

math NEWS

Volume 128, Issue 1

Friday, May 15th, 2015



*mathNEWS Editorial Team
Taken Over By Little Girls*



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lookAHEAD**mathNEWS**

May 15	Issue 1 unleashed on unsuspecting public
May 25	Issue 2 convenes to solve global crisis
May 29	Issue 2 dispensed to local hospitals

CECA Workshops

May 19	Interviews: Preparing for Questions
May 20	Exploring Your Personality Type (Part I)
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May 28	Résumés for Grad Students
May 28	Making Networking Count
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May 29	Academic Interview

University

May 15	Add period ends
May 18	Victoria Day (No Classes)
May 22	Drop, no penalty period ends
May 22	Deadline to withdraw from courses with 100% tuition refund
May 23	Drop, penalty 1 period begins
May 23	You @ Waterloo Day Open House

Miscellaneous

May 15	National Chocolate Chip Day
May 16	National Sea Monkey Day
May 18	No Dirty Dishes Day
May 22	Buy a Musical Instrument Day
May 23	National Jazz Day

[EDITOR'S NOTE: May 22 explains so much about jazz.]

ISSN 0705—0410

Founded 1973

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Thomas Baxter (Baby Spice), Amy Li (Sporty Spice), Elizabeth Liu (Ginger Spice), Julie Sturgeon (Scary Spice), Katherine Tu (Posh Spice)

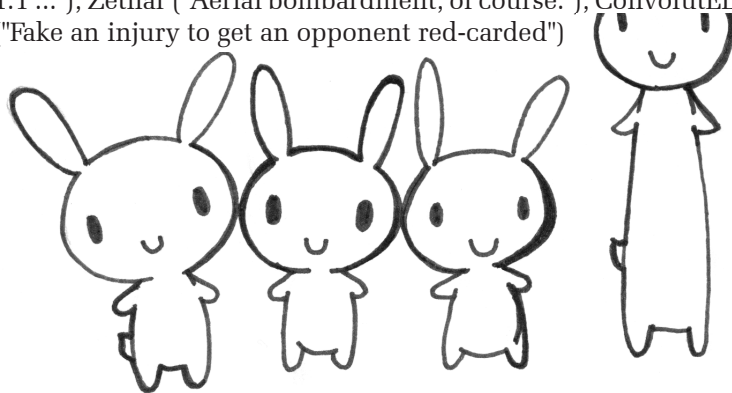
mastHEAD

Welcome, fellow students, to the most un-Canadian of seasons, the Spring term. You may notice that many of your so-called friends have migrated to more natural climes for the next few months, but *mathNEWS* will never leave you.

I pray that they won't notice that I have inserted this paragraph until it has gone to print. I, Convoluted, am the sole survivor of the Little Girl Incursion of 2015 on the *mathNEWS* Editorial Squad. I am writing this *mastHEAD* to you partially in the hopes that I can be rescued, and partially in the hopes that it can serve as a warning to future editors. Beware the little girls. They kick and they bite and I think one of them knows Krav Maga. I have disguised myself as one of them and they seem to have accepted me, but who knows what may happen when they realize that I am not a tiny female?

Moving straight from too-cold-and-snowy to too-warm-and-humid, we proud few will continue to complain about the weather. With the humidity starting to get the better of us, everyone needs a fun way to cool off. So we asked the writers: "What is your ultimate strategy in a water fight?"

wibbled ("duck and cover!"); Beyond Meta ("Yell really loudly and charge at my opponent"); BlueberryMuffin ("hydrophobic clothing"); Grumpy Old Fart ("Fire hydrant & hose"); Ice Nice ("Pretend it's a wet T-shirt contest"); SovietCanadian ("water-balloon trebuchet"); Pockets ("Allies"); The_Over-Thinking_Ape ("Be a fern."); Real_Time_Student ("Throw electrified rails"); xoxo ("waterbending"); Dictated ("Summon an army"); Theodore Bear ("A sharknado"); TotallyLegitDeveloper ("Bravely bold Sir Robin, he bravely ran away!"); GingerbrED ("a squirt gun full of hot sauce—right in the eyes!"); Glec ("19 point strategy. Point 1.1 ..."); Zethar ("Aerial bombardment, of course."); Convoluted ("Fake an injury to get an opponent red-carded")

**CSC Flash**

It's a new term, full of excitement, promise, and CSC events! On Thursday, May 21st, we will be hosting hosting a tech talk on the math behind NTP (Network Time Protocol), the magic that syncs up time across an entire network, in MC4041 at 6 PM, food included!

Calum T. Dalek
Chairbeing Extraordinaire

Volunteers! We Need Your Help!

Come out and join the festivities as we congratulate and welcome our incoming students for September 2015!

Be part of a jam-packed day full of fun and celebration. Answer questions, lead tours, and share your experiences with future Waterloo students.

Talk about your classes, clubs, and favorite spots to hang out on campus.

What: You@Waterloo Day

When: Saturday, May 23rd, 2015 at 9:30 AM – 2:30 PM

Where: Physical Activities Complex (PAC)

If you're friendly and passionate about CS, we want you!

Contact Heather Steinmetz for more details: h2steinmetz@uwaterloo.ca.

Heather Steinmetz

Applications Due!

*Undergraduate Research
Opportunities Conference (UROC)*

Event Details: October 9th – October 11th, 2015 at the Davis Centre at the University of Waterloo

Are you curious about Computer Science research, but not sure where to start? Experience the life of a graduate student in three days by participating in research workshops with other top undergraduate students in Canada.

Eligibility: UROC is open to all undergraduate students in Canada, and is fully funded (i.e., we pay for travel, lodging and meals). To be eligible, you must be in the third or fourth year of your program, and open to the possibility of pursuing graduate studies in Computer Science.

Apply now! Complete an online application at uroc2015.ca by Friday, July 31st, 2015.

Questions? Contact Heather Steinmetz at h2steinm@uwaterloo.ca.

Heather Steinmetz

TCAF is an Awesome Thing

Comics for everyone

Do you like art? Do you like it in comic form? Does a festival celebrating comics and filled with comic-related paraphernalia interest you? If you have a craving for any of the above, you should consider going to the Toronto Comic Arts Festival.

In previous spring terms, I visited Anime North, a general nerdy thing full of cosplay, panels, tons of merchandise, and cool things. This term I am quite poor and decided instead of paying the \$45+ ticket to Anime North and for the hotels and such that I normally get along with that ticket, I would take advantage of the free-ness that is TCAF. Two-days long, no admission, and packed full of cool people and the things they have created. They don't have cosplay like Anime North, but that helps keep walkways clear/moving instead of being blocked up with impromptu photo shoots. Similar to Anime North, there are movies, discussion panels, and other activities that might interest you.

Anyways, being a person who reads a lot of webcomics, I was pleased to see a large amount of webcomic artists/creators present at the Festival, and being a gamer, I was pleasantly surprised to see a section of the festival set aside for indie games of all sorts. It only takes a few hours to bus over from Waterloo, and it's well worth a day full of amazing art and the creators of said art. If you are free in early May next year, I encourage you to take a trip to Toronto; amazing things will greet you and it won't cost you a cent (well, except for travel expenses, and if you want to buy things).

Soviet Canadian

VPA Sez

Hello! My name is Katherine, and I am your Vice President, Academic (VPA) for Spring 2015. To start off the term, I would like to continue the work of our previous semester's VPA, which includes moving forward the proposal for a confidential reporting mechanism for discrimination within the Math Faculty, and moving forward the recommendations made to the Mathematics Standings and Promotions Committee. I will also be continuing my work as the student representative of the Undergraduate Affairs Committee's (UAC) Mental Health Subcommittee.

However, I need the help of you, my fellow math students. As much as I understand the frustration of the student who scrawled, "Fuck you" on one of the posters by the UAC Mental Health Subcommittee, complaints are more useful when they are constructive. It is my opinion that the university leaves much to be desired in terms of accommodating students with special needs, but it is difficult to pinpoint what these needs are and what accommodations would be helpful without feedback from more than one student. I would greatly appreciate any suggestions or feedback sent to vpa@mathsoc.uwaterloo.ca or anonymously through the **mathNEWS BLACK BOX** beside the Comfy Lounge on the third floor of the MC.

I am also open to suggestions on which textbooks you think the MathSoc office library should stock, so shoot me an email if you have any titles in mind.

Thank you!

Katherine Tu
Vice President, Academic

N Reasons Why You Need to Log Into the New Student Portal

Finally, all the UWaterloo info you need to be successful as a student can be found in the palm of your hand (or on your desktop) with the student portal.

UWaterloo's student portal has gained positive momentum across campus as a mobile-friendly communication tool that delivers the information you need, just when you need it. Math students are saying things like, "Wow! This is incredible. You've done a great job, Waterloo," and "Portal has all the information I could possibly need all in one place—fantastic work."

With the portal, you have a convenient, customizable tool that delivers what you need to make your life easier at Waterloo. A few of the helpful features include:

- Study space and campus hot spots: real-time availability and line-up reporter
- Course materials: your personalized list of required and optional textbooks
- Food options on campus: campus food outlet hours, specials, vegetarian and halal options each day and nutritional facts

- GRT/Greyhounds/Feds bus schedules: real-time schedules for your favourite routes to campus and out of town
- Upcoming events and academic deadlines: your favourite events and important academic deadlines you don't want to miss
- Calendar: delivers your class, intramural and final exam schedules. Plus, you can pull in all your important iCal feeds, like Learn events, Facebook, Google Calendar
- And so much more! Coming next week will be a clubs widget to help you stay on top of your favourite club events

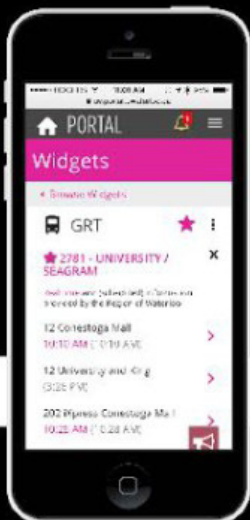
Math students helped enhance the student portal last term in the portal's first hackathon. More than 30 students competed to develop new tools for the student portal and tested the portal's student development environment. In the coming months, more student developers will have the opportunity to develop content for the portal.

For easy portal access, log into the portal using your smartphone at uwportal.uwaterloo.ca, and pin it to your phone's home screen so it behaves as an app. Submit your feedback so the portal can evolve to become an extremely useful tool for all Waterloo students.

The portal is not a lie



the cake is a lie!



uwportal.uwaterloo.ca

Messages From Beyond the Grad

Since graduating last year, I have been living in a land where time is measured in quarters rather than terms and **mathNEWS** pizza is no longer a major component of my diet. Here are some lessons I learned:

1. Inflict your high standards on everyone else

Have you got higher standards than those around you? Are you highly opinionated on topics relevant to your job? Make sure everyone around you conforms to your worldview. Nobody else will keep your standards high for you. If you haven't got high standards, go get some.

2. Document everything you do

There is no greater joy than sending someone an email consisting solely of "RTFM". You can also avoid unnecessary social contact with people who would be wasting your valuable time wondering how to use whatever it is you made. Another benefit is that managers like documents that show you've been doing work instead of reading reddit or whatever you do when you're not working.

3. Make up your own work

Since you know better than everyone else, (see 1) you should be the best person to determine what needs doing. Take over an old project and spend some time improving it. Learn something new, and expand the number of domains in which you have high standards to inflict on co-workers. Your manager will thank you for not making them find busy work for you.

Concealed

**If you wanna be my filler, you gotta
get in this space. Stretch it out
forever. The editors are laaaaaazy.**

Procrastination Causes Productivity

After struggling with procrastination for many years, I have finally managed to channel it. The stress of exams and final essays prompted the largest reading binge in my life to date—when you have work to do, all other actions suddenly seem more appealing and engaging. In addition to somehow still finishing my work and reading tens of thousands of pages (all 14 *Wheel of Time* books and more) procrastination from essays helped me do all my taxes, make my room spotless, get a job, and get around to other important tasks such as sleeping and having proper meals. After this curious situation, I will be conducting further experiments this term. As soon as I try avoiding an assignment I will head over to other less stressful, yet still productive, work. I have discovered powerful forces.

Pockets

007: LocoMotive to Kill

In the MC, there is a room. It is a small room by MC standards. Far too small, in fact, according to its inhabitants. You may have seen them recently, trudging about the MC's third floor, muttering under their breaths, and waving their hands around. These are the Real Time students. As their work piles on, hours in the lab turn into days in the lab, and eventually becomes life in the lab. For some perspective, a bug that requires a mere 12 hours to solve is considered the holy grail of bugs. They live in the Real Time lab, only leaving to hunt for sustenance and to attend classes. There is not enough room and certainly not enough ventilation for a residence in the middle of MC. Frustration accumulates quickly and tempers run thin. Under such conditions, a sane person might occasionally lash out at their neighbours. Unfortunately, their neighbours are the only people who can help them pass the term. So the frustration is vented in other ways.

An accidental bump in the hall is all it takes for one of them to unload. Using a model train, any Real Time student can gently carve initials into the soul of a terrified frosh. As a result of a couple having an argument in from of the open lab door, we learned that heartbreak can be cured via train track electrotherapy. Later the same term, it was discovered that a curved train rail can reach from the heart to the liver. These incidents last occurred over five years ago, which is why they are generally unheard of. The cause was determined to be "spontaneous trances of extreme aggression brought about due to a lack of comfy slumber sectionals"—a situation the MC is currently experiencing. The staff are aware and they know better than to even converse in the nearby hallways. However, it is now a matter of time before some drunk students wandering the MC at 4 AM disappear.

Don't let it be you.

#define RT_ELEMENT 118

N Signs You Should Get More Sleep

- Waldo has been SUPER tired lately (and for a very good reason)
- You decide to marathon an entire TV series for no reason other than, "Hey! This sounds cool and relevant to my interests!" and it's already midnight when you begin
- You can't seem to put the screen down when you're in bed
- You look out the window and notice the beautiful sunset then notice the time and realize it's actually the sunrise
- You can't even understand math any more than you normally can't
- You're slowly dozing off in your lectures when you realize that your class ended...4 hours ago
- You're writing a **mathNEWS** article when

waldo@<3.LE-GASP.ca

Let's Talk About the Mac Labs

Macs and I have a terrible relationship. The key bindings are incredibly weird. It looks like a Unix but Apple had to mess with the directories (`/System?` `/Developer?` Excuse me?). Oh, and open source software can run on it... provided you install a port of the X Windowing system! This means that nothing looks consistent (and isn't that why people buy Macs? [for the consistency and prettiness]). Why does the middle mouse click bring me to this silly lego page with a bunch of Android widgets? I'm running a desktop, not a tablet! When I double-click on the title bar it minimizes the window instead of maximizing it! Maximize and fullscreen are two different concepts! WHY IS SCROLLING BACKWARDS BY DEFAULT? I could go on for hours except that's not why I'm writing this.

My problems with Macs have nothing to do with how bad the Mac labs in MC are.

Let's start with the second floor lab, where I had the misfortune of writing this article. The room is gross: the keyboards are dirty, the chairs are stained, the room is incredibly humid... I feel like I'm dying faster just by existing in this space. I've already encountered one computer that doesn't work, just tonight. The keyboard cords are too short. I had to repair my chair to comfortably use it. And purple walls? I mean, really, purple walls.

There's also the main one on the MC third floor. There are more problems with computers that don't work and, again, the cords for the mice and keyboards are too short.

That's not all, because the problems extend past the physical rooms and into the actual computer system. The first time I logged in, my terminal was broken; `ls` didn't even work! I had to wipe my `.profile` and `.bash_rc` in order to get something functional. Why can't I remove things from my messy tool bar? It would have taken an hour to remove the 10MB of files from my trash. I had to install my own text editor because they don't have any good ones.

Let's see what they have installed. Do they have Git? NOPE! Does it have SVN (which courses use)? NOPE! Does it have CMake? NOPE! Is `cc` in my path by default? NOPE! Where is it? Hidden in `/Developer`, that's where! (again `/Developer` why why) Firefox is at version 22, the one before they changed the interface, which is ancient! I had to `ls / | grep` to figure out if something was even installed. They at least have vim, so I don't have to murder someone, expect that the keys bindings don't work the same. When I tried to compile my CS 246 project on it I couldn't get ncurses working... on the day of the presentation. How do courses use these rooms for anything productive?

Overall score I'd give to the Mac labs: 0/10, would not recommend. I'd recommend the Windows labs, of all things, over the Mac labs.

Although the chairs are spinny so... I guess they're not that bad... Okay, 1/10.

MH

Spring!

It's already been over a week since my first spring term on campus, but I have mixed feelings about being here—well, about spring school terms in general.

On one hand, isn't the weather just lovely? At least now I won't have to worry about bundling myself up in $-n/10$ layers (where n is the temperature outside in degrees Celsius. Note: this formula is only applicable in below-zero temperatures, as attempting to put on a negative number of layers is highly inadvisable, for obvious reasons). This makes getting ready in the mornings significantly easier--more time for sleeping! On the other hand, the sun rises so early in the morning and streams into my room with such obnoxious cheer and OH DEAR LORD WHAT CREATURE OUTSIDE IS MAKING THAT INFERNAL CHIRPING NOISE. So, basically, no extra time for sleeping. The warmer temperatures might not be too great, either, because it seems like the air conditioning in some lecture halls completely missed "pleasantly cool" and went straight to "Hell has frozen over", but of course you didn't prepare any extra layers because it's literally hot as balls outside (approximately 34 degrees Celsius).

There must be another upside, right? I mean, campus is so conveniently empty that getting to class no longer feels like swimming upstream against a raging current of jittery freshmen (recall: fall term). Look at all the room there is for walking! No

giant lines for textbooks (or, not as giant)! All that empty space... Actually, wait, those empty spaces are currently occupied by geese. Great—they came, they saw, they conquered, and they multiplied, just when I thought it couldn't get any worse (evidently this assumption was an error of judgment on my part, because the geese can ALWAYS get worse). Okay, so maybe having a half-deserted campus only opens the door for another goosepocalypse. That isn't exactly encouraging, either.

Of course, we also have to consider a decrease in a) the number of buses running, and b) the availability of courses. While the bus situation could be circumvented by walking to school, provided the travel distance is acceptable and the weather is nice, the course selection situation is another story. After all, it's entirely possible to get stuck in 8:30 AM lectures, especially since there might only be one section available. If you currently find yourself in this situation, I extend my condolences.

Now that I lay things out like this, it does seem a little bleak. After all, we're stuck going to classes and writing exams while our counterparts at other universities get to enjoy the warm weather. There will be no sandy beaches or lazy sunbathing for us in the next few months. Oh, well—at least we'll be employable.

xoxo

Australian Slang

While all of you were suffering through -30 degree weather this past winter, I took the opportunity to head to sunny Australia for a co-op term. Yeah, I know you're jealous, I'm just going to rub it in for good measure. Anyway, it's a pretty similar country to Canada but there are some noticeable differences, particularly when it comes to language. Imagine English reduced to baby-talk with a strong rural twang, and that roughly describes Australian slang. Some Australians get offended when I suggest that, until I point out "lollies", and "brekky" and "sunnies" and "Woolies", and then they usually hang their head in shame and reluctantly agree with me. I've took the opportunity to record some of the more stand-out terms here, so you can pretend to understand any Australian you meet.

- **lollies** = candy. No, not lollipops, all candy in general. There is an entire aisle in the grocery store marked "lollies". I almost died laughing when I first saw it.
- **brekky** = breakfast. Delicious, delicious breakfast.
- **bogan** = an Australian cross between redneck and white trash. Strongly associated with a particular accent usually found in rural Queensland.
- **sunnies** = sunglasses.
- **lift** = elevator. Because it lifts you. Hahaha.
- **bin** = garbage container
- **Woolies** = Woolworth's. A large chain of supermarkets, not your dad's woolen socks.
- **chemist's** = pharmacy or drug store, not an actual chemical laboratory. Disappointing, I know.
- **billy** = a metal tin used for making tea or cooking over a campfire. So, "Billy has a billy," is a parseable sentence.

BlueberryMuffin

At *mathNEWS*, we really really really wanna zigzag-ha.

How's Research?

The first week of my work in the C&O department has been incredibly eventful!

I am really busy and have to do an unusual amount of scurrying about the map. The sheer amount of quests is overwhelming; the action is currently concentrated in three major directions. First, I am obviously being a cool High Elf mage badass and slaying them dragons. Then I am leading the Stormcloak conquest over the land of Skyrim and having holds fall under my dual wielded flames. Finally I am doing the Mage College of Winterhold quests and related exploration of Dwemer ruins, and reforging the Gaulder amulet—toppling sacred urns and raiding crypts.

Now, you will have to excuse me; I have to get back to research, since I should ~~conquer Skyrim~~ get published.

FrozenWinters

The Iranian Letter Drawer

Proof of Goldbach's Conjecture

Good day

I want send you my own proof on of Goldbach's Conjecture for edit in your magazine. Send me please your e-mail.

Many thanks
waiting for your news
Mantzakouras Nikos
Un of Athens
Greece

This comment was sent to **mathNEWS** on our website. In the modern day, we simply say this is a phishing scam and move on. Yet it bears strong resemblance to a series of physical letters **mathNEWS** received in the 1990s. Each and every letter requested that we send them issues of this "newsletter" or give information as to how they can subscribe.

Why were they all from Iran? We don't actually know. They often would say "With the grace of God" etc; which made us think they were legit. My theory is there was some sort of government grant for people to subscribe to STEM journals from the West to their journals to catch up in science.

If you would like to see the letter, come by the **mathNEWS** office in MC 3030. If you have a better theory, please either send it to mathnews@gmail.com or put it in the **BLACK BOX**. If these Greek comments continue, I will say it's really time for the Grexit.

IceNine

Why My Bird Course is Better than Yours

While doing course selection for this term, I was looking for a course I could take to help advance my French minor which wasn't online. This being a spring term, I had little hope of actually finding anything interesting. Then I saw there was a French comic book course. That's right—I get to read comic books while advancing my degree requirements. You think there must be some catch.

Nope! This course has 20% worth of assignments where all you are given a series of panels and all you have to do is insert your own dialogue. You also must write a one page description justifying your choice.

Perhaps you are thinking, "Fine then. I will take this course." Bad news for you—it's a 4th year French course so you probably don't even have the requirements for it.

Beyond Meta

How to Judge People

Judging people is an unavoidable part of life. In order to have any sort of meaningful interaction with people, you will have to make some sort of judgement. These judgements don't necessarily have to be negative—thinking that your friend is awesome is a judgement.

The question that stands is just what metrics you should use for your model. This depends entirely on what exactly you are looking for, job interviews and romance being two common reasons why people judge one another. For this article, I will try to keep my analysis fairly general.

A lot of common metrics are appearance-based because they can be effortlessly identified, although most of these metrics are also bad.

Gender has historically been a popular metric used for judging people. I can assure that is a really shitty indicator for most things. The difference between men and women is much less than the variance of individual humans and should only be used when searching for a potential mate.

Similar arguments also apply to race. There is a certain amount of correlation to race and a person's cultural background, but again, using this parameter in your model will often lead to bad judgement.

Judging someone on what clothing they wear is great unless you really care how much other people care about their appearances.

Personally I like to choose metrics that people have control over as judging people for what they cannot control just doesn't seem fair. Disliking someone because they don't like the same thing as you is also a perfectly reasonable metric. I mean, do you seriously want to be friends with someone who has terrible taste? You have your metrics straight.

Beyond Meta

Man Walks to RCH

Waterloo, ON—Today, a man managed to walk from SLC to RCH without being attacked or chased by geese. The second-year CS student, who wishes to remain anonymous, said the incident was "quite the modern miracle".

Reports say that students swarmed the man free of goose wounds and droppings, all eager to learn the secrets of the universe as discovered by this man, but all he had to say was that "he didn't do anything out of the ordinary".

The man is currently recovering in an undisclosed location from injuries sustained from the mob of students.

Zethar

Australia VS New Zealand or How to Start World War III

So I co-oped in Australia this past semester but had a lot of Kiwi (New Zealander) co-workers. The relationship between Australia and New Zealand is a bit of a bromance similar to the relationship between Canada and the USA, where the two countries get along really well but smack-talk each other a lot. The fact that people from the two countries feel the need to pretend to hate each other is pretty fun to take advantage of if you ever have both Australians and Kiwis in a room and want to stir up some drama. I'll present to you a couple subjects to bring up if you ever want to watch your co-workers tear each other apart.

1. Ask who invented Pavlova.

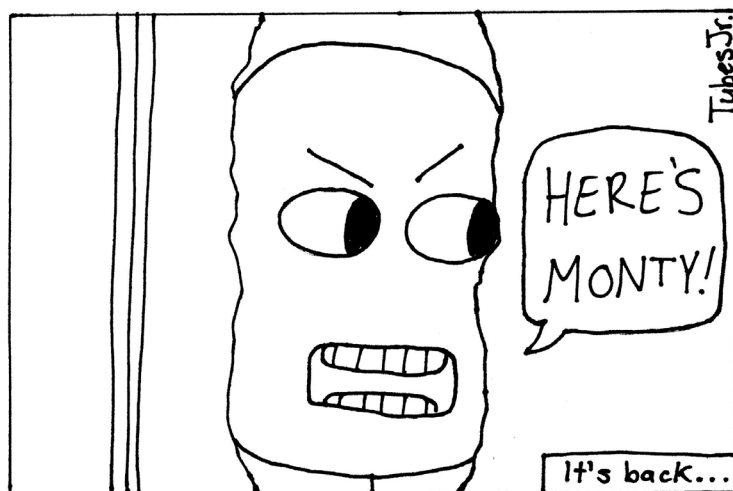
This is the #1 way to start World War III when Aussies and Kiwis are in the same room. Seriously, you'd think most people wouldn't have very strong feelings about a fluffy meringue-based dessert, but every Aussie and Kiwi I've met gets really worked up about it. Just suggest that the opposite country invented it, and you can visibly see fists curl and veins start pulsing on people's foreheads. The ensuing chaos is hilarious.

2. Point out that both countries' flags have a Southern Cross and ask who copied who.

The reaction to this typically isn't quite as strong as the reaction to #1 and depends on how much history the people know, but generally people from both sides like to claim that their country "owned" the idea first.

BONUS ROUND: Make Kiwis sad. If you ever want revenge on a Kiwi after you've lost to them in an argument, bring up how often New Zealand gets left off of maps. For more amazing cringe-worthy examples that you wouldn't have thought possible, visit the website worldmapswithout.nz.

BlueberryMuffin



Greetings from the Pastry Genie!

Good day, fellow math nerds (I mean that in the most loving way possible). For those of you who do not know me, please allow me to introduce myself. I am The All-Knowing, Mystical, Magical, Adorable, Dependable, Dangerous, Victorious, Cheerful, Loveable, and sometimes Crazy Pastry Genie, or AKMMAD-DVCLCPG. But you may call me Pastry Genie for short. I am here to help you improve your kitchen skills.

Today we shall be playing with numbers. Because I mean, come on who doesn't love numbers? No one, that's who, am I right? Of course I am. Don't ever question that. As I was saying, numbers. Have you ever come across a recipe that calls for a dash of this, or a pinch of that and wondered how much that actually was? Fear not! I am here to help! I will endeavour to explain these strange measurements in terms you can understand. A pinch is $1/8^{\text{th}}$ of a teaspoon and a dash is $1/16^{\text{th}}$ of a teaspoon. In case you were wondering, a drop is $1/60^{\text{th}}$ of a teaspoon. Now you're probably thinking, "But Pastry Genie! What do I do if I want to make a really big batch of chocolate cupcakes for my friends in the math department but the recipe calls for $1\frac{1}{2}$ teaspoons of something? Do I really have to measure out $1\frac{1}{2}$ teaspoons seven times? There must be an easier way!" I would tell you that you're correct. There is an easier way. If you would direct your attention to the following list, I believe it will help you find your answer.

- 1 drop = $1/60^{\text{th}}$ teaspoon
- 1 dash = $1/16^{\text{th}}$ teaspoon
- 1 pinch = $1/8^{\text{th}}$ teaspoon
- 1 tablespoon = 3 teaspoons
- 1 oz (fluid) = 2 tablespoons
- $\frac{1}{4}$ cup = 4 tablespoons
- $\frac{1}{2}$ cup = 4 oz (fluid) or 8 tablespoons
- 1 cup = 8 oz (fluid)
- 1 pint = 2 cups or 16 oz (fluid)
- 1 litre = 2 pints or 4 cups or 32 oz (fluid)

Does that all make sense? So there are 48 teaspoons in 1 cup, 64 tablespoons in a litre, and 192 dashes in $\frac{1}{4}$ cup. Now here comes the fun part of the day. The following is my favourite

[insert title here]

The editors mentioned that they have to check for proper grammar and make sure we are writing in English. I decided that this should be tested and submitted an article in another language. Thanks to the magic of translating using a search engine, I can do this without actually speaking another language.

I will now start talking about random things in order to fill space. The grapefruit is on the table. The ski trip ended in tragedy. I do not know how I will complete this. The cake is a lie. There are lies, damned lies, and statistics. You had me at hello. Make love, not war. I'll tell you what I want, what I really, really want.

Yours in lost in translation,
Shay Blair.

chocolate cake recipe, but oh darn. It would appear that the measurements aren't in your average units. I guess you'll have to use the list above to help you if you want delicious chocolate cake. And really, who doesn't? Good luck.

Pastry Genie's Favorite Chocolate Cake

INGREDIENTS:

- 576 dashes unsweetened cocoa powder (Dutch processed is best, plus extra for dusting the pans)
- 480 pinches flour
- 72 teaspoons sugar
- 24 dashes baking soda
- 12 dashes baking powder
- 12 dashes salt
- 2 eggs, large
- 12 tablespoons buttermilk
- 36 teaspoons coffee (Hot water will work too if you drank all the coffee)
- 540 drops vegetable oil
- 60 drops vanilla extract
- 192 teaspoons chocolate frosting

DIRECTIONS:

Preheat oven to 350 degrees Fahrenheit. Butter or spray with non-stick spray two round cake pans; dust with extra cocoa powder. Combine cocoa, flour, sugar, baking powder, baking soda, and salt in a bowl. Stir until combined with a hand mixer on low speed, add eggs, buttermilk, coffee, oil, and vanilla. Increase speed to medium and beat until smooth for about 3 minutes. Divide the batter between the pans. Bake about 35 minutes or until a toothpick inserted into the center comes out clean. Let it cool for 15 minutes. Turn out from pans. Place, face up on a wire cooling rack. Let it cool completely. Spread 96 teaspoons of chocolate frosting onto the top of one cooled cake. Top with remaining layer, frost the top and sides of the cake with the remaining 92 teaspoons of frosting. Share with friends or eat alone in a dark corner.

Pastry Genie

[wstaw tytuł tutaj]

Redakcja wspomniano, że muszą sprawdzić poprawność gramatyki i upewnić się, piszemy w języku angielskim. Uznałem, że to powinno być sprawdzone i przesłać artykuł w innym języku. Dzięki magii tłumaczenia za pomocą wyszukiwarki, można zrobić to bez faktycznie mówić innym językiem.

Będę teraz zacząć mówić o przypadkowych rzeczy, aby wypełnić przestrzeń. Grejpfrut jest na stole. Wyjazd narciarski zakończył się tragedią. Nie wiem, jak mam zakończyć ten. Ciasto jest kłamstwem. Istnieją kłamstwa, przekłete kłamstwa i statystyki. Miałeś mnie na cześć. Make love, not war. Powiem ci, co chcę, co naprawdę, naprawdę chcesz.

Wasz w słowami,
Shay Blair.

profQUOTES

"Well, you can start [this graph] by drawing a triangle, and then you do this: ..." [*Bangs head against chalkboard repeatedly.*]

Wagner, MATH 249

[*Siri beeps.*] "How do you spell 'removable'?"

Rubinstein, PMATH 352

"Lemmas are just theorems that nobody gives a shit about."

Watrous, CS 360

"It doesn't matter, it's just some big expression that is true."

Geleen, CO 446

I apologize for this notation. I invented it, therefore I'm totally responsible for it.

Geleen, CO 446

"You'll never see Obama tweeting 'Going for icecream, hashtag YOLO.'"

Attaulah, CS 330

The proof goes like this. [*Literally waves hands.*] But I am a doctor, so I can make this rigorous."

Tuncel, CO 471

"Why would they steal an eraser, a chair I understand you can sit on that, but its not like they have a blackboard at home. Maybe it is the principle of the thing."

Lopez-Ortiz, CS 240

"I don't think there were Starbucks in the 1700s."

Lopez-Ortiz, CS 240

"Combine a tree and a heap and you get a treap. That's treapy."

Lopez-Ortiz, CS 240

"We computer scientists like LSD. Why? Well, if you are not doing LSD..."

Lopez-Ortiz, CS 240

"It's a very hot topic right now." [*Takes sweater off.*]

Lopez-Ortiz, CS 240

[*Students correct his addition.*] "1, 2, 2, ... Let's do it without counters."

Lopez-Ortiz, CS 240

"But then they come up with LSD sort. And if you think it has nothing to do with drugs, wait until you see how it runs."

Lopez-Ortiz, CS 240

"Can you think of any reasons we shouldn't do LSD? [Laughs.] I walked into that."

Lopez-Ortiz, CS 240

"But time is precious and grade students are cheap."

Lopez-Ortiz, CS 240

"Some students have problems with that. If page size is 100 and key size is 7 how many keys can you fit in a page? I DON'T KNOW we didn't get a formula for that! ... I wasn't there but I think you did in third grade."

Lopez-Ortiz, CS 240

"This axis is speed. So below ram we have SSD, the hard drive, DVD & Network... Dropbox."

Lopez-Ortiz, CS 240

"In first year you want to chase the best teacher. Derivatives are always the same. As the knowledge gets deeper you want to chase those who are doing the work and put up with their idiosyncrasies."

Lopez-Ortiz, CS 240

"Who cares? Well, we're geek. We care. It is the principle of the thing."

Lopez-Ortiz, CS 240

"It's the answer to every problem in computer science." Student: "Can we write that on the exam." "Yes, what is the answer to question 3. Reboot."

Lopez-Ortiz, CS 240

[*Students correct mistake.*] "Have you learned nothing? What is the secret to AVL trees? We allow things to be imperfect."

Lopez-Ortiz, CS 240

"One of the best data structures in the world, optimal in many ways. Except the practical one."

Lopez-Ortiz, CS 240

"Every one in a while you have to clear you [browser] history. Not to get remove the porn, just to get it to run properly."

Lopez-Ortiz, CS 240

"It not scale with the number of items in the container. It is constant with the size of the container. It is mind ***** boggling!"

Lopez-Ortiz, CS 240

"Any question about DFAs? [*Silence.*] Let me rephrase that. It's on the assignment; any questions on DFAs?"

Lopez-Ortiz, CS 240

"There are three flavours of Boyer-Moore: classic, vanilla & chocolate chip."

Lopez-Ortiz, CS 240

"Karp is my grandfather. The supervisor of my supervisor."

Lopez-Ortiz, CS 240

"Some words in English have a lot of double letters. Like committee, the 'e's change the pronunciation but the extra 'm' and 't' are just useless extras It is representative of what a committee actually is."

Lopez-Ortiz, CS 240

profQUOTES

"I can give you the mathematical justification, call this part j and reverse it and it looks like an i."

Lopez-Ortiz, CS 240

"Is it a coincidence? No, I made them up just for fun."

Wagner, MATH 239

"That's long division, that's not something I do in public."

Wagner, MATH 239

"Fun is any problem that takes less than a week. If it takes more than a week it is work. If anything takes more than a year it is a career. I have a career and do a lot of work but occasionally I have some fun."

Wagner, MATH 239

"When I think about it I'll say bridge when I'm not I'll say cut-edge. This way you'll be able to if I'm thinking or not."

Wagner, MATH 239

"... must be a cut-edge. Bridge... I mean bridge. Maybe I should start saying cut-bridge."

Wagner, MATH 239

"I would like to tell you that I have been marking your mid-terms all weekend. ... But that would be a lie."

Wagner, MATH 239

"In short, the proof is an exorcise. My favourite proof technique."

Wagner, MATH 239

"Its a very beautiful proof, if you are the type of person who finds beauty in proofs."

Wagner, MATH 239

"The only reason your midterms are not marked is because I'm lazy."

Wagner, MATH 239

"It's an interesting question, not an important one but an interesting one."

Wagner, MATH 239

"... like recreational mathematics."

Wagner, MATH 239

"I'm not sure why [...] and because I'm a mathematician that will bother me until I figure it out."

Wagner, MATH 239

"Breadth first search first search is an example of this. By the way, the cover of *math*NEWS is hilarious."

Wagner, MATH 239

**If You Wanna Have Some Fun, then
*math*NEWS can Spice Up Your Life**

New Music Roundup

Summer's right around the corner, and I thought it would be nice to usher in the season with a couple of new tunes.

1. Jon Bellion - Woodstock (Psychedelic Fiction)

Jon Bellion released a beautiful album in 2014 called *The Definition*, and after such fragile introspection you'd think he'd need to take a creative hiatus. But he didn't. Instead he released *Woodstock*. It's spacey and glitchy and perfect for listening to on repeat while hallucinating in the sun.

2. NoMBe - California Girls

I hadn't heard of NoMBe until this month, but I'm glad I found him. This is a song to play after the sun's gone down; when the vibe is dark and sultry. It mixes well with *The Neighbourhood* and *The Weeknd*.

3. Milk & Bone - Pressure

Milk & Bone is new band out of Montreal that makes chill, downtempo, cruising music. *Pressure* is a song for relaxing with your significant other on the porch. It's hot and sweaty, but they include the refrain: "You're like good water pressure in a cold rainy summer."

4. Girlpool - Before The World Was Big

I'm not completely sure if I like Girlpool, but nevertheless I can't seem to stop playing this song. The somewhat dissident vocals manage to be both sweet and somber at the same time. For those of us stuck on campus, it reawakens childhood memories of flowers, cottages, and not school.

5. Cheat Codes (ft Evan Gartner) - Adventure

I vaguely recall Cheat Codes from remixes that they've released in the past, but *Adventure* is on a different level. It's unadulterated electro-pop in all its sticky, bubblegummy glory. And hopefully it's a sign that a full album is coming soon.

* ALL THESE SONGS CAN BE FOUND ON SPOTIFY, SOUNDCLOUD, AND WHATEVER JAY-Z'S THING IS.

[flustered]

N Things You Can Do With Imprint

Imprint sometimes gets some flack, but really it is a relevant and useful publication. Some example uses include:

- Fire kindling
- Door stop if rolled and folded
- Confetti
- Papier-mâché
- Green bin lining
- Good square base for paper hats
- Put in grey bin
- Emergency reading material

Glec

N MST3K Episodes We Should Never Hold a Showing of

As a follow up to the list published on March 13th (that should have been in the March 27th issue, but alas, I forgot to tag it), here is a selection of MST3K episodes we should never have a showing of. Though the writers of the show are incredibly talented, there are unfortunately some films that are so bad that not even incredibly funny riffing can make them enjoyable. This is a list "honouring" those terrible stains on the history of film.

- **Invasion of the Neptune Men:** With terrible acting, shameful special effects, and poor dubbing, this film is utterly awful. About a bunch of Japanese children who stumbled into an invasion by the titular Neptune Men, who are then fought by Space Chief... who never goes into space and fights the villains with the same shots over and over again. What is particularly gratuitous about this film is that it uses a video of World War Two bombings as stock footage in the Neptune Men's invasion. There's even the Hitler Building, a stock building with a huge mural of Adolf Hitler painted on it, which is then blown up, a fate which sadly did not befall copies of this film.
- **The Beast of Yucca Flats:** This is the first film on this list directed by Coleman Francis, a name which you will end up seeing again. Some may consider this film to be so bad, it ends up being good. Those people happen to be wrong. Starting with a naked woman being strangled, a scene which ends up having nothing to do with the rest of the film, this is the story of a man who becomes a monster. However, as there were problems with the sound equipment, nobody talks in the film, adding to how dull it is. Adding in a narrator with some of the worst philosophical dialogue ever who cannot seem to speak in full sentences ("Flag on the moon. How did it get there?"), Beast of Yucca Flats happens to be the most watchable of Coleman Francis' movies, which isn't saying much.
- **Manos: The Hands of Fate:** Along with the word Manos meaning hands in Spanish, making the title Hands: The Hands of Fate, this movie's plot is basically the same as that of The Rocky Horror Picture Show, except all the singing and homoerotic relationships are instead replaced by cat fights and extremely long scenes of driving. Note: This

was also on the N Next Episodes of MST3K We Should Have a Showing of.

- **The Skydivers:** The second Coleman Francis film on this list is boring. MST3K describes this film as "like Manos (see above) without the lucid plot". This film has some incredibly realistic skydiving and that's all it has going for it. It even has Manos-style long driving sequences. Harry, a character played by Anthony Cardoza, the producer responsible for this mess, seemingly cannot conjure anything resembling emotion when asked to act. However, this film is not the worst Coleman Francis created, a fact which should horrify anybody with any taste in film.
- **Monster-A-Go-Go:** The people at MST3K consider this to be the worst film they've ever reviewed, which considering the other films on this list, should inform you of its quality. Let's see what it has: terrible acting; a mess of a plot; a director who ran out of money, causing another director to have to stitch it together; and a twist which renders the entire film pointless, as the monster escapes to some sewers and disappears, where then it turns out there was never any monster in the first place. As this movie is pointless, watching it is thankfully pointless as well, so therefore, there's no reason to watch it.
- **Red Zone Cuba:** This film, part three of the Coleman Francis trilogy, is painful. While people may say that Seinfeld is a show about nothing, Red Zone Cuba is a movie about nothing, or at the very least, nothing that you want to care about. With a meandering plot that goes nowhere, main characters who are incredibly unlikeable, terrible direction from repeat offender Coleman Francis, who also 'acts' in the film as the main character, and having acting so terrible that there is a character who maybe dies at the end, but you have no idea because they have their eyes open and are blinking the entire time. (The acting is seriously THAT bad.) Red Zone Cuba is a mess of a movie, and not an enjoyable mess you can't help but watch, like *The Room* or *Rob Ford*, but one you want to turn away from because it is such a dull movie.

Theodore Bear

Fallacy of Tears

This is not a logical fallacy, but instead a literary one.

It is the idea that sadness increases how meaningful the story is. Now there are many good stories that have sad things in them, or even good stories that are full blown tragedies. But this is hardly true of every sad story.

Let us go over an example: *Romeo & Juliet*. Two people see each other and fall in love for no other reason than plot and then die for the same reason; it is considered a great epic. Why? Because it is tragic and no one has every been able to give me a better reason than that.

There is also the other side of this - the happy stories are,

by definition, meaningless feel-goods. This is also not true; meaningful moments and life lessons can be delivered with a joke and a laugh.

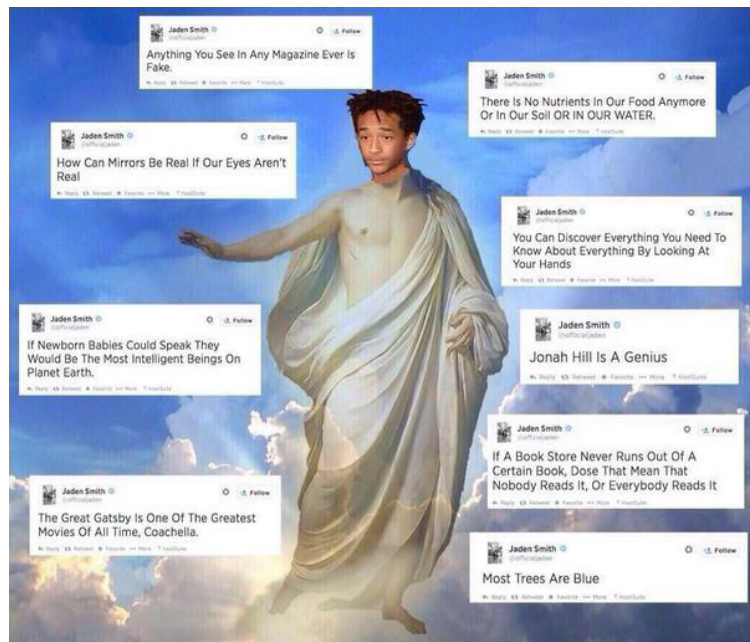
The fallacy is present in many places. School reading materials, best seller lists, recommended reads, and so on. Maybe I'm the crazy one, but I will say it is more of a self-fulfilling prophecy. Those who believe sad stories are more meaningful write sad meaningful stories. Then there is a lack of happy meaningful stories so people believe that sad stories are meaningful and so on.

So now you are aware of it you can keep an eye out for it, in other words: "Now you know, and knowing is half the battle."

A Eulogy to Brilliance

Ladies and Gentlemen, just last week, we lost something that can never, ever, be replaced. The internet is a much colder, lonelier place today, due to the tragic loss of Jaden Smith's Twitter account. No more shall the denizens of the web receive such nuggets of wisdom as "How Can Mirrors Be Real If Our Eyes Aren't Real" that give the mind something to ponder. How can we go on without the source of brilliance that gave us "Most Trees Are Blue" and "If Newborn Babies Could Speak They Would Be The Most Intelligent Beings Are Planet Earth." Can we go on without such insights into the thoughts of newborns? Will we stagnate as a species without having our minds challenged in such ways? Perhaps Jaden predicted this, when he gave unto

us the truth that "There Is No Nutrients In Our Food Anymore Or In Our Soil OR IN OUR WATER." Are we now suffering the consequences? As he told us, "You Can Discover Everything You Need To Know About Everything By Looking At Your Hands" but the human race was not ready for this knowledge, and couldn't take it in, and thus couldn't act on it. Jaden watched as his subjects misunderstood him, and decreed from the top of Mount Olympus that "You Think You Get It. YOU DON'T YOU DONT YOU DONT!!!!!!!" We didn't "get it" and thus, we lost something truly great. The Earth is a place no longer worth inhabiting, now that we have lost the majesty of Jaden Smith's Twitter.



At least we still have the Garfield comic parodies.

Theodore Bear

The Case Against Courage

Our society often likes to praise courage as a virtue. In countless stories, courage is depicted as the ultimate quality. One only needs to look at *Harry Potter* and House Gryffindor or *Divergent* and the Dauntless faction to see how courage is portrayed.

I would argue that these stories show courage as a heroic quality not because it is the best, but because it is a lot easier to write an interesting story about someone who acts recklessly than someone who makes intelligent decisions.

The purpose of fear is prevent you for doing stupid shit that will get you killed. Being courageous is simply going against your survival instinct. Fear is a good thing. If you are afraid of something, there's no need to confront it. It is far better to live a quiet life avoiding your fears since most times when you face your issues, they don't go away—they just move to the forefront of your mind.

Courage leads only to unhappiness. Do the sensible thing and be a coward.

Beyond Meta

Article of the Issue

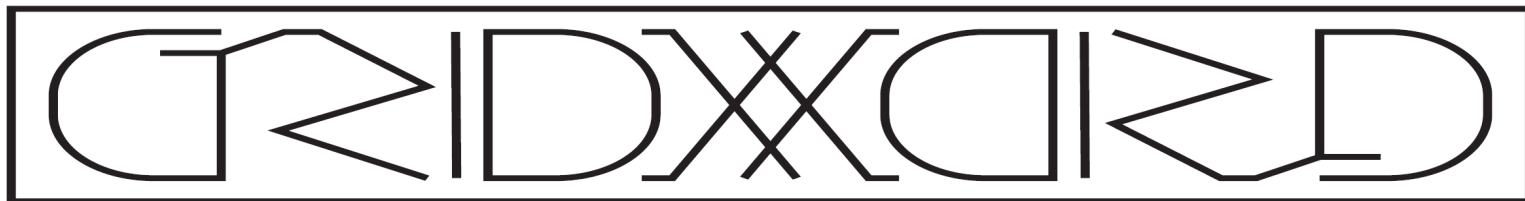
This week's article of the issue is 007: *LocoMotive to Kill* by #define RT_ELEMENT 118. Congratulations! You can pick up your prize from the mathNEWS office when we get prizes.

Although we aren't silly enough to take Real Time like you, we are very busy (read: lazy) people and have not yet purchased prizes. But we will eventually. Probably. Keep checking this column for news on our attempts to brave the outside world to buy prizes for our writers.

This is how much we love you guys; we'd go *OUTSIDE* for you. Do you know how hot it's been? Yeah, you don't, because you're a mathie like us, vulnerable to the elements.

The Editors

Send your articles, *profQUOTES*, baby geese, and *gridWORD* solutions to mathnews@gmail.com or the **BLACK BOX** on the 3rd floor MC!



gridCOMMENTS

"Less sensitive"

Hello again, everyone! Yes, again. This is *moment*, writing. You didn't really think you could get rid of me, could you? You sure did a number on me, but after retreating to my fortress for two years, I have returned and I am more powerful than ever, with my special Editorial Authority!

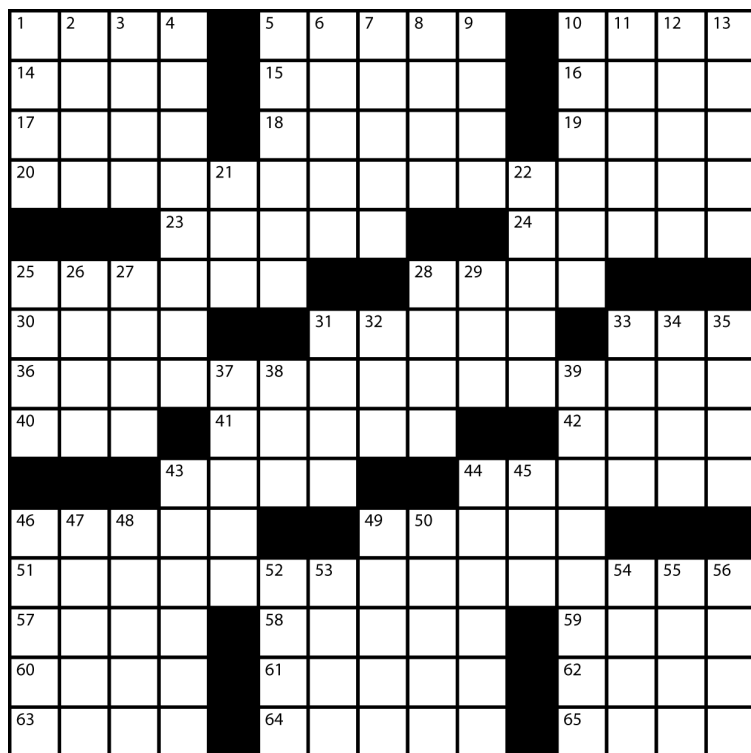
Without our usual *gridWORD* author, *unit*, here, I have resumed my previous duties as PuzzleMaster. And I think I've really got your number, puny Mathlings; I've made this crossword specially for you.

As my power grows, so does my network. My minions number in the millions; your closest ally may already have betrayed you. Mercy is only for those who do my will, like solving puzzles.

Your new overlord demands that you submit your *gridWORD* solutions to the **BLACK BOX** on the 3rd floor of MC before 6:30 PM on May 25th, but he is benevolent enough to grant you the opportunity to win a GLORIOUS prize! Tiebreaks will, as always, be determined by His Amazingness' favourite answer to the *gridQUESTION*, "How do you look out for number one?"

moment
ConvolutED

This Week's Grid:



gridCLUES

Across

1. Living quarters
5. *Jurassic World*'s Chris
10. Hydrated prunes
14. Rorschach test material
15. Old, but stylish
16. Abhor
17. 160 934cm
18. Haughty
19. Agape
20. Group-reduced risk?
23. Small part
24. Eyelashes
25. Warden
28. Prince
30. 4046.86 square metres
31. Mega Man's older brother
33. Watch Dogs cops
36. Ending soon? (Your __)
40. The one afraid of seven
41. Flubber ingredient
42. Air
43. Struggle to remember
(__ one's brain)
44. Seldom
46. Schemes
49. Precedes 'retry' and 'fail'
51. Calculating?
57. Small part
58. "By right or might" country
59. Grimace
60. Pilate's inscription
61. Visors
62. Memo abbr.
63. Gofer: Abbr.
64. Ready
65. Group with Curiosity

Down

1. MySQL, for example
2. Amnesiac in *Legend of Zelda: Twilight Princess*
3. Mayo+Ketchup = __ sauce
4. Cupolas
5. Solemn request
6. Holdover
7. Make amends
8. 1982 Disney film
9. Sukiyaki ingredient
10. Fear
11. Place for a pin
12. Wombs
13. The High IQ Society
21. Pinky the Pink __
22. Dead-end, low-wage career
25. Traipses
26. Berry
27. Antelope
28. Béchamel base
29. 101 325 Pa
31. Extra
32. ACGU composition
33. Muck
34. Scripting language
35. June 6, 1944
37. Humble
38. Mythical bird
39. Kirt Niedrigh
43. *mathNEWS* critter
44. Authentic
45. Directed edge
46. Between Hotel and Juliet
47. Mend clothing (alt.)
48. Princes
49. Surface
50. Aggregates
52. They always get their man
53. Carbonize
54. Small part
55. Hard fruits
56. Insect cheeks

Doodle Space