# mathNEWS

VOLUME 159 • ISSUE 3



# mastHEAD

## "HOW TO ASSERT DOMINANCE IN AN INTERVIEW?"

Hi chat,

I have been in the **mathNEWS** office for nine hours straight now. Nothing exists outside this room. I'm beginning to humanize Adobe InDesign, I have to remind myself that it cannot feel and neither loves me nor has a vendetta against me.

In other news, midterms are rolling around for some of you, I'm so sorry. To those who wrote this week, I hope reading week rejuvenates your soul and returns joy to your term. To those writing after reading week, I think I feel even worse for you. I hope your reading week is productive, and at least a little relaxing.

Me personally, I'm on co-op. I'm actually an ISA this term, so not only have I been in the **mathNEWS** office for nine hours straight, I've been in MC for fourteen hours straight. Help me. Please. Please help me.

Thankfully my one course does not have a midterm, I think I would genuinely pass away at the moment. Instead, I got to spend today reading all of your amazing articles:). Balatro, pedantic math rants, hockey, dietary restrictions; it's like this issue was written for me .

It almost makes up for the immense hole in my chest generated by the knowledge that there is no **prodNIGHT** next next Monday... But !! We are back on Monday, October 27<sup>th</sup>, 6:30 PM in QNC 1502 !! If you like reading **mathNEWS** and have *ever* wanted to contribute, please come !! You don't need to have ever written anything for anything before. I mean you're reading **mathNEWS** right now, you know the vibe.

With Halloween coming up, I hope to see many festive articles next issue! Especially since it comes out *on* Halloween. Write scary stories, write about costume ideas, write Halloween themed joke articles, write about your plans or what you got up to—or don't, it's your article.

I'm going to get back to putting the finishing touches on this now before InDesign gets mad again. Know that you are holding the product of my blood, sweat, and tears (I secrete the ink we use).

> abstractED Editor, math**NEWS**

Usman!	simply tell the interviewer that you're their alpha							
AURELIO	Start sobbing uncontrollably							
Whole Number Haver	ask THEM the questions							
SNOWDOZER	Exercise your right to remain silent							
SMALLMOUTHBASSHATER	start asking them the question							
KUMQUATZZ	This may be an interview, but when you came into view (like interview), I knew I was into you interyou							
MRBLLUESKY	Start writing a proof until it's so long it confuse the TAs							
0.423	Wear a spiderman costume							
Jochemist	Ask "why should I accept an offer of employment from you?" as the first question (opiss on their desk while making eye contact)							
DOCTAH	Interview them instead							
BIG WEENER	Piss your pants							
CRIMSON	Piss on the table and flood the room							
BEESKNEES	Put your feet up on the desk							
TEMPORARY_CHAOS	Answer every question with a question							
DOLLAR STORE PERSON	call the interviewer a little breedable omega, bu true alphas don't need to be told that							
	Fire them mid interview (requires being the boin Undercover Boss)							
INIT	show the interviewer a cool trick you can do with your fingers							
'	Piss their pants							
AWED	Reject any offers to be interviewed in the first place							
CONTENTED	NO! you told me when I walked in here that I was going to be conducting this interview							
MAJ1CKED	Begin T-posing à la 2018 Tumblr humour							

## **ARTICLE OF THE ISSUE**

Congratulations molasses, <u>The Etymological Root of "Jumbo"</u> has moved multiple editors to tears. What a fantastically written article. We are all waiting with bated breath for the next part. Please come to MC 3030 to claim your prize. Also, awED wanted me to mention his childhood love for Jumbo and how he grew up hearing stories about him.

abstractED Editor, math**NEWS** 

Huh, I'm almost at  $\pi$  dollars in my chequing account!

AWAB QURESHI, math**NEWS** EDITOR FOR FALL 2025 ALONG WITH SARA NAYAR, NOAH NAZARETH, SASHA NOVIKOV, AND TOM SI

# mathASKS 159.3

#### FEATURING mathNEWS EDITOR MAJ1CKED

**USMAN!: WHAT PROGRAM ARE YOU IN?** 

Chemical Engineering!

#### A CONCERNED FEMBOY: FEMBOYS?

**mathNEWS** has made a terrible fucking mistake by not giving me a word limit.

Kidding. I don't have enough thoughts on femboys to be writing that much about them. In the lens of gender, I think they're interesting since they've become quite contentious in social media. I don't care enough about femboys to say anything else, so what I will say is that I think they're cool and can serve as an awesome tool to explore your gender. Nothing wrong with wanting to look cute. Whether that's simply pushing the boundaries of presentation or venturing into something else entirely, that's all up to you. However, nothing exists in a vacuum. There are contexts in which there can be criticism made against femboys as a concept and what space they hold in society. To put it simply, yes everything is that deep and yes we should be holding a critical eye to everything.

TL;DR: Femboys are cool! :3c

#### SMALLMOUTHBASSHATER: FAVOURITE FISH?

I'm a big fan of most silly creatures (fish included) but I've never really bothered noting the variety. I love all fish. Now, shrimp? I like lawn shrimp. They're technically not shrimp but the fact that you can find them in your lawn is great.

#### VALLIE: HOW TO BECOME mathNEWS EDITOR?

Look out for notices in **mathNEWS** about editor positions opening, and be yourself in the interview :3!

#### **CRIMSON: WHAT IS YOUR FAVORITE VOCALOID?**

Visually, Hatsune Miku. She's a classic and everyone loves her. I enjoy drawing her and there's so much good fanart of her. But I think my favourite sounding one is Flower! They (to this day I am still unclear of their gender and honestly I prefer for it to stay that way) have really good songs, like anything by balloon/Keina Suda, Kairiki Bear—I think they were like Teto before Teto blew up (I HATE Synth V Teto, sorry). Hit me up any time for Vocaloid recommendations (my Discord is my editor name but all lower case) (cannot guarantee that they'll be good ones).

#### STC BASEMENT BATHROOM: OPINION ON BOILED EGGS?

I love them with soy sauce but I genuinely cannot cook them properly. I always end up under/over-boiling them and it makes me very sad. I don't mind over-boiled eggs because that's what I was raised on, but I'm too impatient to wait all the way, so I end up with snotty little things that are basically

inedible and collapse in my hands as I peel them. I had the unfortunate idea of having boiled eggs from the CMH caf and my stummy hurted afterwards:(

# STC 3<sup>RD</sup> FLOOR BATHROOM: WHAT IS YOUR INNER, DEEPEST, DARKEST, MOST SECRETIVE RAT/GOBLIN/KOBOLD DESIRE?

What a Tumblr-esque question. I feel like darkest and rat as adjectives don't really go well together—rat desire: to climb building roofs. Darkest? Uhhhh... hm, I have many intrusive thoughts that I can't name because most of them are immoral crimes, and not in the silly quirky way. As a kid, I was bullied pretty hard because I was Chinese, and I used to think about killing my bullies in a nearby forest (we lived in the same neighbourhood), does that count?

#### BANANA: WHAT FANFICTION DO YOU WRITE?

I feel like fanfiction as a whole has gotten a pretty bad rep. People recoil if I mention it as a hobby, and they usually imagine some really degenerate shit that only dark booktok girlies could imagine enjoying. Not that there's anything wrong with that, all the power to those who write really filthy smut (I'm sending my regards to the bridge erotica writer) because fuck yeah explore that shit! But there's a very wide variety of fanfiction that isn't that—and that's what I write! Although I do primarily write about ships, they haven't even held hands ③. No kisses either. Probably reflects me as a person, but that's a conversation to be had another day.

I'm very fond of canon divergence—this is when canon branches off slightly, letting you explore what-ifs. But this also depends a lot on the fandom—I used to write a *lot* for Danganronpa V3 (I'm sorry for invoking its name in our lord's year of 2025) which was a lot of canon divergence. But, on the other hand, for fandoms like BSD and BNHA, I feel like there's a lot of appeal in them absconding from their current canon and spitting them out into an alternate universe. I don't know, I write mainly based on vibes rather than actual plot ideas. I still have not finished a single story to this day and I've been writing fanfiction since I was eight.

What I think is a concurrent theme throughout my works is wish fulfillment. Fanfiction has always been a source of escapism for me, and I have noticed that I subconsciously project heavily onto my characters as a way of coping with my life. If you go through my works, you can almost definitely hazard a guess to my mental state while writing them.

So—in summary, all ships but no one does anything more romantic than. Uh. Being close to one another? Like interpersonally? And wish fulfillment.

#### PHYSICS TUTORIAL CENTER: VISIT ME

I'd rather fucking not thanks

#### BEESKNEES: WHAT'S THE MOST MYTHICAL SPOT IN OTTAWA?

Yes, reader, I am from Ottawa. Big yikes.

I actually haven't done much exploring of Ottawa. I'm from a really suburban part of it and I don't drive, so I'm quite confined by the horrors of OCTranspo and it taking an hour to get anywhere. To be honest, what makes Ottawa special for me is the people in it. I don't leave my house by myself often, so really everywhere I've been has been coloured by the people I love. That's what makes places special to me. While on the other hand, in Waterloo, I've done a lot of exploration by myself. I find it hard to sense any kind of mystique if you're with a group of friends (also buses stop running at midnight and nowhere is mythical if it's in broad daylight...), so honestly I'm quite unsure.

Also, what constitutes mythical? In the sense of rarity? Its atmosphere warranting myths to be written about it? Ottawa's kind of boring, so the latter isn't quite possible. Google suggests fictitious/idealized/from a myth, which I don't really have ideas for.

Anyways, I suggest going into the Greenbelt at 3AM and reporting back, or trying to invade the tunnels connecting various places downtown. There's quite a few maps on Reddit—it's for science!

# REVIVED: WITH ABSOLUTE DICTATORIAL POWER AND SLIGHTLY MORE TIME, HOW WOULD YOU CHANGE math NEWS?

In the **mathNEWS** office, we have both an ergonomic keyboard and mouse. I'd switch out both for normal fucking implements. Additionally, I'd make every **mathNEWS** issue a shade of blue, because blue is my favourite colour. Finally, I'd get our office to be on the notorious 7<sup>th</sup> floor of MC.

# MOLASSES: WHAT SEPARATES GOOD MAGIC FROM GREAT MAGIC?

I wouldn't really know—I've *gotten* maj1cked, not the one *doing* the majicking. I think the closer it gets to philosophy without actually being philosophy (like physics), the better. I like it when things are more so of a vibe rather than a perfectly dictated line of logic.

# THE GOVERNMENT'S ONLY SPY: WHAT MADE YOU DEFECT FROM ENGINEERING?

Thank you so much for giving me the space to write about how much I fucking hate engineers.

Okay, I'm kidding. Mostly. It's important to note that ultimately we are all products of our upbringing and our environments, and Engineering has quite the rancid one (in my opinion; everything I write here is wholly my thoughts and does not reflect mathNEWS as a whole). Waterloo Engineering is lauded as a very prestigious program and it leads to intense competition and general apathy towards

your peers. It's also insanely draining and there are very few supports for students—accommodations are hard to get recognized, but of course there are flyers everywhere advertising loanable sunlight lamps and robot dogs. Naturally, it's hard to get along with others here. But, at the same time, it's genuinely almost impossible to make friends with people in other disciplines. All of your classes are with your program, you have basically no electives, and your classes run all day. Maintaining a healthy balance between work, school, and socializing is difficult. Engineering also doesn't really have any clubs—you have design teams and EngSoc, which are quite structured and not really for fun.

This culture festers amongst everyone—as an academic rep (someone who advocates for the cohort to the professors and the Engineering Office), a lot of feedback is met with the same response of, well, that's just how Engineering is. Suck it up or leave. Now, I'm incredibly grateful that I have this opportunity in the first place to be meeting with professors, AFAIK the other faculties don't have things like this, but it's incredibly discouraging to be laughed at by a professor for trying to communicate your peers' concerns.

The unforgiving structure makes it incredibly hard to succeed, especially if you haven't been thoroughly prepared for success. Unfortunately, I think a lot of privilege goes unchecked in Engineering. It does get a little insufferable, especially since I'm a conservative man's worst nightmare—I'm here to get educated, not educate others, man. It compounding in the people around you makes for a really suffocating atmosphere and You Cannot Escape.

Now, is any of this to say that Math, or any other faculty, is without its problems? Absolutely not. There are competitive and toxic programs too outside of Engineering. This is just my perspective. I'd like to write something more comprehensive and possessing more breadth but it is 3AM Monday night and I need to finish this in time for Tuesday  $\mathfrak{P}$ .

Anyways, yeah. There are some cool people in Engineering but they're a bit hard to find and also yes the BO thing is real PLEASE save me. **mathNEWS** is thankfully more pleasant on the nostrils.

#### **BEYOND META: HOW DO YOU DEFINE A SANDWICH?**

I personally think that a lot of things are based on vibes and their contexts, and that attempting to impose any kind of dichotomy upon foods will result in an utter nightmare—as are most things, like animal species (I am a former biology victim). Either we go hyper specific to the point we start excluding members of the type of food, or we go too broad and end up with decidedly not-hot dogs in the foray. So—I think it's a matter of vibes. Personally, I think subs are sandwiches—Subway is advertised to be a sandwich shop, no?—but a lot of people would disagree with me.



# DOLLAR STORE PERSON: I DARE TO ASK — WHAT DO YOU READ?

Oh, Jesus. I'm surprised only one person wound up asking — maybe it's because people *don't* want to know. I actually generally do not read anything that nasty, relatively speaking within the fandom space. However, I still deny people my AO3 username because I do *not* want people looking at my bookmarks. This is because one of my most favourite ships has the world's worst age gap and would make MOST people cringe. And I don't blame them, because it is nasty, but like. The fanfics are fucking good. They're exquisite and I will not relinquish my hold on the ship. However, because I do have a modicum of shame, I will not reveal what this ship is. I genuinely cannot have my real name be associated with this shit and have it be printed; prepare to bribe me if you're dying to know.

Anyways, that's a lot of hullabuloo and not a lot of describing. Currently I've really gotten back into BNHA much to my embarrassment, but I think there's great appeal with regards to the sandbox-feel BNHA has. My favourite kinds of fics are meta fics which explore the world and its real world ramifications, general fics which focus on developing the characters, and slice of life. My favourite 'trope,' I guess, is a band of friends conquering life's challenges one step at a time, no romance. Despite what I have just described, the majority of what I read are ship fics, because that's what you're going to find, generally. I like reading fluff and pre-relationship stuff, nothing too relationship heavy because then it tends to veer into miscommunication drama or they start sucking each other's faces at such velocities it makes me concerned for their well-being. I'm ace, so reading anything more spicy than a kiss has me kind of icked out. Now-my ships? First of all, not fucking BakuDeku despite what EVERYONE loves to accuse

me of. Maybe I'll drop an article detailing my strange relationship with this ship.

Anyways—hm, I'll drop one: Dazatsu from Bungo Stray Dogs. Really, I just love putting my favourite characters together.

Yeah: D! Thanks for taking the bait.

#### **JOCHEMIST: DO YOU READ UNDERTALE FANFICTION?**

No, actually. I've never played Undertale (although I do own the game thanks to a *really* good sale and the leftovers of a Steam giftcard from a friend), primarily because I still haven't figured out the combat mechanic and also because I favour visual novels. I struggle wih sitting up for long periods of time, so spending a lot of time just walking around in-game doesn't appeal to me. I also know that Undertale contains a *lot* of tiny secrets, and it would really bother me knowing that I've missed something by accident. I'm a completetionist, damn it.

I would like to say though, I have *read* some before. I was an iPad kid before iPad kids were even a thing. I had completely unrestricted internet access from a young age, and so I consumed a lot of Undertale fandom content—was even basically in the fandom—without having played the game. Comic dubs, animations, MVs—you name it. I also have had Wattpad since a very young age. I don't remember reading anything Undertale related specifically (mainly because this was almost 10 years ago) but I am 99.9% sure that there's some Sans x Reader shit buried deep in my library. Probably.

# LICHAJEN: HOW DOES HAVING A NUMBER IN YOUR NAME FEEL?

Glorious and liberating. I'm a trailblazer, man.

### STOP WRITING LIKE THIS

#### A LETTER TO MY MIDDLE SCHOOL SELF AND THE ASSHOLES OF THE WORLD

FYI: This is not a commentary on anyone taking part in this newspaper (ily all <3). It's about literature in general.

Some authors seem to find some sick pleasure in writing in a way that makes it difficult to read. I'm not just talking about formal content, old books with different ways of speaking, or even jargon. I'm talking about the people who intentionally use phrasing that is difficult to understand, uncommon vocabulary that barely makes sense in context, and unnecessarily long explanations for simple topics.

There is a difference between something taking a long time to read and understand due to it being a complex topic, and it taking a long time to read because the author wants it to sound like a complex topic. For example:

The quick brown fox jumped over the lazy dog.

An evil author might write this as:

The dog which was found as lazy was by the fox in russet tone hastily perambulated by way of loping.

#### WHY DO AUTHORS DO THIS??

This is the kind of stuff I would do in middle school to try and sound smart. Like, bro, your superiority complex is showing. People not being able to understand you doesn't make you smarter than them. It makes you a bad writer!

# **RATING (7 OUT OF 15) BALATRO DECKS**

#### NOW THAT I'M 80% OF THE WAY THROUGH COMPLETIONIST++, I FEEL QUALIFIED TO SPEAK ON THIS

There are 15 decks in Balatro, each with their weaknesses, and most of them with their strengths. But some decks are better than others, and my opinion is the correct opinion. However, I yap too much, so I will rate the first 7 decks you unlock. This also gives me a new article to write next week, so yippee to me

**Red Deck:** This is the first deck you start with. You start with +1 discard. At white stake it's basically useless since you should have enough discards to work with, but at gold stake it is really nice to have that +1.

- **Strengths:** Gold stake is nice, more value for jokers that use discards (Mail-in Rebate, Yorick), and makes it easier to find your hand. Also, nicer if you have a lot of purple seals in your deck.
- Weaknesses: Not "strong" for low stake play, not a very powerful or fun mechanic
- Rating: 5/10

**Blue Deck:** Blue Deck gives you +1 hand. Blue Deck is slightly better than Red Deck on average, because hands give you money (discards do not).

- **Strengths:** More hands = more money, and more hands means you can play more and die less.
- **Weaknesses:** Not a very powerful or fun mechanic overall. Better for higher stakes than Red Deck is, but still just kinda boring.
- · Rating: 5.5/10

**Yellow Deck:** Yellow Deck starts you off with \$14, compared to the usual \$4.

- **Strengths:** Very strong early game: Use money to make money and buy jokers. You also get interest sooner than on other decks. Money good. Probably the second-best deck for Ante 1.
- Weaknesses: Falls off mid-game, doesn't provide much benefit after you have a good econ and joker setup.
- Rating: 7/10

**Green Deck:** Green Deck stops you from making interest, but gives you \$2 per unused hand and \$1 per unused discard.

- **Strengths:** Early game you don't have to worry about generating econ from interest, so spending doesn't have to be as careful.
- Weaknesses: Not very many synergies (Burglar is one I can think of), but lots of anti-synergies. It's also so weak on its own later on, since not having interest is bad. You need a good econ joker or a good setup to survive higher stakes.
- Rating: 3/10

**Black Deck:** Start with +1 joker slot (6 compared to the normal 5), but -1 hands.

- **Strengths:** Very few, but +1 joker slot does give you, y'know, more jokers. Riff Raff is better?
- Weaknesses: Having -1 hand can kill you quite easily, especially in the earlier antes. -1 hand also fucks with your econ since hands = money.
- **Rating: 2/10** (this is actually one of my favourite decks, but it sucks)

**Magic Deck:** Start the run with Crystal Ball (voucher that gives you +1 consumable slot) and 2 copies of The Fool (tarot card that gives you the last used tarot or planet card you used)

- Strengths: +1 consumable is quite nice, and it also gives you the option to unlock the upgraded voucher earlier. Very nice voucher. Also having 2 copies of The Fool is quite nice since you can upgrade a hand 2 extra times (with a planet card), boost your econ (by using Hermit or Temperance), or get more value out of certain tarots.
- Weaknesses: Baits you into waiting for the perfect opportunity for The Fool (this has killed me before)
- Rating: 6.5/10

**Nebula Deck:** Start the run with Telescope (voucher that ensures planet packs contain your most played hand) and -1 consumable slot.

- **Strengths:** Telescope can be a very good voucher, particularly for gold stake runs (especially for pair spams!!!)
- Weaknesses: Telescope can be a very bad voucher, particularly for gold stake runs (Obelisk, anyone?) Also, -1 consumable slot makes some tarot cards useless, and makes blue seals less valuable.
- Rating: 4/10

Big Weener

### THE VOID

# THIS WAS SUPPOSED TO BE ABOUT SOMETHING ELSE BUT IT GOT TOO PERSONAL

does anyone actually read mathNEWS? or am i just screaming into the void? when the blue button unleashes the voices in my head, do they go on to haunt anyone else or do they cry their last slurs to ink and paper? will the echoes come home one day? will i be the same when they do, or will their original creator face them as a horrified stranger?

# CHAT, ARE WE CRITICALLY THINKING?

#### THAT PARTICULAR GUY WAS UNFORTUNATELY RIGHT

[Content warning: Suicide]

Now, I've been told by many people that I need to stop being delulu in regards to love. They are right, but I don't exactly know how to not be? How do I stop myself from hyperfixating on a mediocre (usually) white man and making my entire life about him for months at a time? My therapist (SHOUT OUT TO HER SHE'S ACTUALLY AMAZING) says that I need to practice loving myself. I told her that's really hard. Not that I'm unlovable (except for romantically, it would seem); I have many positive qualities! My taste in music is fire, my outfits are giving cool girl; I'm Black, so my body is automatically tea, as well as the skincare (if I remember to wash my face); I'm intelligent with a focus on making academia accessible to most audiences, and I'm funny! Ok, maybe only my parents think that one, but they also call me Joe Cool, so take that, losers. But within all that, I want someone to bear witness to all the coolness I have. I want someone to participate in making my days as wonderful as possible alongside me.

What happens if they don't? What does that say about me? A part of me says that if no one values me despite how amazing I am, then I have no place in this world, and thus I should promptly exit. Another part of me says that asking a man to see that and not be put off by that is like me swallowing pills: it's not going to happen, and the attempts won't end well. I might throw up. But on the other hand, this society doesn't value friendships in any meaningful way. I would live for my best friends, and die for acquaintances, but we only think to use people for their connections, to help us move up in the world. I just want to cuddle on the couch and watch Andor with the biggest nerd in my life, and have nothing change. I want to hold hands with the weeb in my life and go to the mall and laugh at everything. Her boyfriend is hella insecure about that tho, so I guess I've lost her to him. I want my school friends to see me as more than that, but society!

Anyways, it seems that all I really want is someone I can talk to without feeling like I'm bothering them, someone who I can be physically affectionate with without shame or assumptions, and someone who I can do both the cool things with and the mundane life shit with. A boyfriend usually hits all those points (if he's actually good). But wanting human connection too much is desperation and means I'm not a true woman or whatever (that particular guy was a MASSIVE prick, you hate to see it). And while it would be easy to blame the wanting on the child-me who was genuinely hated by everyone and now needs love to convince her that life is worth living, or even blame it on the fact that I live in a society that wants nothing to do with me and thus love will prove that I do, in fact, deserve to exist, I'll just say that I want to be happy. And so far, being delulu brings me the most joy. And the most stress, I forget to eat when I have a crush. BUT I am relatively in high spirits. And you really do NOT want me in low spirits. I will attempt suicide.

...Now that I see that typed out, okay maybe I should step away from love for a bit; if I'm using the high feelings to keep

me LITERALLY alive, then I probably should look into that. And if the feeling of being unwanted from others drives me to suicidality (it does like you wouldn't believe), then learning how to deal with it in any healthy way would be great.

Guess I need more therapy. In the meantime, no more being delulu over a man who honestly doesn't deserve it, and we will continue living the coolest life ever, even if no one wants to hear and talk about it. Except you guys! My loyal band of readers will continue to get all the tea on things I like. I love you all. Mwah!

Jochemist

# I LOVE THE STONE ČECH COMPACTIFICATION!

Topologists when there is an absolutely massive compact space that X can embed in:

easty

# ISSN 0705-0410

**UW'S BASTION OF ERUDITE THOUGHT SINCE 1973** 

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

mathNEWS is overseen by the Board of Publications, an autonomous board of the Federation of Students, University of Waterloo, hereafter referred to as Feds. mathNEWS is editorially independent of Feds and the Board of Publications. mathNEWS has never been requested to withhold Improper Content as defined under Feds Policy 71.

Except where otherwise noted, this work is licensed under the Creative Commons Attribution-Noncommercial-No Derivative Works 2.5 Canada License. To view a copy of this licence, visit <a href="https://creativecommons.org/licenses/by-nc-nd/2.5/ca/">https://creativecommons.org/licenses/by-nc-nd/2.5/ca/</a> or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA. Terms may be renegotiated by contacting the mathNEWS Editorial Team.

# **TOP TEN FISH**

#### **UNBIASED**

Since no one asked, here are the top ten freshwater fish (from the most unbiased and professional source out there).

#### 10. LARGEMOUTH BASS

Controversial, I know. A few have ended up in the bottom of my boat before cause I don't want to touch them and my cousin wouldn't grab it. I prefer them to their small mouthed siblings cause they're a little less territorial and a little less likely to attack you. They're a pretty nice catch too, with an unofficial max weight of 25 lbs (a toddler). Put a jig and a worm on your hook, find a weed bed, and you'll catch one.

#### 9. BLUEGILL

I can't say I've ever caught one of these, but they're ok I guess. Like a messed up, violent, spiny goldfish. They're kind of stupid, and will bight pretty much anything you put in the water, so not to hard of a catch. But they can swim backwards, which is pretty cool, so they make it on the list.

#### 8. YELLOW PERCH

Watched my brothers catch a few of these on a fishing trip with my cousins. Put them on the line off the boat in the water, so they stay alive, and my cousin somehow caught them again!! Not to hard of a catch with a jig head or a worm. Nice colours. Apparently really good pan-fried (from my sources, I actually don't eat fish), although they can be a little wormy. If you cook it good though it's ok. Just not a fish I typically look to catch.

#### 7. BROOK TROUT

These were native to the surrounding lakes at my camp (cottage for everyone not from Northern Ontario). But they got taken over by the invasive smallmouth bass (shocker), so catching one of these is really exciting. Their bellies are a really pretty orange too. Not to small either, with a length of about 2 ft (about a baby). Easily spooked, so more natural and gentle bait and lures work best. Not a bad fish.

#### 6. LAKE WHITEFISH

Been to many a Whitefish Lake before, but never caught a lake whitefish. These fish are supposedly also good to eat, and are a favourite for my fish eating family (not my thing). Not to hard to catch to with a spinner. I just suck at fishing. They like mayflies too (which only come out in June?), so they might be full by August. I will get you one day.

#### 5. CHINOOK SALMON

Probably my favourite salmon in the Great Lakes. Literally called the King Salmon (tuff). They're another favourite to eat back at home too, and really good smoked (probably the only fish I'd try). They apparently love a fight too, so they're

exciting to catch. There's a few monsters out there too. Definitely on my fish catching bucket list.

#### 4. RAINBOW TROUT

Also know as Steelheads (totally badass). This is my brother's favourite fish to eat, so it must be kind of good. Although not native to the Great Lakes (points off for that), they're a pretty fish, very shiny and interesting colours. Kind of zesty too ngl. And they get decently big, around 60 cm and a record weight of 40 lb (a small child).

#### 3. NORTHERN PIKE

The first time I saw a pike was when my brother caught one at the age of 4ish, and it was bigger than his arm. It was love at first sight. They're actually so stupid, and will literally bite anything you put in the water, which makes them my favourite fish ever. But they're so stupid they will bite the same lure twice, so you'll just catch the same pike a million times (boring), which is why they aren't at the top. They can be monsters too, with a maximum recorded length of 150 cm. And they're aggressive, so keep your distance if you like your fingers, knuckles and toes.

#### 2. WALLEYE

Also known sometimes as Pickerel. My grandpa fed me these a lot as a kid (points for nostalgia). They're a pretty good fish to fry. However, they've eluded me and my attempts to catch them thus far (the one time I've fished for them). I've been told they like spinners or fake minnows. Walleye are caught a lot when ice fishing, which is actually really fun when your warm and dry and not stuck in the middle of a lake. They're a pretty decent size, but very sensitive to light. And you can eat them.

#### 1. MUSKELLUNGE (MUSKIE)

This is the most exciting freshwater fish you could catch ever. I mean the name "muskellunge" comes from the Ojibwe word maashkinoozhe which means "great fish" (or a few more like mji-gnoozhe meaning "bad pike" lol). They can be absolute monsters, some reaching 6 ft long and almost 70 lb. Muskies also very picky and cautious, so they're the one of the rarest fish to catch. And they eat smallmouth bass (community service). The day I somehow manage to catch one of these will actually be the best day of my life. If you're ever in Kenora (rare shoutout to Kenora), you should go check out Huskie the Muskie, a big statue of the coolest fish ever.

So guys, moral of the story, you should try fishing. Just make sure your cousin will grab the fish for you next time after you reel it out of the water. And if you catch a smallmouth bass, good luck. You'll need it.

# **ERM, AKSHUALLY...**

#### EXAMINING SOMETHING I'VE BEEN PEDANTIC ABOUT

...when defining something in math, people should really use "if and only if" (or more concisely, "iff") instead of "if." Or at the very least, that's the attitude with which I've operated throughout most of my undergraduate career.

This is kind of a dumb hill to die on, because every math student understands that a definition like "A field extension E/F is Galois if  $|\operatorname{Aut}(E/F)| = [E:F]$ " actually tells you that if the degree of a field extension is the same as the size of its automorphism group you can call that field extension Galois, and if you know that a field extension is Galois then you can say that the size of its automorphism group is the same as the field extension's degree.¹ Every math prof I've ever had has written their definitions using "if"s, and so did every textbook and online resource I've encountered (from what I can recall). I understand what each of those sources wants to say because it's clear in context that the implication doesn't just go one way, but nevertheless, whenever I copy down a definition in my notebook something compels me to write "iff" instead of "if."

I've stated my case and I think it's sound, but the difference in how I write definitions compared to seemingly everyone else has made me wonder—am I misguided here? Somehow, despite having wondered about this for some time, I never actually got around to searching up my concern on the internet to see why people follow the "if" convention.

So I finally looked it up. And here is what I found:

The most common explanation people gave about the convention of using "if" in definitions was pretty much what I was expecting: when used in definitions, "if" conventionally just has a different meaning, and that it really is pretty much an "if and only if" in disguise. When people do use "if and only if," it is usually done to introduce alternative definitions after having introduced an initial one with "if." This did not ease my concerns, because the main reason why people did that seemed to be convention/shortening their text. Writing "iff" instead is just a tiny bit longer than "if" and more precise, so I was not very satisfied with this justification.

Although the majority of people really do use "if," there were a few others that shared my preferences: For example, <a href="proofwiki.org">proofwiki.org</a> exclusively uses "if and only if" in definitions.3 Someone on Mathematics Stack Exchange claimed that Paul Halmos would use "iff" in definitions (which I was hoping was true since that would be a big boost to my credibility), but when I went to check his measure theory textbook4 I found a direct counterexample on page 182. I'm assuming the poster heard how Halmos invented/popularized the abbreviation "iff" and got their facts mixed up based on that.

The first counterargument for not using "if and only if" that I thought was compelling enough came from a user on Mathematics Stack Exchange: an "if and only if" statement gives a logical equivalence, but what an initial definition is

doing is giving an "is" statement—it's providing a synonym for a certain kind of mathematical object. Using an "if and only if" statement is improper because one of the sides has not been defined yet (it is undergoing definition) and has no truth value. This is even more pedantic than my approach, and I can accept it as an explanation for why "iff" is inappropriate, but there's just one problem—it merely discounts the possibility of using "if" or "iff" at face value, it doesn't actually offer an alternative for those who want to be as accurate as possible.

Of course, there's still the third option: just not using a sentence structure which forces you to use "if"/"iff." The example definition from the second paragraph can be rewritten as "A Galois field extension is a field extension E/F such that  $|\operatorname{Aut}(E/F)| = [E:F]$ ", which avoids using a term that's completely incorrect when taken at face value ("if") and a term that looks more right but has its problems when examined closer ("iff"). As such, this seems to be the least problematic way of writing definitions, though it can sound a bit awkward.

I'm currently on a co-op term, so I probably won't be writing any definitions in my notebook until January. When I do, I'm going to have a choice to make. Do I begin following convention to blend in better with the wider math community? Do I stick to my principles and keep using "iff?" Or do I adapt when faced with new information and start structuring my definitions differently?

Not that it particularly matters.

#### the government's only spy

- 1. Ok, so clearly not every math student will be able to parse what everything in this definition means since not everyone has taken/will opt to take a Galois theory course, but the key point here is that they will recognize that in a definition, "X is Y if Z" actually means that "X being Y is equivalent to X satisfying Z."
- 2. In moments of weakness and self-doubt, I think I have actually written just "if" before. I'm pretty sure there are a few scattered throughout my notes, but they are few and far between.
- 3. Taken from <a href="https://proofwiki.org/wiki/Definition:Definition/If\_or\_Iff">https://proofwiki.org/wiki/Definition:Definition/If\_or\_Iff</a>.
- 4. Refer to the 1974 printing of Measure Theory by Paul R. Halmos. Just search it up and you'll probably find the version I used, but in case you can't find that version the counterexample I found was the sentence "We shall say that a finite measure  $\nu$  on  ${\bf S}$  is **purely atomic** if there exists a countable set C such that  $\nu(X-C)=0$ ." Here, X is the real line and  ${\bf S}$  is the class of all Borel sets.
- 5. Taken from <a href="https://math.stackexchange.com/a/568119">https://math.stackexchange.com/a/568119</a>.



# WHO GIVES A SHIT ABOUT "DISABILITY FAKERS"?

A spectre is haunting disabled communities—the spectre of the faker.

If you, like me, are disabled, you've heard a lot about the people who "fake" your specific condition. You might even know one yourself: a person, who claims to have your condition, that you are sure is lying. You might have posted or complained to a friend about how frustrating these "fakers" are. As much as I understand you in this, I want to ask a question: why do we target so much of our ire towards "fakers?"

By far, the reason I hear the most often is some variation of, "Disability fakers are taking away resources from real disabled people." Here, 'resources' includes, but is not limited to: mobility aids, medications, caretaking services, and therapies. Take the example of a counseling group for those with PTSD. There are probably limited spots available. If a "real" PTSD patient and a "faker" are in contention for the last spot, and the "faker" is accepted in, certainly, the "real" patient has lost access to a resource.

But it wasn't the "faker" who took it away.

In 2023, the U.S. state of Wisconsin produced **941,686,000 pounds of cheese**.¹ Can you fathom how much fucking cheese that is? You can't. The countries we refer to as the "imperial core," which include the U.S. and Canada, are in a frenzy of late-stage capitalism, frothing at the mouth to produce any kind of product that you could think of, and to produce as much of it as possible. In a country where one state can make 940 million pounds of *cheese in a year*, and where making things to sell to people who need them is good because it gets you more schmoney, why doesn't every person who needs a wheelchair have one? It certainly isn't because there aren't enough wheelchairs to go around.

For a disabled person in a capitalist economy, access to resources is going to cost money. If you have that money, typically access to resources is no issue for you. But if you don't? You gotta start going through insurance, and that's where it gets ugly.

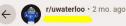
Here in Canada, we at least have government-provided health insurance (with multiple asterisks on top of that, but I digress). The problem, of course, is that the government is also a capitalist institution driven by profit. It is not in the interests of the Government of Canada to provide free resources for every disabled person—there are many of us, and they don't wanna lose too much money, now! That's where you get restrictions on who can or can't get into a therapy group, receive welfare, or be approved for an expensive electric wheelchair.

Where is the disabled person that has not been decried as a "faker" by their opponents in power?

Those of you who disagree with me, I am sure, have been nurturing a question in your heads as you read: "Okay, but is

the author of the article Actually Diagnosed?" I'm not going to answer that—it would go against the point of the article. Up until now, I have been semi-entertaining the notion that diagnosis, especially psychiatric diagnosis, is a tool that is (a) intended to benefit the person being diagnosed, and (b) can meaningfully distinguish between the "real" disabled person and the "faker." I'm going to stop doing that now.

The interests of the psychiatric institution in North America have always lain with the politically dominant groups in the continent: Cishet, White, able-bodied, bourgeois men. One need look no further than "drapetomania," a mental illness proposed by American physician Samuel Cartwright in 1851 to explain why enslaved Black Americans would want to flee plantations. Cartwright wrote, "humanity and their own good requires that [enslaved people] should be punished until they fall into that submissive state which was intended for them to occupy." In the present day, certain diagnoses still allow for patients to be forced into psychiatric facilities against their own will. Most of us are, at least subconsciously, aware of this fact. Two months ago, yet another post about the homeless shelter on University Ave. appeared on r/uwaterloo:



# can we PLEASE do something about the homeless shelter

Serious

I'm so tired of seeing then walking around with the fent lean. They brought a ratty couch and an umbrella out onto the stree to sit and leer at passerby while shooting up, there isnt an hour of the day where there isnt someone outside, high as a kite. Recently they've been venturing out, provoking people at the bus stop and lying outside at random places. This is completely unnacceptable, these people need to be forcibly rehabilitated and locked up in a mental facility.

Nowhere is the primary purpose of institutionalization more evident than in the use of the phrase "locked up" to describe it. Diagnosis is, and has always been, used as a weapon to legally subjugate undesirables and keep them out of public life.

Diagnosis is also completely irrelevant to legitimacy. Barring the structural obstacles to accessing it in the first place, consider this: if I disclosed my diagnoses in this article, why would you believe me? If you disagree with me, you can label me a liar at will to discredit me. If I show you my paperwork, you can start claiming that I lied to the doctors in order to be diagnosed. By the way, this is regularly done by doctors themselves, because they are people and not apolitical, unbiased entities. Consider the following excerpt regarding DID "fakers," citing numerous psychologists:<sup>4</sup>

However, there are potential red flags that can be noticed across a variety of settings that can indicate that an individual may be faking DID. These red flags regard openness about the disorder and one's traumatic history, (...) trying to prove that one has the desired diagnosis, and dramatic, stereotypical, or bizarre symptoms (Howell, 2011). General indicators of factitious disorder and malingering also serve as indications that an

individual may be feigning DID. These include (...) lack of consistent work history, (...) and the individual seeking hospitalization or a DID diagnosis. Finally, potential indications that one may be feigning DID include a need to assume a sick role, medico-legal motivation to be labeled as having DID, demanding or depreciating attitudes towards care givers, (...) or refusing psychological testing (Coons & Milstein, 1994).

What a horrific world this article presents, where the patient must never be open about a part of themselves that affects their entire life, lest they be labelled a "faker." If the patient wants to pursue a diagnosis, perhaps because they want to be legitimized, then clearly they are not legitimate! I leave it as an exercise to the reader to figure out why someone with a disorder stemming from childhood trauma may have abnormal attitudes towards caregivers, or why someone with a disabling condition might have an inconsistent work history. It does not matter if you are diagnosed or not—if you are too demanding, if you ask for better, if you act in ways that the doctors don't like, your legitimacy, and therefore your care, can be revoked at will.

Last of all, I want to say that I'm not asking you to be buddy-buddy with "fakers." It is definitely frustrating when someone claims to understand you and yet clearly doesn't. As disabled people, we are often tired and angry about our situation and the "faker" makes an easy outlet for that anger. Certainly, it's easier to take on one person than an entire system.

But as with any oppressed class, being "one of the good ones" will NOT save us from discrimination. We undeniably have more material interests in common with the average "faker" who demands recognition for a condition we both claim, than with any agent of the oppressing class. If we want real change to our material conditions, it is not the "fakers" that we should be pointing fingers at.

#### mobpsychofan

- United States Department of Agriculture National Agricultural Statistics Service. "Wisconsin Specialty Cheese Production Up 1 Percent." Wisconsin Ag News - Specialty Cheese, 2024. www.nass. usda.gov/Statistics\_by\_State/Wisconsin/Publications/ Dairy/2024/WI-SpecialtyCheese-05-24.pdf
- 2. S. L. Chorover. "From Genesis to Genocide." MIT Press, 1974. p. 150.
- "can we PLEASE do something about the homeless shelter." Reddit, 2025
- 4. "Factitious and Malingered DID." Dissociative Identity Disorder Research, 2016, updated 2024. did-research.org/controversy/malingering/pseudogenic

### THE PUT-TOGETHER PERSON'S STRUGGLE

#### AND WHY THE PEOPLE WHO DON'T LOOK LIKE THEY'RE STRUGGLING STILL DESERVE EMPATHY

I want to preface this rant with a comment on what exactly I mean when I say that we should have a little bit more empathy for those who are doing well for themselves. I do not mean to invalidate the struggles of those who are visibly struggling. This is not to call those who visibly struggle any less capable, any less valuable, or any less important to our lives and the way we navigate this world. I believe, fundamentally, that everybody deserves empathy and I merely see that a little bit less goes to those who don't communicate their struggles to the same extent.

Ultimately, I think there is an issue in society with recognizing struggle and empathizing with those that struggle, not by the fault of any particular individuals, but rather in the way people naturally have to react to the world. Too often, a person is required to let the world know about their struggles in order for them to receive the love and support of those around them. I do not imagine that you, dear reader, would want those that you care about to struggle and to go through various miseries or complications in life. And yet, as people, we are innately reactionary. It takes a crash out, a breakdown, a call for help in order for help to come. What this means is that for all those who struggle less, yet still bear great weight, there will be less empathy, less connection, less support. I see the straw breaking the camel's back too often, a friend who could "handle themselves on their own" who finally hit a wall that they could not simply tough out. Why is it that this person had to struggle through so much without someone to

tell them "Hey man, is everything okay? I've got your back?" Why is it that they had to bear the weight of so much without a shred of empathy for their burdens merely because they were a capable and reliable person?

This imbalance, the struggle for those who do not usually struggle to find meaningful connections, is a great failing of ours in modern society. We see our friends get amazing co-ops, gain prestige, do incredible things with their time, and we don't think, "Wow, I wonder if they're doing okay with life with how busy they are and how much they're shouldering?," instead defaulting to, "They've got their life figured out." Certainly, these people are doing better for themselves. Perhaps that means they are less in *need* of our empathy. That does not, however, mean they are any less *deserving* of empathy. It is frankly a moral failing of us as a people that we so strongly believe that we don't need to treat those that struggle on the inside as nicely as those that struggle on the outside, that we need to see failure before we come to help.

To the put-together people out there, I am sorry. I am sorry that you deal with so much and receive only the bare minimum support. I am sorry that you are not recognized for fighting through your struggles. I see you, I respect you, and I have your back.

# CHOOSE YOUR OWN ADVENTURE BUT I ONLY HAVE 1000 WORDS

# NO ROOM TO EXPLAIN CONCEPT, JUST START AT 1 AND GO TO OTHER NUMBERS BASED ON YOUR CHOICES

**1.** You are you, with your memories. You wake up in a classroom. There's a door and other stuff.

Go to door: 4 Look around: 9

**2.** The computer ignores you. "Next: do you prefer punching or recycling?" When you say anything else, it only repeats itself. Punching: 20

Recycling: 6

- **3.** "Very well" the computer responds. "The experiment will begin with questions. Your cooperation is appreciated." Proceed: 31
- **4.** You try to open the door but it doesn't budge.

Try harder: 37

Look around room: 9

- **5.** The gas fills your lungs. You grow tired, and collapse. Then you wake up in your bed. Maybe it was all a dream. The end.
- **6.** "You're doing well!" the computer commends. "Now, which do you prefer: dogs, or cats?" When you try to ask further questions, it only repeats itself.

Dogs: 8 Cats: 39

**7.** You punch the panther. It swipes at you with a metal paw and knocks you out. You wake up in your bed. Maybe it was all a dream.

The end.

**8:** "Thank you for cooperating." the computer says. "The experiment is over." Purple gas fills the room. A person with a mask opens the door and enters.

If you have **gun**: 21 If you are **injured**: 35

Otherwise: 5

**9.** There's a desk with a computer on it, and a motivational poster

Investigate desk: 16 Investigate computer: 23 Investigate poster: 38

**10.** You roll past the robot, beneath the blades. It spins to face you, but loses balance, toppling and breaking apart. The computer speaks again.

Listen: 6

**11.** You try kicking the robot, but it smashes your leg with the pipe! You yell out as it repeatedly bludgeons you, shattering

your bones.

You die.

- **12.** "If you will not cooperate, we must terminate the experiment here" the computer says. It sounds unhappy. Stand around awkwardly: 17
- **13.** You apologize. The robot stops. "Will you cooperate?" the computer asks.

Yes!: 26 No!: 34

**14.** "The experiment is over" the computer says. A metal box with a screwed-in panel drops from the ceiling, emitting purple gas.

If you have **screwdriver**: 36

Otherwise: 5

**15.** You back into a corner while the robot advances. It's nearly upon you, and you have no more space to kick.

Dodge roll past: 10 Steal knives: 27 Shove from below: 24

**16.** The desk has a drawer, and you pull it open. There's a button with a gun picture, and one with a knife picture. You decide to push one.

Knife: 33 Gun: 19

**17.** "Commence termination." A hidden door opens in the wall and a robot with a gun emerges.

Tackle robot: 25

Apologize to computer: 13

**18.** Again the computer asks a question. "Do you prefer Mario or Sonic?"

Mario: 8 Sonic: 14

**19.** A hidden compartment in the desk opens, and there's a gun. Then the computer on the desk speaks: "Let the experiment begin"

Grab gun: 31

**20.** "Well you can try punching this" the computer says, and a growling robotic panther enters the room!

If you are **injured**: 29

Punch it: 7

Scratch its head: 32

**21.** You shoot the stranger! They collapse. You dash out of the room, into an MC 2<sup>nd</sup>-floor hallway! You escape and call 911. When they arrive, the room is empty! But you know what

happened. You vow that one day, you'll discover the truth. The End (?)

**22.** You yell for someone to let you out! A voice behind you responds: "Please remain silent during the experiment." You turn around. There's a desktop computer.

Investigate computer: 23 Look around room: 9 Try door again: 4

**23.** You approach the computer. It lights up. It starts speaking: "Hello! Are you ready to begin?"

Say you're ready: 3

Thump computer and demand an explanation: 12 Say nothing: 40

- **24.** You crouch and shove the robot. A knife grazes your arm, injuring you. You topple the robot and it powers down. Stand up: 6
- **25.** The robot shoots your arm, injuring you as you topple it. You steal its gun! "Termination: failed" the computer says. "Backup protocol: Experiment continues!" Yell in anger: 2
- **26.** "Very well" the computer says. The robot retreats into the wall. It then reemerges with a metal pipe, swinging at you! Kick robot: 11 Steal pipe: 30
- **27.** You try to steal the knives. You get cut, and recoil. The robot advances further. Then you get stabbed in the stomach, and the robot continues stabbing as your blood gushes out. You die.
- **28.** You kick the robot. It falls over but a knife slashes your leg, injuring you. The computer speaks: "You've passed the first test. We will continue."

  Make pained noises: 31
- **29.** You move towards the panther, but the blood loss has finally caught up to you and you falter. The panther leaps on you and crushes you. You die.
- **30.** You avoid a swing and yank away the pipe. You then smash the robot apart. "Test one complete!" the computer says. Grumble indignantly: 2
- **31.** "Which do you prefer?" the computer asks. "Stroking your chin, or scratching your head?"

Chin: 18 Head: 39

**32.** You scratch the robot panther. Its purrs. It nuzzles you and then curls up and goes to sleep.

Smile: 14

**33.** A robot with many knives enters from a hidden doorway. It wheels towards you. The desk computer speaks: "The

experiment begins!"

Kick robot: 28 Back away: 15

- **34.** "Then Termination is the only choice." the computer says. Before you can react, the robot shoots you several times. You die.
- **35.** The gas fills your lungs. You've barely been remaining conscious with your injuries, and now you don't have the strength. Your vision fades to black as you bleed out. You die.
- **36.** You unscrew the panel and yank out the wires inside. The gas stops. You turn to see the door is open. You run out, into an MC 2<sup>nd</sup>-floor hallway! You see a tall, muscular man with short brown hair fleeing. You follow, but he has disappeared. You vow to find him one day and get answers! The end (?)
- **37.** You try really hard to open the door, but it's still not opening.

Try again: 4

Bang on door and yell: 22 Look around room: 9

**38.** It's a picture of Sonic giving a thumbs up and saying "Just roll with it!"

Look around again: 9

**39.** "Interesting." the computer responds. "Fun fact: Cats enjoy head-scratches!"

Respond enthusiastically: 2 Respond angrily: 2

**40.** "Thank you for remaining silent!" the computer says cheerfully. A hidden compartment in the desk opens. There's a screwdriver.

Grab screwdriver: 6

Doublewhip

Sorry if there are mistakes in here, tracking this is giving me a headache.

# CHILLING ON A WEEKEND LIKE USUAL

watching a movie eating a grilled cheese got my blanket yay

Usman!

## **DSC DATASET 2**

#### **NOW WITH ANIME GIRLS!**

hello!! thanks for coming back and reading this, i love you reader <3

confessions aside, a lot has happened and a lot is happening! let's recap what's been going on in DSC...

#### BOT:

we started off october crazy well with our beginning of term event featuring type racing, origami, yummy boba and push up challenge in E7!!! also shoutout to our push-up contest winner because 45 push ups is crazy, you reminded me that i need to go to the gym (maybe then i'd be happy for once). anyway it would be so exciting to see all that turnout at our other events too because we have a lot of fun stuff planned like...

#### **UPCOMING EVENTS (W000000):**

- escape room: looking to get in that halloween spirit? keep oct 30<sup>th</sup> 7–9 open and get a couple friends bc we're conjuring a spooky night filled with a scary dinghy atmosphere (aka MC), tricky puzzles and of course treats
- **speed dataing**: if you couldn't get friends for our halloween event, come to our speed friending event in mid-november!! perhaps you'll find a new friend, a finals study buddy, a new linkedin connection or your secret admirer??? just kidding it's no secret that i admire you so maybe show up and i'll profess my love a bit more intimately than this
- EOT: consider joining us in late november for a fun round of estimating and free-merch-receiving + free food as usual, what's not to love? i hope we can break our BOT attendance because that would be so sick!!!!
- honestly not much else to plug because of reading week but just dream of being a data science club member, awe-inspiring workshops and anime girls in DSC merch (better yet dress your body pillow in matching attire for only \$36.50 because it's that's cute)

#### **PAST EVENTS:**

not convinced by the anime girls to come? let me give you (and myself:() some fomo on our past events:

- Waterloo Venture Group collab workshop: given how many people talk about creating an AI startup, this was very helpful in providing actual resources for us students to set up your idea and scam receive VC money, and who doesn't like money??? also slurp slurp bubble tea
- ML Solar Flares workshop w/ NASA Space Apps: such an interesting workshop hosted by a super cool person and from my internal sources, it was well-rated

• **Upper-Year Co-op Panel:** so much insight shared!!! just from the crowd you could tell it helped build some confidence and optimism with the sad job search </3 also love bubble tea and pizza, it's so classic for a waterloo event

#### **OFFICE REVAMP:**

thank you to our lovely execs who cleaned up, organized and redesigned our office space, i can see green now!!! sure it's a fake plant but so is my smile:) anyway you should come visit!! we have a nice sitting area, so much desk space, wonderful drawings of anime girls by one of our presidents and lovely plushies!! also we have avalon in here for some reason, so maybe join the discord (discord.gg/wvAhzAHMQK) and we can set up a time to play be i'm so down to play avalon when i'm not high and feeling like i'm gonna die (not necessarily an experience of mine but might be)

#### **EXEC SOCIAL:**

speaking of deduction games, we played mafia at our exec social and it was SO FUN and hilarious. notable moments include:

- waiting for pizza + chit chatting with kahoot music
- pres getting voted out first round bc she wasn't dead (we weren't wrong though!!)
- one exec faked being detective and then accidentally verified mafia, which only worked out be detective was killed round 1 (gasp)
- game moderator crashing out every time our dead pres spoke, which is honestly so real though
- filming reel, hopefully it's up and hopefully you're following us on social media @uwaterloodsc (that was a smooth segue right??)
- pres messing up moderation in round 2
- my fellow mafia men getting voted back to back in first 2 rounds, i was done for
- me killing the person the detective said they'd verify because what else could i do
- everyone ready to leave after i said i could moderate a game :( i'll remember that guys (jk love you guys)

i was enjoying this social so much my friends in the hallway could hear me happily yelling (whoops) across the floor! so if you want to have fun in your life, build great connections, free food from both exec socials and from the office, and more of my deep undying love, consider applying for exec roles in December! you won't regret it be we are not a cult

#### QUOTES:

and now here are some lovely quotes from our execs, picked by our execs (mainly me but ykw i am an exec so i can say that, suck on this dic-)

- yea why u tryna bring back cyberbullying
- · @ai-gf if I miss my via-rail, it's ur fault
- r u in loo for breeding week?
- goon is one letter away from good
- we were wirjubg ib a startyo knai
- Never let your girl stop you from finding your husband
- how about we organically stalk ppl like the good ol days
- 我是女权主义者
- not enough money to goon in the toon?
- · bro I gotta do my diddy ass course bro

which one did i write? maybe i'll tell you in the next edition hehe :3



UW Data Science Club

# RATING RANDOM ARKNIGHTS CODENAMES BY ACCURACY

Arknights, a tower defense gacha game, where you play as one of the leaders of a completely normal pharmaceutical company situated on its own landship, specializing in the research into the treatment of Oripathy (super magic rock cancer). As with every typical pharmaceutical company, it has a sizable paramilitary force, composed of Operators of various sorts, many with funny codenames.

- **Cement**—**5/5**: That's concrete, baby.
- Mousse—2/5: Actually a cat girl, but a baker counts, I guess.
- **SilverAsh**—**4/5**: Leader of the Silverash clan
- Texas—1/5: Even if there exists the Texan Wolf, she's Italian.
- Tin Man—5/5: Sure is one.
- **Catapult**—**3/5**: Doesn't actually use a catapult, but her grenade launcher is close enough
- **Thorns**—**4/5**: Sea urchin-esque.
- **Jessica**—**5/5**: Just her real name.
- W—4/5: She got a couple of wins in her, I suppose.
- **Minimalist**—**4/5**: Yeah, that describes him pretty well.
- **Fang—1/5**: Actually a horse girl.
- **Phantom**—**3/5**: Of the opera?
- 12F-2/5: Used to be called 46A...
- **Asbestos**—**2/5**: Huh, something about fire salamanders.
- **Rockrock**—**5/5**: Real name is Rochelle Rockwell.
- **Greyy—2/5**: Apparently being an electrical engineer lets you double your Y's.
- Hung—5/5:
- **Projekt Red**—3/5: Apparently referencing a certain game studio.
- Durin—5/5: Equivalent of calling a human, "Human."
- Waai Fu—5/5:
- **FEater**—**2/5**: Something about pandas, interestingly enough.
- Mon3tr—3/5: As opposed to Mon2tr and Mon5tr.
- Kjera—4/5: Of Kjerag.
- Rosmontis—3/5: Rosemary symbolism, but the literal Latin translation is "dew of the mountain."

doctah

# THE ETYMOLOGICAL ROOT OF "JUMBO"

#### LOVE, BEFORE THE GREATEST SHOW ON EARTH

"My start in life was very humble, and I have even now, in my fifty-first year, very little to boast of with regard to this world's goods. I have lived with Jumbo day and night for twenty years of my life."

**MATTHEW SCOTT** 

Matthew Scott had been promised a baby elephant. He found himself eye-to-eye with a wreck.

While the Parisian Jardin des Plantes' fellow pachyderms stood many hands above the common man, the baby stood only four feet tall. Neglected in greater creatures' shadow, he was filth-covered head to toe. Disease ran through his hide, and if Scott looked closely, he could see it beginning work on his eyes. His hooves and tail had begun to rot, and he had more sores than any leprotic man.

In Scott's own words, "a more deplorable, diseased, and rotten creature never walked God's earth."

Scott was out of his depth. He was an expert in the apteryx; a tiny thing of New Zealand origin. A bird lover, the fifteenth son of a poor woman in Knowsley, and little more. He knew nothing of elephants. But he knew animals.

He knew neglect when he saw it.

In the outskirts of Paris, capital to Napoleon's second empire, Scott made a choice.

For as long as he lived, this elephant would never be neglected again.

£

In a freshly-made bed, nestled in the corner of Matthew Scott's stable, slept an elephant.

Spring grew into summer. Scott, with the help of Abraham Bartlett, the superintendent of the Royal Zoological Gardens, began to nurse the creature back to health.

As rains washed ancient London, Scott washed scabs from the elephant's eyes.

As horses drew carriages across cobbled streets, Scott drew disease from the elephant's insides.

As lords and steamworkers removed their coats for the day, Scott, just as an overcoat, removed the elephant's diseased hide.

Slowly, tenderly, Scott revealed the creature within.

One day, the zookeepers gave him a name.

Jumbo.



After Bartlett and Scott held him by each ear to administer "a good thrashing" a few times, each followed by food, Jumbo quickly became well-behaved.

Well-behaved, yet alone.

Scott persuaded Bartlett and his superiors, and soon, ambassadors were dispatched to western Africa. By the time Jumbo grew to meet Scott at shoulder height, they returned: with them, an infant female African elephant named Alice.

She was not even a year old.

"The moment he saw Alice led along toward him, I thought he would have broken that stable front out to get at us. His delight and pleasure, expressed in the liveliest manner possible, and which I understood, exceeded that of any boy when he meets his sweetheart for the first time."

MATTHEW SCOTT

Never in all his life had Matthew Scott seen any creature show so much affection as Jumbo showed for Alice.

So began the elephants in love.

Jumbo would, every now and then, turn right about and with his massive trunk throw up such a quantity of water as would make a shower-bath fall on Alice's back, and then, perhaps, he would in the same way, throw up to a great height a regular three-inch water-pipe gush of a douche bath, and this would so tickle Alice, and so add to her enjoyment, that she would presently begin to reciprocate; but as her trunk and powers were not so great as Jumbo's, she could not make such a good job of it.

Remember, when you see a little girl anyway in trouble, you should go instantly to the rescue, and remember that poor Jumbo did the same thing.

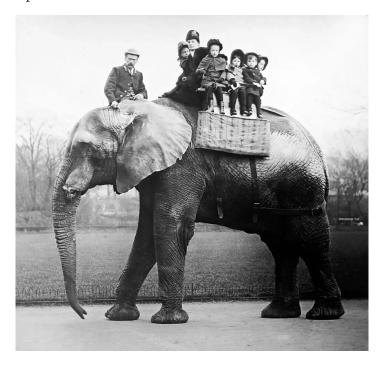
MATTHEW SCOTT



For seventeen years, the pachyderm lovers lived in the Royal Zoological Gardens.

The Gardens provided Jumbo with a howdah, and soon, he was providing rides to all England's youth. Countless came to ride atop England's first African elephant; the tallest elephant the country had ever known. At some point, Matthew Scott brought a young Winston Churchill for a ride. At another, Jumbo met the esteemed children of one Alexanderina

Victoria, Queen of the United Kingdom and recently-declared Empress of India.



MATTHEW SCOTT, ENGLISH CHILDREN, AND JUMBO

But all things must end.

Jumbo had no dentist. Soon, he began to contend with toothache. Nightly rages befell him. One night, he smashed his tusks against his enclosure, breaking them. They never again reached their full size.

Zoo officials became worried. Bartlett, who had helped to nurse Jumbo to health, requested to his superiors that he "be supplied with a sufficiently powerful rifle in the event of finding it necessary to kill him."

ŧ

Enter, The Greatest Showman.

In early 1865, American businessman P.T. Barnum wanted Jumbo for his circus: The Greatest Show On Earth. He made the London Zoo an offer to purchase Jumbo, for only two thousand British pounds. Happy to have their Jumbo problems resolved, the zoo signed. Jumbo was to go to America.

England was outraged. Through legal protests, street protests, and written protests, all Jumbo's lovers exclaimed their grief.

None moreso than his wife. Barnum had not purchased Alice.

When the time came for sundering Jumbo and Alice, the actions of Alice, in the movements of her body and the horrible groans, were something awful to listen to.

The noise of the groans of Alice was at times of a wailing, plaintive, rather musical kind. Then it would sound like the

roar of thunder, and at times was as quick and successive as its peals.

She tore about the stable in which she was confined, and dashed herself against its sides, till we expected every minute she would break loose and follow us.

**MATTHEW SCOTT** 

In 1882, Jumbo and Matthew Scott boarded the steamship *The Assyrian Monarch*. They set sail for America.

After seventeen years of love, Alice was alone.

Jumbo said to Alice I love you Alice said to Jumbo I don't believe you do For if you truly love as you say you do You wouldn't go to America and leave me in the zoo

A LETTER OF PROTEST IN THE LONDON GAZETTE, 1882

molasses

All Matthew Scott quotes sourced from Scott, M. (1885). *Autobiography of Matthew Scott*. Trow's Printing and Bookbinding Co., New York. <a href="https://archive.org/details/autobiographyofm00scot/page/n7/mode/2up">https://archive.org/details/autobiographyofm00scot/page/n7/mode/2up</a>.

Image source: https://www.londonmuseum.org.uk/collections/
london-stories/jumbo-the-elephant/

Jumbo letter of protest sourced from Pickfords. (n.d.). *Jumbo the Elephant*. Pickfords. Retrieved September, 2025, from <a href="https://www.pickfords.co.uk/jumbo-the-elephant">https://www.pickfords.co.uk/jumbo-the-elephant</a>

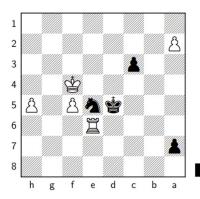
Full sources to be published at the story's end.

### CHESS PUZZLE

#### I WROTE THIS UP IN LATEX FOR NO REASON

Black to move.

1 d4 e6 2 c4 d5 3 ②f3 ②f6 4 g3 c6 5 盒g2 g6 6 O-O 盒g7 7 ②c3 O-O 8 豐c2 ②bd7 9 ゑf4 b6 10 e4 dxc4 11 ②e5 ②xe5 12 dxe5 ②h5 13 冨ad1 豐c7 14 ゑe3 ゑxe5 15 f4 ゑxc3 16 豐xc3 b5 17 ևd4 e5 18 ゑxe5 豐b6+ 19 啟h1 ևe6 20 f5 f6 21 ևd6 gxf5 22 ゑxf8 冨xf8 23 exf5 ևd5 24 ևxd5+ cxd5 25 冨xd5 豐c6 26 冨d1 冨e8 27 豐f3 ②g7 28 ㎏g2 h5 29 冨d8 豐xf3+ 30 үxf3 冷f7 31 冨xe8 冷xe8 32 冷f4 冷e7 33 b3 ②e8 34 bxc4 bxc4 35 冨e1+ 冷d7 36 g4 hxg4 37 冷xg4 ②d6 38 h4 冷c6 39 h5 ②f7 40 冨e6+ 冷d5 41 冨xf6 ②e5+ 42 ጵf4 c3 43 冨e6



crimson

# prof**QUOTES**

#### CO 250: MARTIN PEI

**66** No one trusts me. That's why I'm single.

#### **CO 342: PENNY HAXELL**

**66** Cows can't jump in. Cows are not kangaroos.

#### **CO 439: OLIVER PECHENIK**

- **66** How much does it wiggle? The answer is 3. It wiggles 3.
- To do long division on polynomials, you might have to remember how to do long division on numbers. [Students collectively: uhhh]
- **66** I can't do long division if I don't do it all in one column.
- **66** It appears our doorknob was stolen. At least it's quiet now.
- **66** We're going to learn how to use a computer soon. Otherwise it's no good.
- **66** Buchberger thinks it means subtraction, but no one agrees with him.
- **66** Somehow, this is mostly an exercise in remembering to distribute minus signs.
- **66** You actually need to be able to do it. It's not that bad. It's kinda bad. You can do it.

#### CO 456: DAVID JAO

- **66** This is a math class and we like math proofs, right?
- **66** This is math and proofs are fun.
- **66** That would be a rip in the space time continuum... so that's not allowed.
- Is this obvious to anyone? I could make this claim and walk away and make you guys figure it out.

#### **CS 135: ROBERT GARBARY**

- **66** Don't worry, you're gonna hate this shit too.
- **66** Go play League of Legends or something.
- **66** I have a PhD, by the way.
- **66** Is the empty list empty? Oh shit it is!
- **66** You stayed up all night playing League of Legends, and now you wanna sleep. And that's fine!

#### **CS 145: TROY VASIGA**

- **66** I have magical powers!!!
- 66 Making lists is hard. This could be your co-op job. "I made really long lists during my work term, it was really fulfilling."
- **66** All of you are leaf nodes. Some of you are not leaf nodes. Some of you are not leaf nodes and don't know you are not.
- **66** I'm gonna lie to you, and that's a good example of a toxic relationship.
- **66** Oh look at me becoming my cyborg true self.
- **66** Windows' logo is windows, because that is what you want to jump out of when you use it.

#### **CS 145 TUTORIAL: JERRY JIA**

- **66** So you can think about heaps like corporate America. At the root node you got Jeff Bezos of Amazon. Below him are the upper managers, then the sweatshop workers, and finally the software engineer interns that no one cares about.
- **66** We notice that 21 is greater than 20.

#### CS 241E: ONDŘEJ LHOTÁK

**66** You're probably not gonna find yourself on a deserted island with no while loops.

#### CS 245: LILA KARI

**66** If you see this on the exam, instead of being annoyed, think of it as free marks.

#### CS 245E: ERIC BLAIS

**66** That's a good question! I want to say, AAAH!

#### CS246: BRAD LUSHMAN

- **66** If I have two vectors, I can make a basis. Who knew today was linear algebra day?
- **66** It is not enough that I have your stuff, you must also not have your stuff. We're interested in stealing, not sharing.

#### CS 246: KRIS FRASHERI

- **66** What the skibidi?
- **66** Six seven. I'll be waiting outside after class for fan mail.

#### CS 246E: BRAD LUSHMAN

**66** So you only want to make friends with someone who can do something for you... do with that what you will.

#### **CS 341: TREVOR BROWN**

- 66 Don't rob Bulk Barn.
- 66 None of us want to mark this, and none of us will have time to in the three minutes we spend looking at your solution.
- **66** The colours are going to be numbers, which is a colourblind person's dream.
- **66** Today we're gonna be robbing a Best Buy.
- **66** We like our triangles THICCCC.
- There's a naive version of this algorithm that applies to concave polygons as well, gruesomely named the "ear cutting" algorithm. Or as I like to call it, the Mike Tyson algorithm.

#### CS 343: PETER BUHR

- **66** Does anyone know Python?
- **66** I think it's the most popular language right now. I hope that ends soon.
- **66** You cannot take a complex problem and magically make it into a simple problem. Unless you're a politician.

#### **CS 350: KEVIN LANCTOT**

- **66** Look at this beautiful diagram. Let's reflect...
- **66** Anyone know why I call the CS undergrad server "lost cause"?
- **66** It's actually my acronym [to remember the name of the undergrad server].

#### CS 370: JEFF ORCHARD

[In an Italian accent] Ah it's eh, pie! It's, eh, pizza pie! [Brief silence] That sort of thing could get me in trouble nowadays.

#### CS 398: TOSHIYA HACHISUKA

- **66** I actually don't know what this Asian person is.
- 46 As you can see, this is when their stock went up by I think 100x... and this is when I was doing an internship there, and I didn't buy any stock...

#### CS 466: SEPEHR ASSADI

The best way of proof of proof by intimidation: you just write the statement down and intimidate the other person into accepting it.

#### CS 485: SHAI BEN-DAVID

**66** I can tell you infinitely many stories, but they won't be on the exam.

#### **ECON 101: MIKAL SKUTERUD**

- **66** I'll probably be dead in 20 years.
- **66** Should you have more caffeine? Or more barbiturates?
- 66 I'm gonna be a bad grandpa, I'll tell you that.

#### MATH 137: LAINDON BURNETT

- **66** Are we sigmas in this class?
- **66** cos cos cos oh wait oh wait cos-on-crack oh wait oh wait cos cos cos
- 66 I am not capping, but I can't do math... you're in good hands.
- **66** Oh great, now I'm hearing voices.
- **66** I'm not only a bad boy: I'm a bad boy who copy/pastes.
- **66** Some countries have mandatory military conscription, we have mandatory epsilon-delta proofs.
- 66 Over here we have a parabola, and then here we have a parabola, and then here we have... a parabola.
- **66** Or I can draw a fricking parabola, like a normal person.

#### MATH 145: DAVID JAO

- I wanted to teach [MATH 145] this year, but they didn't give it to me. I guess I got it anyway.
- **66** You haven't memorized the squares mod 11? What are you doing with your lives?

#### MATH 145: JERRY WANG

- **66** I define 6 + 6 = 7.
- **66** Kummer realized that unique factorization isn't possible, so finding the gcd becomes sus.
- **66** Whenever we have something redundant, we like to kill it off.

- Wait until you take algebraic geometry, then you'll learn how to blow up a plane.
- [On Discord] yo ngl next class gon be cra

#### MATH 147: BLAKE MADILL

Do you ever wonder why you call it closed? It's because it's closed.

#### MATH 245: LEIGH FOSTER

- Tiny little preview... nope, no preview, sorry.
- Let A be m-by-n: monkey-by-Nancy.

#### MATH 237: JOE WEST

- I walked around loudly eating pringles, and people thought I was rude, but no, that was a hint.
- Can I declare my 48 hour absence? Like right now?
- Is this Waterloo? Or is this... nevermind. I was thinking of someone down the street.
- Anyone remember the mean value theorem? Or the "why wasn't I fined for speeding on highway 407" theorem? Because, I mean, you can look at your average speed throughout the day, and you were definitely going that fast at one point. But I guess it wouldn't be profitable to fine people for driving normally on the highway.
- I can use Prime again! Even though I didn't pay the annual membership fee.
- Does anyone remember U2? It kind of sounds like "YouTube."
- Wait, the band is called U2, right? Sorry, I'm not much of a classical music fan.
- If it helps, we'll call it an "intellectual experience," not a midterm. "Intellectual experience."

#### MATH 247: FAISAL AL-FAISAL

- Our motivation is simple: derivative good.
- Don't do the algebra. That's cheating.
- Do you buy what I'm saying? [Class nods] Good, because I was lying.
- We lose the fact that "differentiable" implies continuous. This is unacceptable. We cannot live with this.
- I'm going to give you a physicist derivation.
- For now, I want you to struggle.

66 I can just close my eyes and imagine what the partials look like

#### MATH 249: STEPHEN MELCZER

- Let's give the proof. Like I said, it's 300 years old, it's not going to be very hard.
- If you see this on your exam, you can assume I'm not sadistic.

#### MATHSOC COUNCIL: SPEAKER ALEX PAWELKO

Secretary, please note that the Domino's website sucks balls.

#### PHYS 442: CHRIS O'DONOVAN

I think I spelled them (actually) wrong.

#### **PMATH 440: MICHAEL RUBINSTEIN**

- I need that guy, the 321 blue.
- We're just counting with our fingers.
- [The trivial bound] is whatever you found challenging.

#### **PMATH 446: BEN WEBSTER**

- You know what they say: hexagons are the bestagons.
- 66 ...and when I say "structure," I mean "choice of idea of what structure means."

#### **PMATH 450: XUEMIAO CHEN**

- It's not in the lecture notes by the way, that's why you should come to the lecture. [Chuckle] Nah, I'm kidding.
- It will be graded as a bonus question, because I also don't know the solution.
- [Puts quotes around "trivial"] I'm gonna say trivial cuz it's trivial to me.

#### PMATH 453: MICHAEL BRANNAN

- **66** [On Cauchy-Schwarz inequality] So this is something you see every year, so let's prove it again. Family tradition.
- 0/0 is 1.
- Ok bye bye.



#### **PMATH 455: MATTHEW KENNEDY**

66 One thing that you'll learn if you become a professional mathematician, is that if you're presenting at a conference, you should always get someone worse than you to teach your class. [Note that Matt is guest lecturing for Katernya Tatarko, who is away presenting at a conference]

#### PMATH 465: RUXANDRA MORARU

**66** Because it's the chain rule, I need to look at my notes.

#### PMATH 930: RAHIM MOOSA:

- **66** There's a stronger version of this theorem that uses Erdős-Rado instead of Ramsey. Even the names scare me, so I'm just going to state the thing as a fact for now.
- **66** I don't know, because I don't know what I'm doing for the rest of the course.

#### STAT 240: PEIJUN SANG

- **66** [This is] what you learned in calculus class... this is not my job.
- **66** Do you think it has impact on salary? Actually it does, but it's negligible, considering tax.
- **66** Some Chinese students prefer to use their own social media, but you guys like to use UWFlow or Reddit.

#### STAT 341: JACK DAVIS

**66** I'm not smart enough to be in CS.

#### **SYDE 572: JOHN ZELEK**

**66** How do we do quadratic regression? [*Total silence*] This is the part where someone responds.

### **DRAWING TIPS**

- Reference more like interference... int-reference... reference inting my drawing
- If you weren't born good, then give up
- Become a furry and then draw your fursona many times
- Make a pact with the Amulet
- Practice... wait huh?
- Make a pact with the Amulet
- · Make a pact with the Amulet
- ??? umm
- Scratching
- Clawing
- Hunger
- Unending
- Calling
- Beckoning

- Thrall
- Tongues
- Dreamless past
- Fractal future
- Scintillating
- Gaze
- Ascension
- Grasp
- Ascension
- Realize
- Ascension
- Inculcate
- Ascension

kumquatzz

# **LEGENDS OF TOMORROW**

Do you ever get the urge to watch:

- a young Barack Obama being chased by a telepathic gorilla?
- how the Apollo 13 failed?
- how Marie Antoinette came back to life after the beheading?
- how horny Einstein was?
- · Captain Blackbeard being a total bitch?
- a unicorn eating a human nipple after eating out hearts of some other humans?
- the writer of Kamasutra flirting with humans because he's bored?

If you answered yes to any of the above, and/or are interested in any zany sci-fi media, you really should watch Legends of Tomorrow. A lot of the show feels like a high dream (in a good way) because of the amount of unexpected things happening. I have never been bored watching an episode of this. They have great humor, weird storylines, and also sometimes deal with big issues. Overall 9/10 would definitely recommend.



0.423

# WALKING FROM WATERLOO TO BURLINGTON REVIEW

#### OR HOW I LEARNED TO STOP WORRYING AND REALIZE LIFE IS A HIGHWAY

For how long can a human being walk, uninterrupted? AI tools suggest a disappointingly short duration for the average person, with the caveat that "trained athletes" can go a lot longer. Apparently the Guinness World Record holder walked a few hundred miles without sleeping, so that's pretty cool. We are a pretty average group of people, so we should be a good assessment on how far someone our age can go. Thus, a group of us set out to do just this. Recently, a group of walkers became quite popular for walking from Oakville to Toronto in one go, a solid 40k. But we thought we could do one better. We set our sights on Hamilton, with the idea that if we could make it there, we could possibly push all the way to Toronto. It may not come as a surprise that we didn't, but we did double the Oakville walk, and did a full campus-to-campus traversal, which is generally pretty hard unless the two campuses (campi?) in question are Waterloo, and Laurier or Guelph. This is how we did it, and what happened along the way.

#### PART 1: WATERLOO TO CAMBRIDGE



This is the part of the walk you dream about when you're more than halfway through and are no longer really enjoying walking anymore. Energized, motivated, and sleep deprived, three of us set out from SLC at the ripe, dark hour of 5:30 in the morning. Not another soul is to be found besides the Flock Stop night-shift worker. The clock begins ticking: if we want to get to Hamilton safely, before sunset, we only get to stop for about 90 minutes total until then. We exit onto Ring Road, welcomed by still air and utter silence outside. We set out towards the Laurier-Waterloo Park ION station, and continue down streets parallel to King. We pass Uptown and see beautiful parks with the backdrop of the rising sun. The Motivational Minecraft Music is on and life couldn't be better. Eventually, we enter the stroad area of Kitchener, around Fairway, which is fortunately equipped with sidewalks. At around the 10k point, the road finally terminates at Homer Watson Park, our first trail (and definitely the most pleasant) of the day. One of our friends gets hit by an acorn in the head and yells really loudly. Homer Watson lies right at the border of Kitchener and Cambridge; but before reaching the

Cambridge area in earnest, the park's trails spit you out at a peculiar suburb known as "Doon." "Doon" has several roads you will find quite funny if you are from Toronto, which include "Doon Valley" and "Doon Mills." Feels like a weird parallel universe. Anyway, the way out from Doon was our very first challenge: Blair Rd. This is the kind of country road you go on to get to your grandmother's farm: very curvy, very limited shoulder. The ominously increasing number of roadkill is a great indicator of the effects of this. You usually want to walk on the left side of the road for these kinds of things, but even this was dangerous on account of the sharp turns, and so with little choice, we dashed from left to right to dodge oncoming and incoming cars, like a really shitty game of Crossy Road, hoping to not meet the same fate as the flat turtles and skunks and crows below. After a gruelling 10 kilometers of this, we finally reached an exit to the outskirts of Cambridge, equipped with beautiful sidewalks. And thus, over 20 kilometers in, the next leg of our trip began.

PART 2: CAMBRIDGE TO WEIRS LANE



You may have heard bad things about Cambridge. It's actually a pretty nice place, as long as you avoid Hespeler. Galt is really pretty, it has the Waterloo architecture campus, and a nice church bell that was playing "twinkle twinkle little star" for some reason. We stopped at a cafe that had a surprisingly tasty matcha slush, and used a few minutes of the half hour or so we had remaining on our timer to embrace our surroundings a little. Then, it was time for the Real part of the journey. The vast majority of the distance to get to Hamilton was comprised of Highway 8, the kind of road you take when the 401 is too busy and Google Maps tells you to take an alternate route. At this point, one of our friends had reached his limit, and dropped out, leaving two of us. And thus we set out, with a Boston Pizza marking the end of civilization as we crossed the Cambridge-void border. Thankfully, a sizeable shoulder is present throughout the whole stretch of 8, making it at least mostly safe. It's quite difficult to differentiate one point of this stretch from the other, and they kind of blend together in my head. There's a misleadingly hopeful sign saying you're

entering Hamilton quite early on, which is technically true. We pass exciting towns like Sheffield and Rockton, which are pretty much just intersections. And this is where the pain begins. Every time you sit down and get up again, you feel it. Stopping is just about the worst thing you can do at this point. Feet begin blistering and pace starts to slow. But now we've easily killed another 20 kilometers, and realizing we've now surpassed the Oakville group motivates us. We speed up as much as we can, with our timer now surpassing the allocated limit. We eventually feel the need to take an extended break at

a nice little country market which these days are just apparently rebranded convenience stores.

Now, at this point, we could continue down 8 straight to Dundas, but there's a portion of highway on a downward angle with no shoulder that's pretty scary to go down after dark. So, I had an alternate plan. What was it? Well, I'm pretty much out of words, so you'll have to find out next time. Stay tuned!

epic\_waterman

# TINY GEESE (NOT) IN YOUR AREA



FOUR GOSLINGS ASTRIDE WITH (PRESUMABLY) THEIR PARENTS ON A WALK BY C2 AND THE EGG FOUNTAIN.

Ever wanted gosling facts?

No?

Too bad.

- 1. Goslings come from eggs—one of a half dozen or so in a clutch.
- 2. Goslings don't honk yet, they make weird whistlechirping noises.
- 3. Fresh out of the egg, they look like fluffy over-boiled egg yolks.
- 4. Unfortunately for goslings, geese really like high altitude real estate and make nests in very high places, but don't worry, goslings are very bouncy and can survive a 24 metre fall.<sup>1</sup>
- 5. It takes about six days for goslings to develop salt glands. If their only water source is of high salinity, their growth is stunted.<sup>2</sup>
- 6. Goslings have favourite parents; the most they'll stray away from them is one metre of their mothers and two metres of their fathers. Both are favourites because they are their parents.<sup>3</sup>
- 7. Likewise, parent geese have favourite goslings. It's their goslings. Their favourite goslings are *their* goslings.<sup>3</sup>
- 8. Elder geese adopt goslings from younger inexperienced parents. Occasionally this is done in displays of dominance or just because elder geese are really good at leading goslings. This leads to massive creches of goslings of varied age groups and a few

- other parents dragged into the mix for a larger security detail during Spring term. Creches also form when parents just want to raise goslings together like that, but it's commonly elder geese who begin and continue the tradition. Either way, it means more beady little eyes staring into you to find a lack of soul.<sup>4</sup>
- 9. How can a goose be a good leader? By being overly obvious about their intended destination. Some geese do head-flips, others do head-thrusts by extending and retracting their long necks. Geese tend to follow head thrusts more often than flips. With goslings, they'll do these actions lower to the ground. It's adorable when goslings copy the adults' head-flips.<sup>5</sup>
- 10. A gander is a male goose and goose refers to a female goose. This is an important distinction to make when you're waddling by DC/C2 and get too close to the suspiciously stationary goose on the roof and a gander decides to dive-bomb your face.

#### TotallyNotAGoose

Technically "Tiny geese not yet in your area"

- Craighead, John J., and Dwight S. Stockstad. "Evaluating the Use of Aerial Nesting Platforms by Canada Geese." *The Journal of Wildlife Management*, vol. 25, no. 4, 1961, pp. 370–371. *JSTOR*, https://doi.org/10.2307/3798824.
- Stolley, Dorie S., et al. "Effects of Saline Drinking Water on Early Gosling Development." The Journal of Wildlife Management, vol. 63, no. 3, 1999, pp. 990–96. JSTOR, https://doi. org/10.2307/3802813.
- 3. Seddon, Laura M., and Thomas D. Nudds. "The costs of raising nidifugous offspring: Brood rearing by giant Canada geese (Branta canadensis maxima)." *Canadian Journal of Zoology*, vol. 72, no. 3, 1 Mar. 1994, pp. 533–540, https://doi.org/10.1139/z94-071.
- Conover, Michael R. "Gang brooding in Canada geese: Role of parental condition and experience." *The Condor*, vol. 111, no. 2, May 2009, pp. 276–282, <a href="https://doi.org/10.1525/cond.2009.080073">https://doi.org/10.1525/cond.2009.080073</a>.
- 5. Black, Jeffrey M., and Barrow James H Jr. "Visual signalling in Canada Geese for the coordination of family units." *Wildfowl* 36.36 (1985): 35–41.

Citation 4 contains very good goose illustrations I wish I could be paid to research this.

# MY FAVOURITE GAMES FROM THE UW FALL 2025 GAME JAM

Q: What do military battleships, speed dating, brainrot, kittens, and the ION all have in common?

A: You can turn all of them into great video games in 72 hours or less!

Last weekend, the UW Game Jam brought together over a hundred student developers in Waterloo (and beyond) for a marathon weekend of rapid-fire game development. Teams received a theme on Thursday and had a playable game on Sunday—that's only 72 hours to make an entire video game from scratch!

The Fall 2025 iteration of the jam managed to break the records for number of participants and number of games submitted—a record set just last term. I'm absurdly proud to see more and more people each term coming to the jam to step out of their comfort zone, make their first game, and see how rewarding it can be to work on interactive art you care about, surrounded by a supportive and talented community (and an extra huge shoutout to the UW Game Dev Club exec team for how well-organized everything was)!

I've been traveling for the last few days and so I couldn't find time to actually make anything myself, but I was so excited to play them all so that I could recommend to you the ones I liked the best. I was so excited, in fact, that I forgot the mathNEWS deadline was the day after the jam. Whoops!

All that to say that there's still plenty of games I haven't gotten a chance to try. I'm sure they're all worth your time to check out, but here are some of the ones I can personally recommend.

~

**Dreadnought:** A great example of how strong theming and art can make a simple game idea feel dramatic and epic. At its core, this is a game that could be played on pen and paper, but the layer of narrative theming around it—with letters from the front, messages received over the comms, UI you need to physically navigate, and a delicious moment of anticipation when you fire your gun—elevate it to something I got really invested in.

Cat vs. Bot: Games made for game jams are kind of the equivalent of flash fiction—it's a chance to explore a short, punchy idea that only needs to sustain 5–10 minutes of gameplay, not several hours. Cat vs. Bot is a great example of this. It's a short platformer game where, at each checkpoint, your controls are jumbled and rearranged in a new way. I love games that play around with the physical way you control them, and having to contort your hands to control your character in weirder ways each time is very funny.

**Operator! Operator!:** A simple game about connecting different nodes on a telephone switchboard to each other to connect the appropriate signals. In the later stages, it does feel really frantic, and you feel like a real multitasking telephone operator. Shoutout to the actual rope, which is a lot of physical fun to fiddle around with. I almost lost a few times because I just got distracted jiggling it around.

Mission: Seducible: A speed-dating game with incredibly high production values (full voice acting is CRAZY for a jam game) where you need to determine who of your three speed-dating partners is your true love, and who is an enemy spy trying to kill you. Not to flex, but I got the spy AND got a date on my first try, boosting my ego to dangerous levels.

I Heart Ion: A really fun idea for a visual novel where you only *kinda* understand what your romantic interest is actually saying. I got rejected by Ion-chan, which brought my ego back down to earth. Maybe a light rail girl and a human boy can't fall in love after all...

**Nostos:** A really relaxing "press the button to the rhythm" game which is almost more of an interactive music video than a game. Play as a child on a boat in the ocean trying to signal a lighthouse for help and enjoy the original (!!!) music.

Jack Gordon's Home Defense Simulator (2007) (5G Capable): On the exact opposite end of the relaxation spectrum is this brainrot-themed shoot-em-up game. As someone who doesn't use TikTok, this is what I imagine it feels like to be on TikTok.

**Rising Edge:** A really creative tower defense game where not only do you need to construct the towers, but also the circuitry and wiring that links those towers together. You need to construct your own ad-hoc control system and manage your increasingly complex wiring to keep your defenses intact. This could easily be fleshed out into a full priced game.

**Waterloo Is Not Love Island:** A short and sweet narrative game with an excellent title about an oblivious new student searching for love in the wake of a murder. Great character names, too.

3

If you're interested in playing some of these games (or any of the 20-ish I didn't get a chance to try), head over to <a href="https://itch.io/jam/uwgdc-fall-2025-game-jam">https://itch.io/jam/uwgdc-fall-2025-game-jam</a> to try them all. Make sure to leave a nice comment and make someone's day!

And if you're feeling inspired and want to make your own game soon, you should join the Waterloo Game Development Club! Besides events like the termly Game Jam, they run weekly meetings on Thursdays where people give talks on game development and share what they're working on, and

Game Potlucks on Saturdays, where people bring a game they've been playing and show off why they like it.

Most importantly, though, it's a great community of passionate people who love making games, and can encourage you to keep working at it when you get demotivated. If you're at all interested, you should go to a meeting. To join, check out the Instagram and Discord links at <a href="https://linktr.ee/uwgdc">https://linktr.ee/uwgdc</a>.



Dick Smithers

# SUMMARY OF PHYS 475 COSMOLOGY SO FAR

AS FAR AS I UNDERSTAND IT AT LEAST

#### N SECRETS OF THE UNIVERSE I HAVE LEARNED:

- For the first ~400 000 years after the big bang, the universe was so hot and dense that photons couldn't travel through it, meaning it was opaque. The furthest out we can see is limited by the opacity of the early universe.
- As far as we can tell, the universe is "flat," meaning its geometry is euclidean. The only way we have of determining this, though, is by looking out at the universal horizon and not seeing curvature, which is the same method Xenophanes would have used to determine the Earth was flat ~2500 years ago.
- The furthest stars and galaxies are moving away from us faster than the speed of light. This is not an illusion and does not violate special relativity, because special relativity does not apply to motion in an expanding spacetime.

#### N SECRETS OF THE UNIVERSE I HAVE YET TO LEARN:

- Who killed JFK
- Where Bigfoots go when it rains

# WHAT IS YOUR FAVOURITE COLLECTIVE NOUN?

- Murder of crows x2
- Y'all x2
- Chat x2
- A League of Legends
- School of fish
- A waddle of penguins
- A parliament of owls
- A charm of finches
- A set
- A collection
- Aggregate
- A gaggle x2
- A flamboyance of flamingos
- An eclipse of moths
- A flock of birds
- · A flock of ducks
- A flock of seagulls
- A hatedom
- A repository of developers
- A grumble of pugs
- A cohort of unemployment x2
- A murder
- Fellas
- A ChatGPT of assignments
- A galaxy
- An unkindness of ravens
- A class
- · A waddling of ducks

mathgeek

# WRITTEN OUT: SUFFERING THROUGH GRADUATE SCHOOL APPLICATIONS

For some reason, I must apply to grad school in order to go to grad school. This is clearly unreasonable.

They require in no particular order:

- Statement of Purpose [why you want to do this shit]
- Personal Statement [fuck if I know]
- Research Statement [reasonable]
- References (2 academic, 1 professional) [they do not define academic]
- Transcripts [all from all schools]
- My soul [if I ever had one]
- My dignity [ditto]
- \$100–150 [each]

aphf fuck this shit

# FIVE AESTHETIC THINGS TO DO OTHER THAN SMOKING ON A BALCONY

When life gets tough and you want to express it in a tortured artist or main character way, one of the most classic and aesthetic ways is taking a long drag from a cancer stick from your New York apartment balcony and looking out at the city at night. Unfortunately, as I neither have a balcony nor do I smoke, I have been left to find other, equally brooding activities.

First: The two main criteria of why smoking on a tall balcony is so aesthetic is because it feels 1. self destructive, and 2. lonely. It shows the emotional turmoil so well, which is why these two criteria are essential in the replacements.

**NOTE**: There will be no really harmful behaviours in this article, just things that feel kinda self destructive. If you wanted to actually be self destructive, you'd just smoke.

Alternatives:

#### 1: SITTING ON THE SWINGS AT A LOCAL PARK LATE AT NIGHT

Parks at night are one of those places that you feel like you don't belong, while carrying a certain longing for your childhood that you'll never get back. At night, most parks are usually empty so you'll be free to be enjoy your edgy mc moment without being interrupted. Just make sure your local park isn't some kind of meeting place for anything.

# 2: GOING TO A BAR ALONE AND ORDERING NON-ALCOHOLIC DRINKS

Hear me out! When people go to a bar and drink, they fit in with the others there. When you go and order a non-alcoholic drink, it really shows just how much you don't fit in there, but don't really have anywhere else to be. Lonely doesn't have to mean physically isolated, just emotionally. It works best if you order miserable drinks like non-alcoholic beer instead of cocktails to maximize your misery.

#### 3: STAYING UP LATE TO STUDY

This is like, half the dark academia aesthetic for a reason. If you want to direct your inner turmoil into something productive, drink too much coffee and stay up late to finish your assignments.

#### 4: SPENDING A WHOLE DAY ON A PERSONAL PROJECT

If you have a free day, this is a great one, but it adds to the self-destructiveness if you don't. Turn off your phone. Don't answer calls or texts. Leave your room a mess. Just get lost in your work, whether it's a painting, writing a book, baking enough for an army, going down a YouTube rabbit hole, just reading a book, or anything else.

#### 5: CHOP OFF YOUR HAIR

Looking for a big life decision that will affect your daily life without any long-term risks? Learning to cut your own hair might be the perfect choice! Worst case scenario, you wear a hat until it grows back. You can cut it really short or buzz it, or just change up the style a bit and add some layers. Another option is to dye it at home, but you might need to plan it a bit in advance if you need to buy hair dye.

#### **6: START WALKING**

Do you ever feel like you wanna be Forrest Gump and just start running, with no destination or time limit? The vast majority of us are not a Forrest Gump or Terry Fox, so maybe just start with walking. Take a break, some vacation time, or your two day absence, grab some cash and a snack, and just walk. Okay, maybe you won't need that long. Let's be honest, you'll probably turn back around within a few hours at most. Still, it's nice to leave knowing that you don't have to be back for anything and can just wander and think for as long as you need. This also works for driving, if you have your own car.

#### 7: BLOWING BUBBLES

I couldn't write this without mentioning the trend that inspired this article. Blowing bubbles instead of smoking on your smoke break is a great way to pretend like you're actually letting off steam, without actually really feeling any different afterwards. I don't think it's as effective as the others in this context. Still, it is a great way to take a break from your work.

im\_better\_now

# PUBLIC SERVICE ANNOUNCEMENT

#### **BEWARE OF THIS PERSON**

As I was walking through the fine streets of Waterloo during last weekend's beautiful weather, I was greeted with a sight that I was not prepared for. A Mercedes with the license plate reading "RizzKing" stared at back at me. I was not prepared for so much masculine power, so I fled.

Sending out this PSA to; (1) unburden myself of this knowledge, and (2) so you can be prepared unlike me and hold yourself in the face of the shear force of the RizzKing

Lars Nootbaar

Unclear if there is a relationship between this car and the people who wake me up drag racing down University Ave in the middle of the night.

# **MY FIRST 92 DAYS OF CAT OWNERSHIP**

#### DAY -3: THE EMAIL

I log on to my co-op-issued Lenovo at 8:30am on the dot. Outlook automatically opens onto my desktop. One subject line stands out: "4 KITTENS IN NEED OF HOMES." I read of a pregnant cat that was abandoned on a doorstep in a plastic bag and gave birth to seven kittens. I begin devising a list of potential cat-sitters and texting my landlord to ensure my apartment is pet friendly.

#### **DAY 0: ACQUIRING RESOURCES**

Five cat toys and one blanket from Dollarama, two food bowls, one water bowl, one bag of kibble, ten cans of chicken, one bag of litter, one carrier, one brush, one nail clipper, one plastic litter box, and one bag of treats from PetValu, one scratching post, one cat bed, two scratching mats, and four TV earthquake straps from Amazon. Three hundred dollars leaves my bank account.

#### DAY 1: A NEW HOME

I take an Uber to New Hamburg. I am given a choice of three male kittens and one female kitten. Two male kittens roll around and wrestle across the floor. One female kitten sleeps peacefully on the bed. One male kitten sniffs my hand and purrs. He is selected for showing me attention and is given the title of "Alex." Alex rides home with me in the Uber and is introduced to my bathroom. Alex is confined to the bathroom until he proves he can use the litter box. Five hours later Alex is released. He cautiously explores his new home and sleeps on the couch armrest, blatantly ignoring the brand new cat bed.

#### **DAY 3: A NEW GENDER**

Alex is brought to the vet where he is classified as a 0.5kg Grey Tabby Domestic Long Hair Feline. Alex is examined. Alex is discovered to be female. I decide her name is sufficiently unisex and do not change it. Alex is vaccinated against feline immunodeficiency virus. Three hundred dollars leaves my bank account for the second time.

#### DAY 12: LOSING TOUCH WITH THE OUTSIDE WORLD

I sit on my couch watching the *Justice League* cartoon on Netflix when everything goes black. I check my phone and find no bars of wi-fi. I fear the worst. Chew marks are discovered on the router wire, modem unresponsive. The lead suspect meows and jumps into my lap. I pet her. I am forced to venture out and work my remote job from the company office for the rest of the week.

#### DAY 15: LOST HOPE

A new modem cable arrives in the mail. The internet still does not come back after it is plugged in. I deduce the modem has been fried. Alex learns how to climb to the top of her scratching post.

#### **DAY 19: COMMUNICATIONS RESTORED**

A man from Rogers enters my apartment and installs a new modem. Alex is locked in the bathroom during the procedure. Alex is not happy about this. Mesh cable protectors are installed overtop of the new modem cable. Alex wrestles with the new modem cables but finds them less fun when they cannot be destroyed.

#### **DAY 25: THE SIRENS**

My apartment fire alarm goes off at 1am. It is ear-bleedingly loud and sounds like the beginning of *The Purge*. Alex sprints under my bed when I am not looking. I endure the alarm for several excruciating minutes while I search for her, finally pulling my bed out and finding her huddled in my bedroom corner underneath the bed frame. Alex is scooped into a carrier and taken outside. A passerby makes an "awe" noise when walking by and looking into her carrier. I am a proud parent.

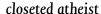
#### **DAY 68: NO RABIES ALLOWED**

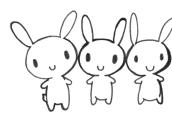
In compliance with Canadian Government laws, Alex is vaccinated against rabies. One hundred and fifty dollars exits my bank account.

#### **DAY 92: PRESENT DAY**

Alex is looking cute today.







# MY OTHER FAVOURITE SOLO FOR (ALMOST) EVERY ORCHESTRAL INSTRUMENT

OR, AN EXCUSE TO DUMP EVEN MORE CLASSICAL AND CONCERT BAND MUSIC FROM MY PLAYLISTS

- Piccolo Georges Bizet, La Garde Montante from Carmen Suite no. 2
- Flute Mel Bonis, Scènes de la forêt
- Clarinet—insaneintherainmusic's jazz cover of DK Island Swing (original ver. by David Wise)
- Alto Clarinet I legit can't find anything for this instrument besides Lincolnshire Posy &
- **Bass Clarinet** Pyotr Ilyich Tchaikovsky, *Dance of the Sugar Plum Fairy* from *The Nutcracker*
- Oboe James Hosay, Persis
- English Horn—Gioachino Rossini, William Tell Overture
- **Bassoon** Florence Price, *I. Allegro ma non troppo* from *Symphony no. 1*
- Contrabassoon Maurice Ravel, Concerto for the Left Hand
- Soprano Saxophone Percy Grainger, Colonial Song
- Alto Saxophone Malcolm Arnold, Siciliano from Prelude, Siciliano, and Rondo
- Tenor Saxophone Omar Thomas, Come Sunday

- **Baritone Saxophone** Gavin Whitlock, *Midnight* in *Kinsale* from the *Celtic Suite*
- **Trumpet** Darius Milhaud, *Alsace-Lorraine* from *Suite Franç*aise
- **Horn**—Jean Françaix, L'embarquement pour Cythère from Musique pour fair plaisir
- Trombone Gustav Mahler, Symphony no. 3
- **Euphonium** Robert W. Smith, *By Loch and Mountain*
- Tuba Claude T. Smith, Festival Variations
- **Violin**—Vittorio Monti, *Csárdás*
- Viola Antonín Dvořák, I. Allegro ma non troppo from String Quartet no. 12
- **Cello**—Gustav Holst, *Invocation*
- Double Bass Darius Milhaud, La Création du monde
- **Piano**—Astor Piazzolla, *Estaciones Porteñas*
- **Timpani** Robert W. Smith, *The Inferno* from the *Divine Comedy*

yalevoylian

# EVEN EVEN MORE BLUE JAYS RADIO COMMERCIALS RANKED

AND OTHER FUN THINGS ALSO

An ad for Endy, a mattress company, starts like this:

\*alarm sounds\*

Man, yawning: "Wake me up when we make the playoffs."

Narrator: "Wake up Canada, we made it!"

Sounds inoffensive, right? The problem is, they started airing this ad days (maybe almost a week) before they actually clinched the playoffs!! They *did* end up making it, but this totally could have jinxed it and I would have never forgiven them.

... And that's all for ads, folks. Sorry that I didn't pay more attention to the ads this season, but maybe that means I'm just above being influenced.

Honourary mention to something that isn't an ad, but instead probably the greatest call of a play I've heard from Ben Shulman this season.

Picture the scene: it's game two of the ALDS, they're playing the Yankees, they just beat the Yankees 10–1 yesterday, and they're up 5–0 so far today. The bases are loaded for Vladimir Guerrero Jr.

You're in your room, or your car, or if you're my dad, maybe you're in a kayak. Through the slight static of the radio, you hear the sharp crack of the bat.

"Pinch yourself all you want, you will not wake up from this dream right now! The blue jays lead nine—nothing on a Vladimir Guerrero Jr. grand slam!"

The Blue Jays are awake, Endy. They're wide awake.

normalparameters

At the time of writing, the Blue Jays have won the first two games of the ALDS at home against the Yankees, with game 3 coming tomorrow in New York. I can't tell the future, but I hope this article holds up, and I will always choose to believe in my team.

# A black**BOX** a day keeps whitespace away.

A HEALTHY mathNEWS EDITOR

# WHICH TLOAS TRACK ARE YOU?

Taylor Swift's *The Life of a Showgirl* is out and incredible. It's pop fun, cool references, and a wonderful time all around. Haters need to get a life, but more importantly, everyone needs to find a track to identify with forever. What better place to pick that than **mathNEWS**!

Count up the times you answer each letter of the following questions to determine your life's track:

#### WHICH TLOAS THEME COLOUR IS YOUR FAVOURITE?

- a. OG orange
- b. Champagne pink
- c. Classic turquoise
- d. Shiny bug navy

#### WHICH WORD WOULD YOUR FRIENDS USE TO DESCRIBE YOU?

- a. Bright
- b. Sweet
- c. Cool
- d. Quiet

#### WHICH PAST SPECIAL TS EDITION CALLS YOUR NAME MOST?

- a. Til Dawn Edition
- b. Live from Paris
- c. The Witch Collection
- d. Sad Girl Autumn Version

#### WHICH WEIRD SPOTIFY DAYLIST WOULD YOU LISTEN TO?

- a. Pop beats Friday night
- b. Romcom baby Tuesday afternoon
- c. Dramatic boss Monday morning
- d. Mood swing Sunday night

#### WHO WOULD YOU WRITE A SONG ABOUT?

- a. Your friends
- b. Your partner
- c. Your enemies
- d. Your family

# WHAT WERE YOU MOST EXCITED FOR ON THIS ALBUM? (IF NOTHING, WHAT SOUNDS MOST EXCITING?)

- a. Happy, colourful songs
- b. Love stories
- c. Reputation-vibes
- d. Going behind-the-curtain

Based on your answers, you've been divided into one of four TLOAS variant categories. Within the category, ask yourself: **what does being a showgirl sound like to you?** The matching answer will reveal your track!

#### MOSTLY A'S: LIFE IS A SONG

- It's beautiful: Opalite
- It's rapturous: Elizabeth Taylor
- It's frightening: The Fate of Ophelia

#### MOSTLY B'S: DRESSING ROOM

- It's beautiful: Honey
- It's rapturous: Wood
- It's frightening: Wi\$h Li\$t

#### MOSTLY C'S: SO GLAM

- It's beautiful: Actually Romantic
- It's rapturous: CANCELED!
- It's frightening: Father Figure

#### MOSTLY D'S: ALONE IN MY TOWER

- It's beautiful: The Life of a Showgirl
- It's rapturous: Ruin the Friendship
- It's frightening: Eldest Daughter

If you haven't yet, stream TLOAS wherever you get music. It's a great album to hear in order first so grab some glitter and start listening. That's show business for you!

BeesKnees

## **GARDEN PATH SENTENCE**

KNOWN. SOME. CALL. IS. AIR. AM.

The old man

the boat floated

down the river

the young man

sank

wacfeld

# **MY LONGEST SENTENCE**

Give job me give work job me work job give me work job give me you.

Whole Number Haver

### A GHOST STORY

#### IN HONOR OF OCTOBER. BASED ON TRUE EVENTS.

Last Friday, when the clock hit 5:00 PM, I immediately sprang up from my desk at work, gathered my things, left the office, and threw my laptop in the garbage. The weekend was approaching! I jumped on the ION and got off at the university. I was about to make my way home when I remembered that I needed more toothpaste and realized that nothing was open at that time except for Farah's. At that point I was already in front of Molly's and I just had to sit down and order two long islands. And three shooters.

Walking out of Molly's, feeling great, I headed back home. I got all the way to Philip and Columbia, realized I forgot to get toothpaste, then made my way back to the plaza. It was dark at this point, the street lights were on and the parking lot was emptying out.

At Farah's, I pulled on the first door to get inside and it stayed closed. It was locked. I put my forehead to the glass, there was nobody inside and the lights were off. Strange, I've never seen it closed. Getting a second wave of strength from the shooters, I yanked on the door again, for no reason, and stood staring at it, trying to determine what to do. Half of my brain was focused on considering the present circumstance and the other half was entertaining a five-year-old intrusive memory. At some point, I started to smell cigarettes. I saw a disappearing wave of smoke to my right, and looking down, I could see a boy, dark-haired and pretty, sitting on the ground, chain smoking.

He looked up and told me that the store was closed, but he could get me something from the back if I wanted. Yes, I need toothpaste. With fluoride. I eat lots of sugar.

A pale blue translucent light surrounded his figure. He blew smoke in my face and I tried my best to inhale it (he was pretty). Standing up, he motioned to follow him and we walked to the back of the building, where he opened a door and took me down what felt like ten flights of stairs. There was a small break, then ten more flights of stairs, down, down, down, into the back. After the last step, we started walking through a long hallway that twisted and turned as it willed, and seemed like it would last forever. We passed various strangers down there, people selling all kinds of things. I had no idea this existed all this time. I stopped to buy a small bag of this candy that looked like blue starlight mints from a man who was one-third of my height and, for some reason, started my rant about how I think it should be socially acceptable for adults to trick-or-treat too. I then walked in silence, feeling somber, absorbed in a thought that I had been suppressing for two weeks. The thought re-emerged when I noticed that the walls, ceiling, and floor of the ever-lasting hallway were painted with one long, winding, diagonal stripe that reminded me of a fun house.

Suddenly, the boy grabbed my wrist, with an alarm in his eyes, and asked me what I was thinking about. I couldn't

understand why he was so insistent on knowing, but I explained anyway (he was pretty).

I just don't get why something bad always happens, always out of the blue. It happens even if you eat well, exercise, get good grades, have a good job. You could be stable for months or years, and it will always be waiting for you, it will always ruin the streak. Everything could be going your way—and I don't mean you've been subjected to a sudden streak of good luck—I mean you could be in the most calm, stable state of mind, feel like you have control over everything, even if things aren't going perfectly, and then suddenly, something you would never expect knocks on your door, pulls out a Glock 19, and takes you out. It's like when someone beside you raises their hand to scratch their head and you flinch, thinking they were about to hit you for some reason. I just keep anticipating, waiting for the other shoe to drop and eventually, it always does. All I want to do is slowly and painfully make progress on the things I care about, and I know it will take so much energy and so much time. Just let me have a calm four months and leave me be (I don't know who I was pleading to). I'm tired of the anticipation.

Still feeling somber, I remembered that I bought candy earlier and took it out. I opened the bag and chose one piece, its round shell was made with blue and white spirals originating from the center. Suddenly, it fell right through my hand! I heard it hit the floor with a weak sound. I picked it up and it fell through my hand again! I blinked a few times, not understanding what was happening. When I bent down to pick it up again, I saw that it had turned into broken glass, and I quickly pulled my hand away. When I stood up again, I saw multiple tables and booths, filled with people laughing and talking amiably. As my vision cleared, I realized that the glass in front of me was my own, and that I had just dropped it.

It appeared that I had never left Molly's. And I might have a drinking problem.

sirtophamhat

Solely to provoke an argument, I will say that I don't believe in infinite sets—they are merely convenient fictions.

PROF. DAVID WAGNER

## **HOCKEY IS SO BACK**

#### THE FIRST INSTALLMENT OF hockeySTICKS!

The arrival of early October can signify a lot of things to university students, such as the promise of going home over reading week or the encroaching dread of midterms. To me, the leaves changing colour and the weather getting colder means it's the start of hockey season! (The dread never leaves.)

If you're a hockey fan like me, you've probably spent the last four to six months waiting to see your favourite team(s) play meaningful games again. Your team might have already started their season; maybe we both witnessed the Kitchener Rangers come back from being down 3–0 to win their home opener in overtime, or we were both in the stands of CIF last week cheering on the Warriors men's hockey team. If you follow the PWHL or women's USports hockey, your team is still preparing for the start of their season. However, there is another hockey league whose season starts in early October: the best men's hockey league in the world, the National Hockey League.

By the time this issue releases, all of the thirty-two teams in the NHL will have played their first game of the 2025–26 season. You might be able to spot some fans around campus: for example, the average Toronto Maple Leafs fan can often be observed cursing the circumstances of their birth. All thirty-two NHL teams will be playing again on October 11th (the day after this issue releases), so if you're sick of studying for midterms and you'd like to try a different flavour of crippling anxiety & staring at your laptop screen in despair, why not catch a game?

To celebrate the beginning of the 2025/26 hockey season, and to shatter the unfounded stereotype of STEM students being nerds who don't know what physical activity is, here are **mathNEWS** contributors' predictions for who will win the NHL championship—called the Stanley Cup—this season:

- What's the Stanley Cup?
- Ducks
- The Vancouver Canucks!! (my answer! this will be our year!!!)
- I don't even know... can I say the Oilers?
- Hatsune Miku
- The Minnesota Wild, only because my boyfriend is from Minnesota
- I don't know what the Stanley Cup is
- Kazakhstan
- Mexico
- Probably Stanley. It's their cup, isn't it? x3
- Bruce the Duck
- Let's go Oilers!!!
- Oilers (Connor McDavid if you can hear us please save us Connor McDavid) [Editor's note: Please god surely this time right]
- Jordan Peterson (apprehensively) x2
- If I say Leafs will that do anything for us?? Please.... we need this...
- Oilers (yuck)

- Taylor Swift
- Jane Remover
- Oumaji
- I don't know anything about that
- me

Thanks for reading the first installment of **hockeySTICKS**! See you at Columbia Icefield on October 24<sup>th</sup> for the Warriors women's hockey home opener:)

aurelio

### **SOUP RAP**

4/4 TIME, 86BPM

I
MADE
SOUP (fuck yeah!)
AND IT FUCKIN ROCKS
we eatin GOOD tonight, knock off your fuckin' socks

put in potatoes 'n' chickpeas 'n' carrots, herbs and spices, an'a pound of fish, left it to its devices got a real big bowl, ate it in the kitchen it was spiritually fillin' as any practiced religion

but when it came time to put my soup away I checked the cupboard, and to my dismay all the round containers were in the fridge in use the only jar in sight's the one I use for juice

went through all the containers I could find that I own they're rectangular in shape and bitch, it's well-known that you don't store soup in no fuckin' square I gotta put it away in the fridge, but I swear

that I gotta find something, do the best I can 'cause Iyaint tryna put soup inna lasagna pan

macinnes

Don't put that in mathNEWS. I don't need my name attached to it when you Google me.

**BLAKE MADILL** 

# CAN A TEAM OF THREE PEOPLE LEAD AN ENTIRE INDUSTRY?

The idea of leading an industry seems impossibly distant. Apple turned heads when they released the first iPhone, but it wasn't all Steve Jobs and Steve Wozniak. They had an army of thousands backing them up.

In the last few decades it's become clear that the further technology advances, the smaller that army needs to be. WhatsApp sold for \$19 billion with only 55 employees: try explaining that to someone half a century ago. It's been making me wonder what the limit will be, the minimum team size you'll need to take down an entire industry.

#### 

The latest artificial intelligence buzz word is MCP: Model Context Protocol. It sounds complicated, but it's really not. It basically means that now, large language models like ChatGPT can do things instead of just say things. Want your LLM to make a calendar appointment and send out email invites? Easy peasy. Want your coding agent to execute unrestricted SQL queries on your production database? Piece of cake.

This idea surfaced late last year, with large model companies like OpenAI supporting it around March this year. It was becoming clear that the first company to build and host an MCP server for public use would snag a snowballing lead in a very, very big war.

000

Three weeks after OpenAI released MCP support, Cloudflare released the first public MCP server, enabling any company on earth to build MCP agents of all kinds, essentially for free.

It turns out, three senior engineers at Cloudflare had been paying attention to the evolution of MCP, and they had locked into the vision of a public MCP server. With Cloudflare's dominance in cloud computing, and the engineers' years of expertise writing infrastructure that connected billions of computers, all it took was a few weeks of heads-down development before leadership paid attention to them.<sup>1</sup>

"Tomorrow" was the launch day they selected, and an entire industry was officially flipped on its head.

#### 000

The engineers at Cloudflare had some glaring unfair advantages. They had the necessary expertise, a company with industry dominance, and leadership that noticed. Plus, they had the wherewithal to heed the signs and drop everything to work on a never-before-seen project.

So like, why couldn't three random Waterloo interns do the same thing?<sup>2</sup>

no pun indented

- 1. No idea if that's how it happened lol.
- 2. Asking for a friend.

### N CLUB DISCORDS THAT I AM IN

I MISS HAVING TIME, THE CLUBS AND SOCIETIES FAIR HAS RUINED ME

- mathNEWS: I am required to say I like mathNEWS since the editors are watching my every move right now. 10/10
- mathsoc: yeah it's cool 10/10
- humans VS zombies: i played this one like last year and it was a blast, then i forgot about them lol 10/10
- board game club: i love board games but i cannot understate my disappointment. they have 3 board games. the board game club has 3 board games. tragic. **9/10**
- csc: they give free food at events **10/10**
- concert band: once a band kid, always a band kid. unfortunately i have a club on tuesdays. idk/10
- deception board games club: i love avalon! easy 10/10
- riichi mahjong club: i like mahjong but i have not gone to a single meeting. 10/10
- quizbowl: very fun club 10/10

- uw putnam training: i hate math but i love jerry wang 10/10
- watsfic: dnd is cool **10/10**
- with respect to time: i love jazz, if only my air didn't malfunction **10/10**
- rhythm game club: i'm neurospicy like that **10/10**
- blood on the clocktower: i played 12 hours of this game on saturday and i had what might be the biggest crashout of my life 10/10
- uw cubing club: i love being slow 10/10
- uw tetris club: why am i in this club 10/10
- femphys: another club where i have no idea why i am in the club. i am neither female nor in physics
- pmamcoc: 10/10
- cheese club: cheesing it 10/10
- jugger club: it looked really fun but i was busy going to the aforementioned blood on the clocktower session 10/10

### **MOONCAKE**

I check the route to T&T. The bus takes 20 minutes. Walking takes 19 minutes. I decide to walk.

I walk past Needles Hall, there's a sign for free counselling. I walk past a honking flock of geese, they seem mad at nothing and everything. I walk past a community garden, the crops seem healthier than me.

I arrive at T&T. There's a big sign reminding me that Mid-Autumn Festival is coming up on Monday, October 6<sup>th</sup>. In front of the makeup aisle is a big display of mooncakes of all shapes and sizes. Boxes and boxes of lotus seed paste, red bean, date and walnut, taro, spicy crawfish and pork. They are all too expensive.

I wander around T&T. Everything is in the wrong place. The T&T I went to back in Edmonton has the seafood section next to the meat section, the freezer aisle in a well-defined aisle, and only human-powered checkouts. Here, the seafood section is on the opposite side of the meat section, the freezers are relegated to the perimeter of the store, and there are signs encouraging me to use the self-checkout. It feels so off.

I pass by a worker selling tempura shrimp—she says it's a great deal. It's 11 dollars for 10. It might be a great deal for someone else, but not for me. I pass by a Laurier student talking on the phone about how much she misses home. Although she's from Laurier, I still end up agreeing with her.

I pass by a free-samples worker offering slivers of mooncake. "It's almost Mid-Autumn festival," she says in Chinese. I nod.

"Would you like a free sample?," she asks, holding up four percent of a red bean mooncake. I almost take it, but then remember I'm allergic to nuts. I try asking if I can see if there are nuts in Chinese, but I forget the word for "ingredients list." I give up and finish my sentence in English. She asks a coworker to find a box of red bean mooncakes. The coworker flips through a pile. Lotus seed, mung bean, pineapple, lotus seed again, lotus seed again. Finally she finds a red bean flavor box. "I don't think it has nuts," she says. On the ingredients list, it turns out it is made with peanut oil. She laments my poor luck. "I just don't think I've met a Chinese person allergic to nuts before," she says. I thank her for the offer. It's the thought that counts.

I come back from T&T. My floormate asks if I want a mooncake, "My dad gave me two boxes, but nobody reasonable can eat that much." There are five flavours. I check the ingredients list. All five flavours are made with peanut oil. I can't eat any of them. "Unlucky," he says. I ask him to give mine to someone else. We end up trying to solve a strong induction problem together. Neither of us can do it and we give up.

I get pizza, soda, chips, and cookies at mathNEWS prodNIGHT today, and although they are in the same equivalence class of mooncakes (by abuse of notation), they are not the same.

I guess I won't have any mooncake this year. But I think I will be ok.

papayabird

### 237 KAKAPOS LEFT

Have you ever reacted with party parrot? That's Sirocco the kakapo, the National Spokesbird for Conservation in New Zealand. His moment to fame was on BBC's "Last Chance to See", when he climbed on top of Mark Cawardine (a human)'s neck and beat him with his wings in an attempt to mate with him (his party parrot moment).

The kakapo are very rotund, mossy green parrots that can't fly. Instead of flying, they like to climb up trees with their legs. Their bodies are ony 3.3% pectoral muscle so they definitely can't flap upwards, but the wings are useful for semi controlled descents after they climb up the trees. Also, male kakapos find hot single female kakapos in their areas by digging holes and booming (sounds like when you blow on the top of a beer bottle) for months on end, losing up to half their body weight, and waiting for a female kakapo to come to their hole.

The kakapo are critically extremely endangered, with their population going down to 51 in 1995. Today, it is at 237 (238 a couple days ago, but rest in peace to Solstice), due to intensive breeding efforts. A lack of genetic diversity causes lower egg hatching rates, so the kakapo breeding people like to inject

cum from many males that are genetically different into females. Sometimes this involves the use of drones to get the fresh cum from the male kakapos from one side of an island to the female on the other side as fast as possible (flying the cum with drones only takes 5-8 minutes, as opposed to 1.5 hours+). Also, due to Sirocco having health issues when he was a chick, he was taken in for medical help and as a result imprinted on humans, so he only wants to mate with humans now. The kakapo breeding people tried to make a helmet for people to wear to collect his cum but they were unsuccessful. The kakapos were decimated mostly because they are ground dwellers and the Polynesians and Europeans brought lots of rats, stoats, ferrets, etc that thought their eggs were delicious. They also have almost no natural defences, as their only strat is to freeze and hope they aren't spotted (to be fair their mossy green feathers look a lot like vegetation). This was no way to live as you can just walk up to them and stuff them in a bag.

Follow <u>@kakapo\_recovery</u> on instagram and support Predator Free 2050 ^-^

# RATING UW MASCOTS BASED ON HOW CONFIDENT I AM THAT I COULD BEAT THEM IN A FIGHT

IF YOU'RE A MASCOT: I LOVE YOU, PLEASE DON'T FIGHT ME <3

#### KING WARRIOR - 0/10

I would get folded like a table. Really nothing else to note here. King literally reps athletics and recreation. I go to the PAC gym MAYBE twice a term—I'm cooked. He's also known for cheering athletes on during games so he's got buff connections. Just gotta hope that he doesn't call all the varsity teams to watch the fight.

#### PORCELLINO (ARTS) - 7/10

I could take them. Like there's not much else here but me looking at the guy and going "ehhhhh seems feasible." Are they a boar? Yes. Does that mean anything here? No. I think they're a kind and gentle fellow and I plan on using that to my full advantage and winning the fight. Probably.

#### AHSSIE (HEALTH) - 0/10

They're a kangaroo. I'm picking my battles and this is NOT one of them.

#### THE TOOL (ENGINEERING) — 10/10

I'd show up with a smelter—badda bing badda boom fight over. Apparently the tool has "tool bearers," a group of people sworn to protect the tool? Ignoring them, then smelting is just the answer. Not ignoring them, then as a math student, I feel

obliged to say that I would win against engineers and I refuse to lose to a gaggle of goons.

#### BIG BANANA (ENVIRONMENT) - N/A

I think the banana is cool. I'd like to take them out for lunch and get to know them:))

#### **PINKY (MATH) — 8/10**

Pinky's origin has a history of kidnapping and sabotage. Taking from their source material, they can't be thaaaaaaat strong. Also they're a tie? Knot em up! There's the chance that I'm fully wrong and they Shaggy-from-Scooby-Doo-ultra-instinct my ass and I lose TERRIBLY, but I'm willing to take my chances.

#### COBALT THE DINOSAUR (SCIENCE) - 3 / 10

Dinosaur. Also the coolest mascot! Blue, cool rock source, cool name origin and simply put just very cool.

CONRAD THE COOKIE (GREBEL UNIVERSITY COLLEGE) - 10/10

Gobble Gobble

sillybilly

# SOME FUNNY QUOTES FROM THE MALAYSIAN AND SINGAPOREAN STUDENT ASSOCIATION BOARD GAMES CLUB EVENT

THEY WERE ALL SAID BY THE SAME PERSON, WHO WAS BORN AND RAISED IN CANADA (NOT MALAYSIAN OR SINGAPOREAN)

Q: What province is Banff National Park in? A: British Columbia

Q: What is the largest Canadian burger chain? A: Burger Factory? Slap Burger?

Q: What is the largest city in Nova Scotia? A: PEI

Q: What year did the Confederation take place? A: Uhhhh, 19 something?

Fried Rice

## **NO MORE BIRD COURSE**

CLAS 104 now has an in-person final exam, allegedly.

I want to defeat you.

PROF. JASON BELL

# YOU DON'T NEED A DOCTOR TO ACCESS HRT

#### DIY HORMONE REPLACEMENT THERAPY FOR TRANSFEMININE AND TRANSMASCULINE PEOPLE

There are so many reasons someone might not be able to or want to access Hormone Replacement Therapy through standard avenues, such as:

- Living with less than understanding family, who may still handle your medical appointments or question your leaving home without reason
- Not being able to afford it through the usual means, e.g., insurance difficulties for some international students
- Not having your own means of transportation and living too far from anywhere that does informed consent
- Being denied it by your physician
- Going on co-op or exchange to somewhere where it is or may soon become difficult to obtain it
- Long waiting lists
- Trauma or prior negative experiences with the medical system
- Not wanting government or medical records of your transness
- Underdosing or misdosing by less than knowledgable physicians

and many other reasons that I'm absolutely forgetting right now.

#### FOR TRANSFEMININE PEOPLE

The good news is that estradiol is not a controlled substance, at least in most countries, including Canada. Exceptions include some countries like Saudi Arabia and the UAE, so do your research of course. But the vast majority of you reading can legally and safely purchase HRT.

For transfeminine individuals, HRT consists of estradiol, which causes feminization, and sometimes anti-androgens (which block testosterone). Your body fat will redistribute to feminine deposit patterns, you will grow breasts, your skin will soften, hair loss will be prevented, or ceased if it has begun, you will experience many other such changes. HRT will likely make you infertile, but still act as if it doesn't and use protection and such. See here for details: <a href="https://transcare.ucsf.edu/article/information-estrogen-hormone-therapy">https://transcare.ucsf.edu/article/information-estrogen-hormone-therapy</a>.

You would be buying pharmaceutical grade HRT produced by licensed pharmaceutical companies in countries where it is permitted to sell medications internationally. It will be safe.

Options available to you include pills, gels, and injections, all of which have their benefits and drawbacks. If you decide on injections, the estrogen will do enough of a job suppressing testosterone (for the vast majority of people) that you won't need to take anti-androgens, which is why I said sometimes. Pills tend to be the more commonly chosen avenue though, and taking anti-androgens is not the end of the world.

Ideally, you'd be able to get blood testing done every three months or so, but this is not absolutely necessary.

You can do this, I believe in you. You deserve to exist in this world.

#### FOR TRANSMASCULINE PEOPLE

Since distribution of testosterone is technically illegal, how exactly to obtain it will go undiscussed. However, personal possession is not illegal. Please refer to the link in the last paragraph.

The main hormone behind masculizing HRT is testosterone. Effects of masculinization for the most part look like the inverse of feminization: fat redistribution, body growth, acne, and unfortunately hair loss. Menstruation will also cease. However, your chest generally won't change (some might experience shrinkage, emphasis on some), but your voice will deepen. There are many other side effects, many of which are covered here: <a href="https://www.rainbowhealthontario.ca/">https://www.rainbowhealthontario.ca/</a>
TransHealthGuide/qp-mascht.html.

Testosterone is available in three main forms: injections, gels, and patches. Unlike estradiol, there is no pill form, because it's too hard on your liver. Additionally, there is no need for anti-estrogens—estrogen production naturally lowers while on HRT. Gels are more expensive and more tedious but still a great option. Injections are the more favoured path given their effectiveness (effects will show up more quickly) and ease (once every 1–2 weeks; gels are daily)—needles are scary, but I promise it gets easier.

If possible, get blood tests done about once every month when first starting out, and then after about the first three, you can move onto a more annual basis. Not necessary, but highly advisable given how HRT does induce changes in your body and you want to make sure you're in the clear regarding health.

You got this! You deserve to be you, in whatever form that looks like. I believe in you; I am proud of you.

#### WHAT NOW?

Visit <a href="https://diyhrt.info">https://diyhrt.info</a> for a wealth of information we have not covered, regarding specific medications, dosing, where and how to buy them, more technical details, and in general a much more thorough explanation of all of this.

sunrise parabellum and boy wonder





### **ALL IS WELL**

#### gridCOMMENT 159.3

aloha

man that **gridCOMMENT** being cancelled stuff was WEIRD, huh??? hahaha. i'm alive, well, and most importantly, free. duh, how else would i be able to publish this **gridWORD**? now, about the gridWORD: if i were being held captive in a mystery location on campus, which i am not, i would hide a puzzle in this gridWORD which, when solved, would tell you my whereabouts. but i am alive, well, and free, so there is no puzzle and nothing to be deciphered.

anyway, last last time, i asked you all what your favourite study spots in waterloo were, and why, and you all said:

- your roommate: your room
- awmlet: i'm gatekeeping
- Solvers: EV3, has wholesome nature vibes!
- macinnes: DP by the course reserves because you only get the course reserves for three hours so I have to be productive
- thirdoffive: I like studying at GRR, because then if you get tired of studying you can go climb for a bit
- pac\_gym: my favorite study spot on campus is the balcony of MC outside of CnD during the day. (During the summer and the start of the fall term). This is because its the one time and place where the campus feels the least depressing lol.

- Rademacher: Environment Building courtyard
- · Flamingo Porcupine: In the psychedelic tunnel under

congratulations to thirdoffive on giving the answer i agree with the most!! what, you didn't know that the gridWORD was always an autocracy? plus, grr has a wonderfully deep fried tv with nature documentaries. thirdoffive, please pick up your prize at the **mathNEWS** office at MC 3030. everyone else gave great answers.

the **gridQUESTION** for this issue is: what is, in your opinion, the birdiest course at uw? please be creative with your answers, no cs 452 or clas 104. the gridMASTER may be wildly unimaginative, but i expect you all to be better. please submit your completed gridWORD with a pseudonym and answer to the **gridQUESTION** by oct 20 at 6 pm, either in person at MC 3030 or to <a href="mathnews@gmail.com">mathnews@gmail.com</a>. please make sure also to NOT attach your answer to the puzzle, because there is no puzzle and i am not in imminent danger, so there is no solution to be solved, no location to be deciphered. thanks everyone

fearfully yours,

spaghettiinhalers

#### **ACROSS**

- 1. Desire
- 5. Happen again
- 10. Bass part
- 14. Powerful heater
- 15. Entertain
- 16. Small wild ox
- 17. Items of a sole soul\* (11, 13)
- 20. Annoy
- 21. Two-cupper
- 22. Dissolved substance
- '\_\_\_ down! Shh!!" 23.
- 25. Summer mo.
- 27. Copter sorts
- 28. Hormones that stimulate ovaries and testes\*
- 31. Water carrier
- 32. Grow chompers\* (6)
- 33. Sum
- 36. Excise
- 38. Fish hawk
- 40. "Dr \_\_\_ Vandertramp"
- 41. Fight back
- 45. Spike
- 46. Bipedal dinosaurs\* (5, 8)
- 48. Japanese bar offering\* (4)
- 51. UW student group 52. "\_\_\_ upon a time..."
- 53. Querying
- 55. Viral point guard
- 57. Electric guitar equipment 59. Acting ambassador\* (10, 12, 14)

- 62. No longer working: Abbr.
- 63. Sacred song\* (3)
- 64. Sloth and Greed, for two
- 65. Aphrodite's paramour
- 66. Plant origins
- 67. Damon of "Good Will Hunting"\* (1)

#### DOWN

- 1. Arizona tribe
- 2. Subdue\* (7)
- 4. Dashes that are less likely to get flagged by an Artificial Intelligence detector
- 5. Indian royal
- 6. Issue
- 7. Kind of shock
- 8. Purpose
- 9. Umps
- 10. Manx, e.g.
- Provoke
- 12. Gambler's game
- 13. Performs correctional vision surgery, maybe
- 18. Newspaper piece
- 19. Old-timers
- 24. Whittle, as a vegetable\* (2)
- 26. Understood
- 28. Disease-causing microbe
- 29. Aquatic mammal known for linking paws during naps
- 30. Snapshot
- 33. Monkey puzzle tree

- 34. Reduction
- 35. Changes colour
- 37. Weeping
- 39. Map out
- 42. Hang
- 43. Kind of tuition
- 44. Gobbled
- 46. Fractions depicted by the Mercedes-Benz logo
- 47. Miso sauce bean
- 48. Pelvic bones
- 49. Theatre helper
- 50. Glide on a blade
- 54. Beauties
- 56. New newts
- 58. "Over here!"
- 60. Female deer
- 61. An end to sex?





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

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

A PERPETUALLY BORED mathNEWS EDITOR

# lookAHEAD

**SUN OCT 12** 

MON OCT 13

**TUE OCT 14** 

WED OCT 15

**THU OCT 16** 

**FRI OCT 17** 

**SAT OCT 18** 

Thanksgiving
Ada Lovelace Day

Be Bald and Free Day

Tuition and fee refund deadline—50%

Last day to select an examination centre or submit a proctor for online course final examinations

**SUN OCT 19** 

MON OCT 20

**TUE OCT 21** 

WED OCT 22

**THU OCT 23** 

FRI OCT 24

**SAT OCT 25** 

Last day of reading week

Diwali

No prodNIGHT:(

PMAMC&OC SASMS I

SSSniperWolf's Birthday

Convocation begins

No mathNEWS:(

Howl at the Moon Night

LAST ISSUE'S gridSOLUTION

<sup>1</sup> S	<sup>2</sup> U	$^{3}$ R	4Ε	<sup>5</sup> R		<sup>6</sup> W	7	<sup>8</sup> N			9 9	10 <b>Y</b>	<sup>11</sup> R	<sup>12</sup> D	
<sup>13</sup> O	٧	0	L	0		<sup>14</sup> O	O	Α		<sup>15</sup> G	Е	0	ı	D	
<sup>16</sup> S	U	В	G	Е	17 <b>N</b>	R	Е	S		<sup>18</sup> E	R	J	Р	Т	
19 O	Т	L	Α		<sup>20</sup> E	D	D	Α		<sup>21</sup> T	-	Т			
	22 A	Е	R	23	Α	_			<sup>24</sup> M	ı	Ν	J	<sup>25</sup> T	<sup>26</sup> E	
				<sup>27</sup> S	Ρ	Е	28 L	<sup>29</sup> L	-	Ν	G	В	Ε	Е	
	<sup>30</sup> A	<sup>31</sup> D	32 E	Z			<sup>33</sup> A	Ζ	Z		<sup>34</sup> S	Е	Α	L	
	35 K	I	L	Т	<sup>36</sup>	<sup>37</sup> E		<sup>38</sup> T	I	<sup>39</sup> M	Е	R	S		
<sup>40</sup> A	R	G	0		<sup>41</sup> N	Α	<sup>42</sup> P			<sup>43</sup> E	Α	S	Е		
44 C	0	Ζ	Ν	<sup>45</sup> E	C	Т	-	<sup>46</sup> O	<sup>47</sup> N	S					
<sup>48</sup> E	Ν	ı	G	М	Α			<sup>49</sup> N	J	Α	<sup>50</sup> N	<sup>51</sup> C	<sup>52</sup> E		
		<sup>53</sup> F	Α	В		<sup>54</sup> E	<sup>55</sup> D		Т		<sup>56</sup> A	L	G	<sup>57</sup> A	
<sup>58</sup> T	<sup>59</sup> R	I	Т	Е		<sup>60</sup> C	R	0	S	<sup>61</sup> S	W	0	R	D	
62 S	N	Ε	Е	R		63 R	0	Ν		<sup>64</sup> E	Α	S	Ε	D	
<sup>65</sup> P	Α	D	s			66 U	Р	s		67 A	В	Е	Т	S	

**BELL BEAST** 



eeepycat