# Mach

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Who needs girly heart arrows when you have a crossbow



©WolverinePanda



February 23

February 26

#### *look*AHEAD math**NEWS** February 14 Issue 3 mugs students for their chocolate February 24 Issue 4 goes to rehab for its chocolate addiction February 28 Issue 4 successfully completes rehab and returns to its loving readers' arms **CECA** First interview cycle ranking opens 1PM February 28 March 3 First interview cycle ranking closes 2PM March 3 First interview cycle match results 4PM University Reading Week February 17-21 Deadline for 50% tuition refund February 21 Misc February 14 Valentine's Day February 15 Flag Day February 15 Cheap Candy Day Family Day February 17

#### WISE National Conference Notice

National Pistachio Day

Winter Olympics Closing Ceremony

The WISE National Conference in Toronto this March 22-23 brings together experts in technology, consulting, healthcare, and more for two days of student career exploration, workshops, networking, and \$1000 cash prize competitions. Cisco, Accenture, Kyle Hill, Satish Kanwar, and Swati Mylavarapu are just some of the big names attending. See who else is coming and how to get your tickets while they last at http://wise.skule. ca/conference/. Register with UW's delegation and see if you qualify for a subsidy. The first 5 CS students to register with the UW delegation also receive \$30 their tickets.

Alison Lee

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#### Founded 1973

mathNEWS is normally a 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 *math*NEWS editors; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or math-NEWS. Current and back issues of mathNEWS are available electronically via the World Wide Web at http://www.mathNEWS.uwaterloo.ca/.Send your correspondence to: mathNEWS, MC3030, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid mathNEWS@ gmail.com on the Internet. This work is licensed under the Creative Commons Attribution-Noncommercial-No Derivative Works 2.5 Canada License. To view a copy of this license, visit http://creativecommons.org/licenses/ by-nc-nd/2.5/ca/ or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA. Terms may be renegotiated by contacting the editor(s).

Caramel Chocolate (Murphy Berzish), Chili Chocolate (Julie Sturgeon), White Chocolate (Rachel Wiens)

#### mastHEAD

With Valentine's Day upon us, this week's mastHEAD tackles the challenging topics of romance and love. mathNEWS holds no responsibility for any ideas implanted in your head as a result of the discussion. We asked our writers: "What is your ideal Valentine's Day?"

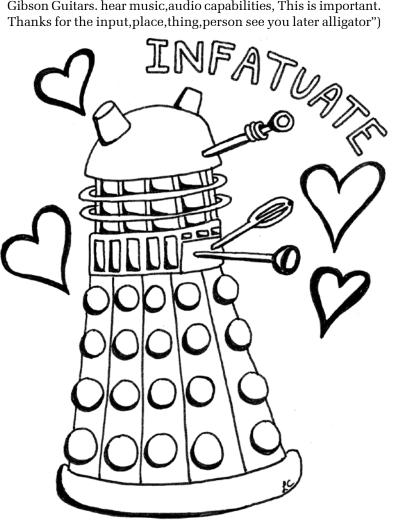
Element118 ("Being on a boat in the Caribbean, smuggling cocaine, the love drug."); xoxo ("Flying with penguins."); Ender Dragon ("The world loving each other for just one day."); AddictedGmr ("Spending time with my girlfriend in Calgary."); MuffinED ("Hiding under a rock."); TubesJr ("Watching movies in my bed in my onesie."); unit ("404 not found."); psychomath ("Exploring the universe in the TARDIS."); !bar ("Pizza and Netflix in sweatpants."); himynameis ("dinner, a movie, and reading a quantum physics textbook."); wibz ("getting roses from a drug dealer and building a snowman named Oprah"); Konstantine ("happy drunk, yay reading week!"); Stubbs ("Pink fluffy unicorns dancing on rainbows."); WolverinePanda ("Paintballing/Laser tag"); Ice Nine ("Latex catsuits, ball gags, and butt plugs."); Beyond Meta ("Baking party with friends."); Zethar ("In Gensōkyō. Avoiding my midterm on that day."); k! ("Snuggling with other bunnies."); Grumpy Old Fart ("

from Belgium import chocolate

for chocolate in bag:

eat (chocolate)

"); ScruffyED ("Teaching the AI about love. Currently I am feeling Gibson Guitars. hear music, audio capabilities, This is important. Thanks for the input, place, thing, person see you later alligator")



#### Meet the Exec: Prez

Lauren Hurley

President - Mathematics Society

prez@mathsoc.uwaterloo.ca

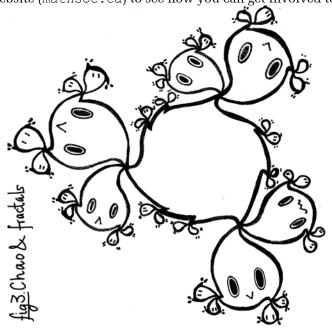
The President of the Mathematics Society (MathSoc) is the CEO of the organization and an ex-officio member of most of the Society's committees.

The President's duties include:

- Representing the Society to the University and other organizations.
- Overseeing and managing all high-level operations of the
- Working with the Faculty, club executives, and external organizations to improve student life.
- Guiding the long-term goals of the Society.

The President of MathSoc should be someone that has a lot of prior experience with the Society. When Lauren first started at UW, she was Novelties Director for MathSoc. She was eventually elected as Vice President, Operations and held that position for 3 terms. Considering how time consuming, yet rewarding, this position is, you must be a very committed and knowledgeable person to do this job well!

The MathSoc experience can be very rewarding. Lauren gets the opportunity to meet new people, both in and out of the Faculty of Mathematics, and is also constantly improving her leadership, teamwork and communication skills. Getting involved early is very important, so check out the MathSoc website (mathsoc.ca) to see how you can get involved today!



#### **Sweet and Sour: Attendance**

In my second week at Waterloo I suddenly realized something that I suspect was obvious to everyone else on the first day: I didn't have to go to class. There was no one taking attendance! The euphoria of being able to come and go without having to tell anyone was amazing. I could skip my first class to play video games, or, more likely, sleep in.

My excitement quickly turned to despair after my first midterm and my many weeks of playing hooky (ditching is the current term) had caught up to me. I realized my freedom was nothing more than an illusion.

By going to class, my course was always at the forefront of my thoughts. Attending class provided me with structure, course material, and knowledge. I needed this structure to succeed, so I started going to class.

Then I learned the secret - if you listen closely enough to what your instructors say and how they say it, you discover what they consider to be important as the course progresses. You will recognize the clues they are giving you about your midterm or final exam material. This is important because every instructor has their quirks, their personal views on what matters and what does not.

Finally, when you go to class make sure you pay attention. The latest stats I've seen suggest that those people who multitask in class, (twiddle or twit or whatever it's called) have a 10% lower grade than their peers.

So attend class and SOAR!

Riley Metzger

mathadvisors@uwaterloo.ca

### **Call Out for Volunteers!** MARCH OPEN HOUSE

Spread your love for Waterloo Computer Science to future students! Sign up to be a volunteer!

#### **Event details:**

Saturday, March 1 9:00 am - 4:00 pm

Volunteers will receive a free lunch and t-shirt!

A volunteer orientation session will take place on Wednesday, February 26 from 5:00 - 6:00 pm in DC 1304.

For more information, please contact Sumair Ali at cs-urco@uwaterloo.ca.

> Sumair Ali Recruitment & Multimedia Associate David R. Cheriton School of Computer Science Faculty of Mathematics | University of Waterloo

# A Dose of Real Life: Beginning to Understand Yourself

Trigger Warning: This article briefly touches upon depression and suicide.

Before one can even begin to deal with what one can encounter in "real life" and real life, one needs to become fully aware of one's self in every sense of the word. From early on, one is expected to someday gain a full understanding of how they operate, interact with others, what affects them in a perceived positive or negative manner, and what talents they will eventually pursue and advance in. The reality is, no one truly does understand their full self as the experiences one has may give them conflicting ideas.

For example, in the post-secondary world, one is expected to choose a particular field of study, pursue it, attain a degree acknowledging that they have apt for the chosen field, and then go on to do something related in that field. For many of the students in that world, this path is not followed exactly. A student may think that one field is explicitly for them but they have experiences that suggest otherwise. Other students may have no idea what they actually want to go into and instead sample a mish-mash of fields to see if something fits. Even after one may have attained a degree in one field, they may end up actually doing something in another. The "real world" is no different as you can simply replace "field" with "career" and the situation is the same. The real world however has a number of other experiences in store no matter what kind of path you have to face. When thinking of such experiences, one instantly thinks of the phrase "life happens". This can be used in many contexts, similar to "welcome to real life" or "welcome to the real world". For example, when not getting some kind of achievement or a medical emergency happens. When life does happen in such a manner, it can be particularly overwhelming for an individual. Learning how to handle such situations when they arise is often an arduous task, but these days it is all too necessary.

Issues of mental health have been gaining prominence and action momentum over the past few years and it again comes into prominence here when an individual is facing perceived hardships. Such hardships can be rather devastating for an individual as one's mind is likely not prepared for the ramifications or even just the idea of experiencing such hardship. As a result, the mind may respond in a rather extreme manner and one's thoughts may take a serious turn. One such extreme response is depression, often coupled with thoughts of suicide. The feelings of overwhelming negativity, as though the world is closing in on one's self and would be better off without, are common in such cases. If one is feeling this way when facing hardship, it is completely okay to be not okay. One may not understand at first why they are having such feelings, as it may contradict their perceived notions of their personality, but facing hardships tend to bring to light many dimensions of one's self. This again goes back to the idea that one may not understand themselves as they initially thought. Now I personally am not here right now to say how one should face certain hardships, but I am here to say that it is okay to have the thoughts one may have even if they are a bit scary. One is allowed to feel the way they feel and they are allowed to take their time in experiencing and understanding why they feel the way they do. Once that happens one can then decide what the best course of action is going forward. In order to do that though, I would personally recommend one start by trying to understand why they may feel this way. It could be being pressured or influenced by an outside source, or even not living to one's own personal expectations. In order to understand one's thoughts, one needs to try to understand what caused them in the first place. One needs to try and understand themselves and what causes such reactions and thoughts. It may take a while to even understand what "truly understanding one's self" means, but it is absolutely necessary to try to do so when dealing with "real life" and real life.

Now you may be thinking, "Didn't you say that there is a reality that no one really understands their full self? How are we supposed to try and understand ourselves when we will may not succeed and get all the answers?" To answer your first question, you would be correct in stating that I did say that there is a reality that no one really understands their full self. However, what I continued to say was that there was a reality that no one really understands their full self because the experiences they have give them conflicting ideas. This is mainly about perception and how an individual sees their self. When an individual experiences hardship and thus reacts in a manner that seems rather scary, the reaction is only scary because of the perception they have towards it. To try and understand one's self, it helps to try understand the perception behind it. This is an underlying idea behind mental health issues: in order to understand the mind, one needs to understand how the mind perceives and reacts to the things that affect it (like emotions) in order to understand how to do something about it. A fantastic resource to look at is www.checkupfromtheneckup.ca where one can get online, private information about mental health issues as well as access to resources to try and understand what issues are out there and may be affecting one's self. Situations in "real life" and real life do sometimes happen unexpectedly, but if one can gain some understanding of their full self through their mind and their perceptions, one may be able to understand how they can handle as many situations as possible.

If you are experiencing hardship at the moment, I would like you to know that you are not alone and that there are resources out there and available to assist you. Feel free to visit UW's Health Services and Counselling Services for more information or visit the resource website at http://uwaterloo.ca/counselling-services/resources. I hope that you will be able to find the what works best for you.

A Mediocre Kitty

You are never alone. If you are in trouble please contact:

Health Services: 519-888-4096

Mobile Cris Team (24/7): 519-744-1813

Kitchener-Waterloo Distress Line: 519-745-1166

## That S#!t Cray

I'm crazy. You're crazy. She's crazy, he's crazy, and they are crazy.

Everyone has used this word. Often it is used to explain misunderstood behaviours of others, when one is too lazy to ask for an explanation. Sometimes it is used when one refuses to accept responsibility for their actions and instead pin it on the obvious insanity of another person.

I find myself using "I'm crazy" as a defense mechanism.

"Don't worry about me, I'm crazy."

"Yeah, I did ; I'm crazy."

"It's not good for me, but I'm crazy, so who cares?"

But what does crazy really mean? Why am I so conditioned to consider myself this way? The truth is that society labels all those who differ from the norm "crazy", especially those who suffer some form of mental illness.

You're deficient in serotonin? Dopamine? Well, you're clearly crazy. Certifiably insane. <obvious sarcasm is obvious>

But the truth is simple: 1 in 4 people will struggle with some form of mental health issue. And yet we still manage to ostracize and invalidate the struggles of these people. We stereotype them. We criticize them.

And then we wonder why so many people find it impossible to come forward and seek the help they really need.

So what am I really saying?

People need to care about people.

People need to make an effort to understand and support others.

People need to lose their prejudice and sense of superiority, because you are not better than someone with mental illness because you believe you are less broken, less "crazy".

A person is not and should not be defined by their mental illness.

It is not a label or a category.

You are you. Your desires, words, actions, and the life you lead. Not your brain chemistry.

#endrant #sorrynotsorry #poorlywrittenrantbutnoshitsgiven

psychomath

# Can I be your derivative? So I can touch you in one spot and then never again. The limit of my love for o you does not exist. Because there's a jump discontinuity around -4. TO: FROM: (C)like My love for you is an infinite loop. You take up all my space and crash my computer. FROM:

# **Optimal Pub Crawl Organization**

I went on a lovely pub crawl after the Iron Ring Ceremony for the Engineers of UW. Though the engineers are quite adept at drinking, they absolutely failed at organizing the drinking path for the evening. I will accept the excuse that they had been drinking since 8:30 in the morning but I would like to suggest an optimal path to save everyone some hard earned cash next time.

- 1. Cheap drinks FIRST. Never ever put Chainsaw last on the list and never put the Fox first.
- 2. If one place needs you to follow a certain dress code to fit in and you get special permission to get in... put it later in the evening when you are too intoxicated to notice how much you stand out.
- 3. (More for the participants than the organizers) Don't be afraid to split from the big massive crowd and go to an alternative bar instead of waiting 45 minutes in a line in the cold. Not worth it.

- 4. Be sure that the last place you visit is ideal for desperate pick-ups. You'll have spent the evening surrounded by your classmates and/or friends, but after a certain amount of alcohol/time you must be able to surround yourself with people to go home with. No program-cest!!! (...unless decided upon while sober)
- 5. Plan around live music. If there is any, enjoy to the max.
- Geography comes last. Decreasing the amount of walking is useful, but walking is free. Drinks, music, and good company are not.

Also, enjoy! And thanks for letting me tag along. More programs need large scale pub crawls like this. Show Laurier that Waterloo knows what's up!

konstantine



# CAMPUS QUESTION

# SHOULD UW STOP TAKING IMPRINT SERIOUSLY?



"Yeah, just like anybody else."

Elizabeth Liu 2B FARM

"Yes, absolutley."

Harrison Gross
4B MATH STUDIES



# **Enough Snow Already!**

I mean, really. Okay, it was nice at first, kind of pretty in its own way, but enough is enough! Freezing temperatures, snow and ice have led to painful falls, sore throats and runny noses across campus. Weathermen have tried to explain the snow by blaming something called a polar vortex, or have fallen back on the old excuses: "We don't make the weather! We just report it! Stop calling this number!" But I say it's time we take a stand. Students, TAs, professors, I propose a general strike! We must take a firm stance. Let us cancel midterms and classes, refuse to grade assignments, and boycott class until the weathermen see sense and accede to our demands.

ENOUGH SNOW ALREADY! VIVE LE PRINTEMPS!

bubblegum

[Disclaimer: Unless you are a professor, the author of this article does not in fact suggest following any of the suggestions suggested by the author of this article in the article above, who will not be held responsible for any consequences incurred by failing to follow the suggestion of not following any of the suggestions suggested by the author of this article in the article above.]

## **Boardgame Review: Love Letter**

Love Letter is an amazing card game. It is affordable, costing only \$15. It is easy to explain and quick to play. Most importantly, it is fun. It has 16 cards and plays best with 4 people. The premise of the game is that you are suitors trying to woo the princess's heart by delivering love letters. The art is fantastic and there are nice red wooden cubes to score points.

Another cool thing about Love Letter is that according to the rules, the person who most recently went on a date goes first. It's a very subtle way to find out if the people you are playing with are available.

The game is great; you should buy it!

Beyond Meta

### **Petition to Ban Tuesdays**

Once you get through Mondays there should not be another day after it. All in agreement say "aye".

konstantine

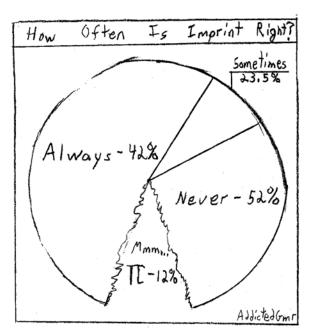
# **Investigative Journalism in Short** Supply at Imprint

As many of you may be aware, Imprint, the "University of Waterloo Official Student Newspaper", saw fit to publish an article in their February 7, 2014 issue about the recent funding report released by the Student Life Endowment Fund. The article in question can be found online at http://tinyurl. com/BadPie or on page 4 of the print edition. There is much to be said about the poorly proportioned pie chart which was published alongside it in print, but that is tangent to what I am concerned about.

A funding report like this should be public information to all students. However, Imprint did not see fit to link to such a report, or say how further information could be obtained. Doing a cursory search of the Feds website turned up no previous funding reports or links to current ones. Since such a document does not seem to be available for public viewing, I would hope that Imprint would have a comprehensive guide to what has been funded, rather than the paltry summary that was published. This is not the case. For example, I am curious as to what the Waterloo Cuban Salsa Club needed \$3,800 for, but it is not mentioned in the article. Similarly, I am curious as to why the Iron Warrior, a direct organization under EngSoc, was grouped separately from EngSoc and why they did not go through WEEF. The article also mentions that the funding amounts listed are the amount that has been spent "to date", but doesn't specify if it is the year-to-date.

This is a failure of proper investigative journalism from Imprint since if the report is freely available it should be linked in the article. If it is not, they should have grilled Devin Drury until it was released publicly, I will be writing letters to both Imprint as well as Devin Drury, asking about said information, This lack of transparency is unacceptable.

> **Harrison Gross** 4B Honours Mathematical Studies



# Monty Python in Python – The Tale of Sir Robin

```
parts = ["eyes", "elbow", "kneecaps", "body", "limbs", \
"head", "heart", "liver", "bowels", "nostrils", \
"bottom", "penis"]
verbs = ["gouged out", "broken", "split", "burned \
away", "all hacked and mangled", "smashed in", "cut \
out", "removed", "unplugged", "ripped", "burned off"\,
```

#### def TaleOfSirRobin (bodyParts, actions):

print "M: Bravely bold Sir Robin, rode forth from\ Camelot.\nHe was not afraid to die, o Brave Sir Robin.\ \nHe was not at all afraid to be killed in nasty ways.\ \nBrave, brave, brave, brave Sir Robin!\ \n\nHe was not in the least bit scared to be mashed\ into a pulp"

```
i = 0
    while (i < 5):
        if (i % 2 != 0 or i == 4):
            beginning = "and"
        else:
            beginning = \n'n"
        if (i == 0):
            beginning += "Or to have"
        elif (i == 2):
            beginning += "To have"
        print beginning,"his", bodyParts[i], \
             actions[i]+","
    print "brave Sir Robin!\n"
    while (i < 12):
        if (i == 5):
            beginning = "His"
        elif (i % 2 != 0):
            beginning = "And his"
            beginning = "and his"
        print beginning, bodyParts[i], actions[i]+","
   print "\nSR: That's...that's, uh, enough music for\
```

TaleOfSirRobin (parts, verbs)

now, lads."



# Valentine's Day

A lot of people have a love-hate relationship with this particular day.

What makes this day so much more special than any other? Well, it is the day that honours the martyring of Saint Valentine, historically speaking. However, in modern society, that loosely translates to candy hearts, flowers and sappy greeting cards.

It is a day meant for lovers to celebrate their love and affection for each other. Because I mean, why would they do that all the other 364 days of the year? That is simply preposterous.

So do we appreciate this chance to go even more overboard showering our lovers with gifts and affection? Does it really have meaning when we are specifically instructed to do so by media and culture? Is it just another obligation we take on grudgingly?

A lot of people complain about being single on Valentine's Day, and thus, I have found, that in the weeks leading up to it, some try their hardest to find a significant other they can spend it with. Now, does the desperation to be with someone on V-Day mean that you really, truly love this person? Or are you looking for a placeholder to perform rituals with? Are you possibly using V-Day to get back at an ex, or a friend who has simply always rubbed his or her relationships in your face? Whatever the superficial reasoning, you're not particularly respecting the "true meaning" of the day.

If this is the case, would it not be better for people to save any caring gestures, and important declarations, and surprise your loved one on a not-so-special ordinary day? Would it not hold more meaning? But at the same time, will you completely neglect your significant other by treating V-day as ordinary? (Unless, of course, it is agreed upon beforehand that nothing is to be done on that day)

Valentine's Day: always making sh\*t complicated. Are you making the right plans? Buying the right gifts? Who is it okay to give a gift to; will it make things awkward? So many expectations and so few of them can really be met. It's when you miss the days when you just used to give out Valentine's cards to all the kids in your class, and you got them back. It made you feel special, and maybe you got some extra chocolate. Simple as that. If only adults could do it too.

So, Valentine's Day... Some people hate it: singles, because it makes them feel an array of feelings ranging from loneliness to disgust, and couples, because it often diminishes the truth and sincerity behind the loving acts toward each other. But then, some people love it regardless. They love the hearts, Cupids, and roses. They appreciate the celebration for what it is, however superficial it may have become.

Where do I sit? Well, somewhere on the line between love and hate. I, like many others, have spent Valentine's Days, more often than not, alone and unwanted. But still, I find the cutesy gestures and celebration of love somewhat undeniable.

Valentine's Day was not always about romantic love. So celebrate the love you have for your family and friends. Tell them you appreciate them. Because as long as they're around, you'll never really be alone. And that is something to cherish.

Celebrate (all kinds of) love every day of the year.

psychomath

## Your Guide to Aphrodisiacs

Perhaps you're looking for a little extra advantage for Valentine's day. We reviewed several popular aphrodisiacs for you, so you know what to use.

#### Ambergris

Ambergris is a substance found in the bowels of sperm whales. I'm not sure which genius decided it was an aphrodisiac, but covering yourself in whale excrement is probably a bad idea for impressing that special someone in your life.

#### Epimedium grandiflorum

This flower, also known as "Horny goat weed", is found in China, Japan, and Korea. It is believed that it causes increased sexual activity in goats. Unless your partner is a goat, give this one a miss too.

#### Ginkgo biloba

In addition to the usual use for improving memory, this is supposed to increase blood flow, which is probably why some people think it's an aphrodisiac. Additional side effects include increased risk of bleeding, gastrointestinal discomfort, nausea, vomiting, diarrhea, headaches, dizziness, heart palpitations, and restlessness. Sounds like something to avoid if you're trying to impress your partner. Worse, you'll remember every minute of their rejection with perfect clarity

#### Ginseng

Symptoms of mild overdose may include dry mouth and lips, excitation, fidgeting, tremor, palpitations, insomnia, increased body temperature, and increased blood pressure. Really, you're going to get that anyway if you're nervous about asking someone out. Just skip the ginseng and go for it.

#### math **NEWS**

We've got evidence that reading *mathNEWS* together has led to successful romantic relationships (well, at least one). Go find that special person in your life, and spend some time together browsing through the issue.

Grumpy Old Fart