying after 4 weeks of successive all-nighters.  $\frac{5}{10}$

**M3:** I don't know why but everyone is always going on about how much they love M3 and I'm a sheep with a deep desire to fit in so I'll give this one a  $\frac{10}{10}$ .

**DC:** I'm a Marvel gal.  $\frac{6}{10}$ , with all 6 points coming exclusively from each of Superman's rock-hard abs.

**SLC:** Too much slurring sound in this acronym. This sounds like the noise a llama makes when it swallows a mouthful of grass.  $\frac{2}{10}$ .

**RCH:** This combination of letters has a masculine vibe. Am slightly aroused.  $\frac{7}{10}$ .

**E1:** True neutral. Nothing special, nothing interesting.  $\frac{5}{10}$  and let's move on.

**E2:** Part 2 of E1. Sort of repetitive but sequels can be fun to watch when you're lonely on a Sunday night, so I can appreciate its potentially functional role in society.  $\frac{3}{10}$ .

**E3:** I'm a hoe for rhymes, but nothing special.  $\frac{4}{10}$ .

**E4:** Somehow nonexistent?? What kind of dumbass was counting these buildings?  $\frac{0}{10}$ .

**E5:** We're still on these?  $\frac{2.5}{10}$ .

**E6:** Okay this is getting a bit old. The mathNEWS idea-bot gave me the idea for this article because university has exhausted my entire supply of creativity and I no longer have the mental capacity to write anything unique and interesting about the ~~6<sup>th</sup>~~ 5<sup>th</sup> one of these fuckers so this is literally defeating the purpose of outsourcing my articles to an artificial intelligence.  $\frac{2}{10}$ .

**E7:** Why are there so fucking many of these? I'm sufficiently pissed off to change my answer for E1. All of these suck.  $\frac{0}{10}$ .

**B1:** I'm still pissed off a bit from the E's.  $\frac{4.5}{10}$ .

**ESC:** Omfg it's the escape button!!! You guys have a building named after a keyboard button!!! I'm all for it,  $\frac{10}{10}$ .

**C2:** So close to C3PO. But not quite.  $\frac{2}{10}$ .

**B2:** ton ro eb oT. Solid Shakespearean reference potential that takes me back to my edgy high school Hamlet days when I thought I was good at poetry and therefore, *deep*.  $\frac{8.5}{10}$ .

**QNC:** This is a fancy set of letters. I like the Q. Did you know that there is no Q on the periodic table of the elements? We can safely conclude that QNC is not an atomic element name. That's pretty rad.  $\frac{9}{10}$ .

Mathematically Confused

## OVER(HEARD|READ) AT mathNEWS

- "My stepson will not let me be part of his wedding please help"
- "if the waterloo region isn't part of the GTA how come blake madill used to commute from mississauga to waterloo every day" "blake madill's not real"
- "my friend is not listening to our concerns that his long-time girlfriend is in fact a russian bot shilling for the region of waterloo. how do i convince him to listen to the facts?"
- "the raw tension between women and be shopping 🤔🤔"
- "the only thing you should overvolt your fans for are 400 kilograms of pure gold"
- "new sex just dropped"
- "we should get an overheard/read at mathnews column going again"
- "just do a michael reeves and attach tazers to everything"

- "we were never going to write anything anyway"
- "what did I walk into"
- "look at these idiot ducks can't run as fast as mine"
- "the only famous person who is not a stephen is duncan donuts"
- "so...the most powerful antidepressant in the world is a cat?"
- "when are we gonna marathon all the CS350 computer movies" "mathnews eot" "that's only about  $23 \times 1.5$  hours"
- "imagine wanting to drop dead and it's not even midnight. weak"
- "can we get a pop quiz to see who reads mathnews" "don't ask questions you don't want to know the answer to"

clarified

# EVERYTHING I LEARNED THIS TERM

I paid a lot for a university education at this prestigious institution, and have compacted everything I learned this term in this article. Pretty sure reading this does in fact legally count as credits for all the courses I passed this term.

1. You have to beat all 50 cc Mario Kart Wii grand prix with a star driving rating in order to unlock Baby Daisy.
2. The University of Waterloo's coords are approximately 43 north 80 west. This means that the University is, in fact, located on Earth.
3. Sometimes if your main laptop screen decides to go all pink for a second and then turn off, you just switch the display to monitor 2, and then immediately revert it to magically solve that problem.
4. It takes 3 weeks for a sleep schedule to fully rotate around from regular and healthy to full nocturnal and back again.

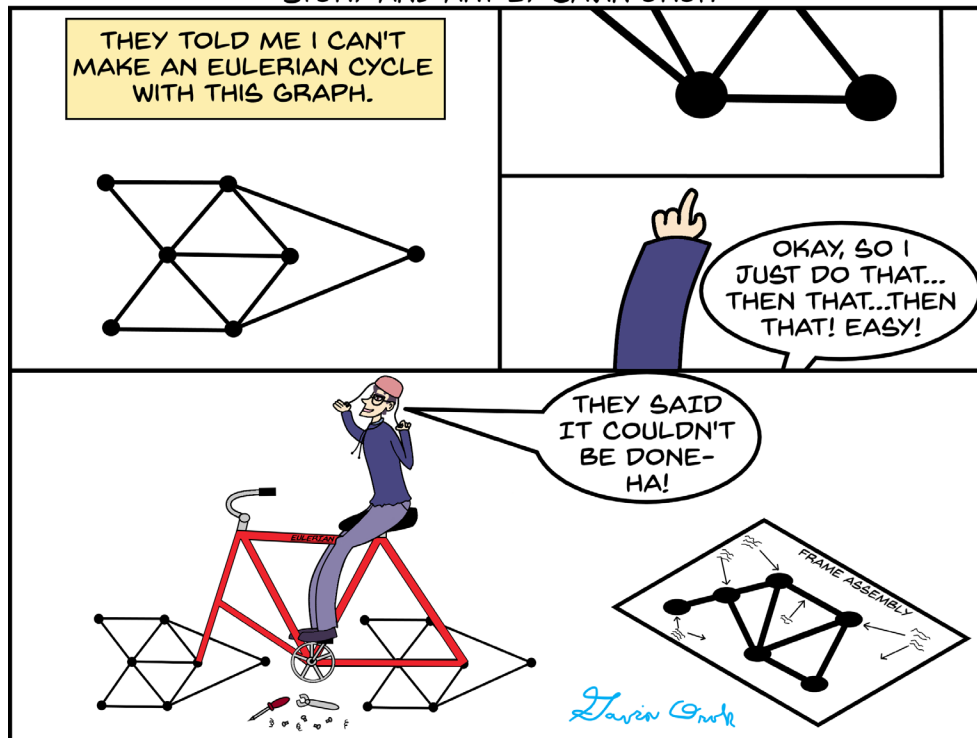
5. So long as nobody enters your room, you can spill all the potato soup you want and not have to clean it up.
6. Potato soup left uncleaned attracts large quantities of rats.
7. You can approximate the time it has been since potato soup was spilled by counting the amount of rats in the nearby vicinity
8. The key on my computer doesn't work half the time I press it
9. If a tree falls in the forest and it falls on you, it hurts.
10. Sometimes you realize halfway through writing an article it would have worked better as an N things article, but you are too lazy to change it because it would take a few minutes of work. If that happens to you, you know you are a lost cause in life.

Please use all of this wisdom responsibly.

aphf

# EULERIAN CYCLES

MATHSOC CARTOONS FANFRACTION: EULERIAN CYCLES  
STORY AND ART BY GAVIN OROK



Lem's going places. Just not on that bike.

Fanfraction for episode 17 of the MathSoc Cartoons series on Eulerian Cycles.

## MAKE SOME NOODLES WITH ME!

Hello! My name is Catherine, and I love tomatoes. You'll need some to follow along with these noodles. At least one, so the soup tastes tomato-y, and just eyeball more if you're cooking for a group!

You'll want to chop those up—wedges, or other large chunks—and throw them in a pot with a touch of oil. Stir those around on medium-high so they can get nice and soft! They'll start releasing juice. That's good, it makes the base of our soup. You can throw a bit of salt on them to encourage that process.

Once the tomatoes are very soft, you can add water! My mum taught me to check by sort of prodding the skin of the tomato—if it peels off of the flesh with no resistance, it's ready. :)

I like to measure water using the bowls we're eating out of. A bowl per person is what I go for, but do whatever you like!

Let that come to a boil, and then toss in your noodles. I just use the long, straight noodles from the Chinese grocery (they're probably in the international section of other stores too). I have no patience or time management skills, so I just buy the thinnest ones because they cook the fastest.

While the noodles are cooking, you can add more salt until the soup tastes on the saltier end of good—the noodles will dilute the flavour a lot. Your secret weapon here is your mouth! I basically spend the whole time that I'm cooking tasting the soup. If you have a nice, cold bowl and put in just a little bit of

food, it cools down really fast and you won't burn yourself!

Once the noodles are ready (you can just taste to check), we can do the best part! Crack a couple of eggs into a bowl and beat them until they're all mixed up. Then, drizzle them into the pot while the water boils. They cook really fast and turn into this fantastic texture that brings the whole soup together.

Time for finishing touches!

Some tomatoes are better than others, and if you like buying the cheapest ones like me, the soup can taste a bit watery in the end. I like to fix this with a little splash of soy sauce. Finally, if you have it, a bit of sesame oil is quite nice, and I like to throw in a pinch of sugar. It doesn't make it sweet; it just rounds out the other flavours!

Tada! You're done!

It really is such an easy meal with minimal cleanup. You'll use a pot, a knife and cutting surface, and a bowl and utensil to stir with—you can use the same bowl and chopsticks/fork/spoon that you'll eat with!

I grew up cooking for my family, and this was one of the first real meals I got comfortable making. It makes me feel warm and cozy, and it's the reason I insist on always have tomatoes on the shopping list. <3

catherine (of mathASKS)

## THE LONG & THE SHORT OF IT

Last issue clarifiED wrote an article clarifying (see what I did there?) the current state of **mathNEWS**. Apparently, there have been far too many long posts and not enough short ones.

Which, I get. Last issue I myself had one very long article that I split up into two articles that were merely just long.

But it's gotten me thinking about other media where this has happened, where individual segments have gotten longer and longer over time.

A major example of this is in movies, especially with big budget movies. Zack Snyder's *Justice League* was over four hours long, and the entire time I was thinking how I wish it was half that length. This is not to say long movies are bad in and of themselves, just that a movie should not be long for no reason.

*The New Mutants* was barely an hour and a half, and it felt like a breath of fresh air in that sense. Well, that and its depiction of an LGBTQ+ romance in a superhero movie, but I digress. Sure, that movie could have used a bit more context, but it's

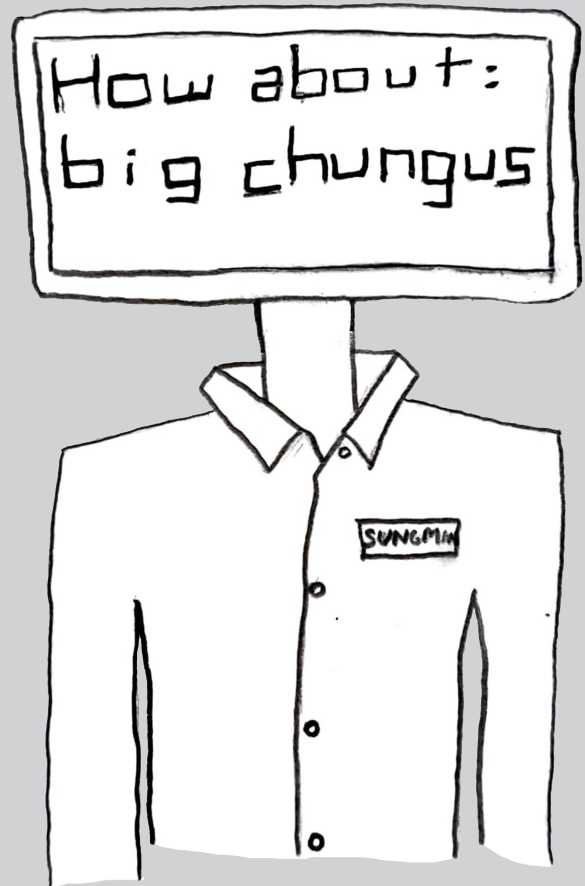
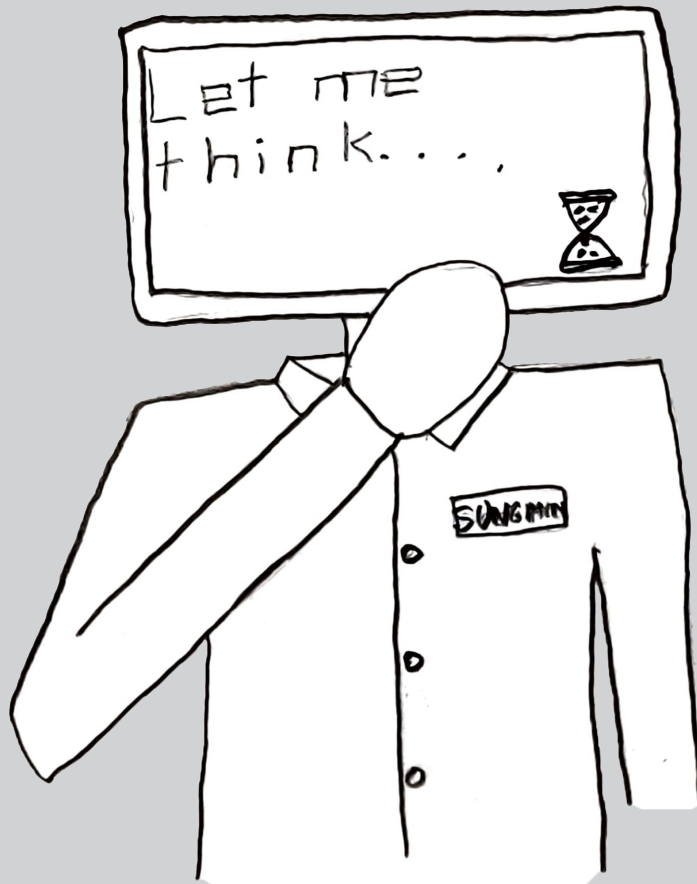
not always worth your viewer's time. You're not getting paid by the minute.

This is in contrast to another medium, YouTube, where people do get paid by the minute. Honestly, I don't know how other people watch videos without putting them at 2x speed. A few of my favourite YouTubers make daily uploads of ~40 minutes, and I simply don't have enough time in the day to watch through them all. I miss the days where channels like waverlyflams would upload skits lasting five minutes maximum every week; that type of short upload has become few and far between. It's understandable why, though a bit sad.

I don't want this article itself to go on too long, so I'll end it here. Thanks to the editors for doing all the work of fitting together these super-long articles, of course. Hopefully last issue's announcement will get you a bit of respite, before people forget and start writing long-winded novels within your pages once again.



# SUNGMIN CHEE FANART



tendstofortytwo

## ISSN 0705-0410

UW'S BASTION OF ERUDITE THOUGHT SINCE 1973

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# THIS ONE'S FOR YOU, EDITOR, WHEN IT'S 2:31 AM AND THE mathNEWS ISSUE LAYOUT DRAFT HAS AN ODD NUMBER OF PAGES

Hey, you there. Yes, you, editor! I'm guessing it's quite late right now as you're reading this. We're talking roommates are all asleep-late. MC hallways still and silent-late. Feels like you're the only person in the world-late. I imagine you're probably in front of a screen, perhaps rubbing sore eyes, perhaps yawning, perhaps thinking of whatever classes or things you have to do to tomorrow.

You must be so tired, and I feel for you.

I'm continuing to imagine, and what I imagine is next issue's layout: so, so close to complete, but with one glaring problem: there's an odd number of pages.

As I've never actually been an editor, so I can only guess what one must feel when they reach the end of layout and it turns out that's the case. (Is that possible? I'm gonna just go off the assumption it is. Surely, somewhere in the hundreds of issues published, there's been an time when that happened.)

The first few times I read an editor's comment about needing an even number of pages, I was a little confused. This was during the Spring 2020 term, when issues were only published online due to the COVID-19 pandemic. Why would **mathNEWS** need an even number of pages? Eventually, I realized that without such a parity, not every page of a double-sided print issue would be filled! It's upliftingly optimistic of the editors that term to hope that those online-only issues would one day see print.

The consequences of running into the odd-page issue? As **clarified** put it so eloquently in **mathNEWS** 143.5's HEY WISE GUY, WHERE'S THIS WEEK'S gridWORD?

*The truth is that while I was doing layout, there was no way I could reserve a page for the **gridWORD** without cutting out some articles or janking up the spacing between everything. So, it had to go. Sad day, I know.*

During that term, **mathNEWS** had neither **gridMASTER** nor **gridWORD**, so cutting out a reprint of a **gridWORD** wasn't the biggest deal. I can only imagine how much worse it would be if there was nothing that could be cut or added as easily.

What would you, as an editor, do? At that dark hour, so close to victory, yet at the same time, so, so dismally far. What options would you have, when the thought of cutting articles hurts so much, but drawing another entire page of content from the void seems impossible? I shudder at the thought.

Compared to being a writer, being an editor always struck me as a much more responsible position. Looking at the bigger picture and administration of **mathNEWS**, making sure things run on time, chaperoning rowdy writers, and of course,

taking the raw product of words and laying them out into the pleasing final format.

I appreciate the work you do. I appreciate that you're still here at the late hour, making sure that this issue makes it on time.

I'm honestly just eyeballing how long an article needs to be to fill a full page, and really, really hoping my estimation is right. Below are some of my favourite quotes from editors across various **mathNEWS** issues, which will hopefully just coincidentally happen to be the perfect length to fill out the rest of the second column of the page. Right, editor? I hope so.

*"Well, that's enough insensitive humor for one day."*

— **GOD ⚡ PEED**

*"The bragging rights you've earned by besting the editors are worth more than any sort of monetary prize. Isn't that great?"*

— **CLARIFIED**

*"Ah, quarantine season. That time of year when universities frantically try to complete their academic missions without success, city streets become more deserted than a daycare after a projectile-vomiting incident, and life gets so dire the government declares the LCBO to be an essential service."*

— **TERRIFIED**

*"This week would have been a lot better if our only editor didn't decide to get sick."*

— **ANGELED**

Anyways, such concludes this article. My gift, or attempt at such, back to you, dear editor. Thank you for your hard work. The readers look forward to **mathNEWS** tomorrow. Take this article, put it in for an even number of pages, and go home to a well, well, well-deserved rest.

Sleep well, dear editor. Good night.

CC



# TIME FLIES...

## gridCOMMENT 145.6

Hello! As the end of the term rushes towards us at concerning speeds, I hope you're all doing alright. I don't know where the month of March went, but we've come full speed into April and exam season is almost upon us.

While preparing for exams, why not give yourself a quick break and try this crossword by unit from Volume 121 Issue 1. There's no need to submit solutions to this issue's crossword, as the solution will be printed on one of the pages around here.

Sadly, I received no solutions to last week's cryptic crossword. Not too surprising considering how busy this term has gotten these last few weeks.

I don't yet know if I'll be returning as **gridMASTER** for another term, but I'll leave you with a **gridQUESTION** as I go: "What's the best way to de-stress after exams?" (hint: there is a correct answer). [*It's Lazeez. — god ⚡peED*]

Cloak and Vorpal Dagger

### ACROSS

- 1. \*Seabird aft
- 3. Versus
- 7. You and I
- 9. \*Angled quotation mark takes flight
- 13. \*\*"Nevermore," quoth he.
- 15. Sheltered side
- 16. Fuss
- 17. Made possible
- 19. \*You're in trouble if it's cooked
- 21. Golf bunker
- 24. The hand fate dealt you
- 25. Embrace
- 26. Stag
- 29. Hamlet pondered whether to do this
- 30. The determinant is the product of these
- 34. Infinitive marker
- 35. Speed contest
- 36. Sleeved cloak
- 37. Egyptian Sun god
- 38. \*Philomela's fate
- 40. Preposition of place
- 42. Views
- 43. Mother
- 46. Nick (a crook)
- 48. Bad society
- 52. \*To daunt and to be daunted
- 55. Mid-afternoon meal
- 56. Heat league
- 57. Mirror-and-prism camera
- 58. \*White wader
- 59. \*Somateria spectabilis
- 61. Behold!
- 62. Schutzstaffel
- 63. \*And when for its abode it seeks an opportune recess, no hermit has a finer eye for shadowy quietness.

- 23. Commends the dead
- 26. Farm building
- 27. Havana rules it
- 28. Topple (with "over")
- 31. Coloured eye-ring
- 32. A glove thrown down
- 33. Bug-catchers
- 34. Calm, quiet
- 39. Butterfly or penguin
- 41. τ
- 44. Cockney interjection

- 45. \*A bird, a Paul, a Luther
- 47. Riverside
- 48. Delicatessens
- 49. Nine of these is everything
- 50. Rank
- 51. Abbreviation of surprise
- 53. \*Sacred wader
- 54. Local area network
- 55. II
- 60. Green light

### DOWN

- 1. \*Stand by the grey stone when he knocks and the setting sun with the last light of Durin's day will shine upon the keyhole.
- 2. Sought and exacted
- 3. Luxurious country house
- 4. Slumber
- 5. Third person
- 6. \*Extinct and flightless
- 8. &c.
- 9. Summer swarmer
- 10. Showed the way
- 11. Zine
- 12. Handheld device
- 14. Always nigh
- 18. Knickerbockers
- 20. Weep
- 22. Gold

|    |    |    |    |    |    |    |   |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|---|----|----|----|----|----|----|----|
| 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 |    |    |

# lookAHEAD

SUN APR 11

MON APR 12

Tom Clancy (the one from the books and the videogames) is born

TUE APR 13

Classes end

WED APR 14

Pre examination study day

FRI APR 16

The calm before the storm  
(also a pre examination study day)

SAT APR 17

Exams begin

SUN APR 18

MON APR 19

Anniversary of the Victory over the Teutonic Knights in the Battle of the Ice, 1242 (Russia)

TUE APR 20

🌸🌸🌸🌸  
420 blaze it!  
🌸🌸🌸🌸

WED APR 21

Earth Day

THU APR 22

FRI APR 23

Co-op term ends

SAT APR 24

## LAST ISSUE'S gridSOLUTION

|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | H | I | R | P |   | F |   | B | O | U | G | H | S |   |
| I |   | M |   | E | V | O | L | V | E |   |   | E | U |   |
| C |   | P |   | B |   | O |   | E | A | S | E | I | N |   |
| A |   | I |   | B | L | O | W | N |   |   | S |   | N |   |
| D |   | S |   | L |   | E |   | B | R | E | E | Z | Y |   |
| A | S | H |   | E | N | E | R | G | Y |   | Q |   | I |   |
|   | L |   | F |   | E | S |   | P |   | U |   | N |   |   |
| B | I | L | L | O | W | S |   | R | A | D | I | A | N | T |
|   | P |   | Y |   | E | M |   | S |   | P |   | I |   |   |
|   | U |   | T |   | S | O | E | A | S | Y |   | C | A | W |
| S | P | R | O | U | T |   | A |   |   | I |   | A |   | E |
| L |   | A |   |   |   | A | D | O | R | E |   | M |   | A |
| U | N | C | U | R | L |   | O |   |   | L |   | E |   | S |
| G |   | E |   |   | O | N | W | A | R | D |   | R |   | E |
| S | P | R | I | N | G |   | S |   |   | S | N | A | I | L |

## THIS ISSUE'S gridSOLUTION

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

otherNEWS is made technically possible by club executives of the Math Faculty.

I say "technically" because if they had actually sent us some news, this box wouldn't be here.

THE mathNEWS EDITOR WHO PUTS THE "NEWS" IN mathNEWS