

Who needs girly heart arrows when you have a crossbow

> Daryl Dixon The Walking Dead ©WolverinePanda



lookAHEAD

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	
February 28	First interview cycle ranking opens 1PM
March 3	First interview cycle ranking closes 2PM
March 3	First interview cycle match results 4PM
University	
University February 17-21	Reading Week
	Reading Week Deadline for 50% tuition refund
February 17-21	0
February 17-21 February 21	0
February 17-21 February 21 Misc	Deadline for 50% tuition refund
February 17-21 February 21 Misc February 14	Deadline for 50% tuition refund Valentine's Day
February 17-21 February 21 Misc February 14 February 15	Deadline for 50% tuition refund Valentine's Day Flag Day
February 17-21 February 21 Misc February 14 February 15 February 15	Deadline for 50% tuition refund Valentine's Day Flag Day Cheap Candy Day

WISE National Conference Notice

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

ISSN 0705-0410 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

Sweet and Sour: Attendance

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 Society.
- 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!





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-ur-co@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.

 $\# endrant\,\# sorry not sorry\,\# poorly written rant but no shit s given$

psychomath

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.
- 6. 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!

CAMPUS QUESTION

SHOULD UW STOP TAKING IMPRINT SERIOUSLY?



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".

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''
        if (i == 0):
            beginning += "Or to have"
        elif (i == 2):
            beginning += "To have"
        print beginning,"his", bodyParts[i], \
             actions[i]+","
         i += 1
    print "brave Sir Robin!\n"
    while (i < 12):
        if (i == 5):
            beginning = "His"
        elif (i % 2 != 0):
            beginning = "And his"
        else:
            beginning = "and his"
        print beginning, bodyParts[i], actions[i]+","
        i + = 1
   print "\nSR: That's ... that's, uh, enough music for \
      now, lads."
```

TaleOfSirRobin (parts, verbs)



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 *math***NEWS** 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.

Last Minute, Inexpensive, Valentine's Day Ideas

It's Valentine's Day. You either have something planned, are freaking out with nothing planned, or are some smart person out there, not in a relationship. Why do I find you smart? Relationships aren't all cotton candy clouds and rainbows. They are stressful, especially when you have a partner that is really into Valentine's Day and expects something spectacular to happen. Dude, let's be serious right now, all that pre-meditative planning and trying to impress your partner is fucking stressful. Especially when you don't want to do something typical and want to make it memorable, while not spending a boat-full of money or traveling.

I'm going to share with you some ideas that will be memorable for your partner, easy on your wallet, and still be fun for you (hopefully). If you already have a plan, you can add these on at your disposal.

- 1. Don't want to buy your partner chocolates or whatever? Awesome! Stay in on Valentines' Day, or after your romantic dinner out, get your partner and bake the treats together. Have a flour fight; when you're cleaning the dishes, have a bubble fight; make it fun. The final product doesn't matter, because you'll have so much fun laughing and being silly that your failed attempt will be a memory that will last. And hey, if it does work out and you get a yummy treat after, BONUS!
- Want to be romantic? Your partner wants to try out those chocolate dipped strawberries that cost WAY too much? Get out two pots (same size), fill the bottom pot with water half way, place the other pot on top and put in some chocolate, remember to stir the chocolate so it doesn't burn, get out some cut fruit and BAM! Chocolate fondue! (Or you can look this up online with better instructions) You don't need a fondue set, don't waste money!

- 3. Does your partner or you like dancing but you (or your partner) don't want to make a fool of themselves by going to a dance club? Well then, say HI to your living room! Get all your housemates to ditch, get some music, make a giant play list, put it on random, and dance. You can laugh WITH each other, at one another, and not have to worry about other people. Or if one of you actually knows how to dance, teach the other to dance. Have fun with it. Ta-dah! Memory made! Honestly, if you can't make a fool of yourself in front of your partner, you may want to reevaluate some things.
- 4. Are you and your partner more low key? Why not make dinner together. Like the baking, you should have fun with it. Except, in this case, you may want the end product to be edible. If it isn't edible, order a pizza (or something not too expensive). Seriously, you making the whole dinner yourself is a bit stressful! Stuck? Want an easy suggestion? Chicken cordon bleu! Do not fear the French name. This is easy to make! I promise you, if not ask the *math***NEWS** editors where you can find me, find me and smack me. This is how confident I am in the simplicity of this recipe:

Buy chicken breasts, ham slices, Swiss cheese slices, and Shake 'n' Bake (the chicken kind). Follow the instructions on the Shake 'n Bake box, except when there is 5-10 minutes left for your chicken to bake, pull the chicken out, cut the breasts in half and place a slice of ham and a slice of Swiss cheese onto the bottom half of your cut chicken breast, place the other half on top and finish cooking your chicken.

Those are some last minute, inexpensive, memorable things you can do with your partner today, on Valentine's Day.

Wolverine Panda

Giant Fluffy Frogs

The weeks leading up to Valentine's Day are always marked by the appearance of cliched, pink-and-red kitsch EVERYWHERE. Most of it, I've gotten used to. However, I have to admit that I found myself startled when, on my weekly grocery expedition, I turned the corner and found myself face to face with an entire aisle of giant plush frogs in the most atrocious shades of red and pink imaginable.

Seriously, marketing-directors-who-somehow-decided-these-plushies-would-be-a-good-idea? FROGS. Really, that's the best you can do?

Now, I understand that the market is already over-saturated with all kinds of stuffed animals. Teddy bears, bunnies, and squirrels I can understand: they're cute and fluffy. But who woke up one morning and thought: "You know what? Nothing says 'I love you' like a huge, slightly terrifying stuffed frog!" And despite how soft these frogs were, their giant, vacant eyes were really nothing short of terrifying. Also, how do you even go about explaining your gift to your significant other? Unless they are an ardent frog lover, the exchange will probably be terribly awkward:

"I got you this frog because it's fluffy and takes up more space than it should!"

"My feelings for you are like this frog: slimy and kind of gross."

"This frog represents...Well honestly, it was the first thing I saw when I ran into the store this morning."

I'm no relationship expert, but I'm not sure that would go over so well. Whoever said frogs were the new chocolate was seriously disturbed. So, if you're scrambling to find a gift at the last minute, a) shame on you, and b) just go with chocolate. At least your significant other can eat it as comfort food after you prove just how spectacularly unimaginative you are.

C++ Column: goto

This is a column where I write about random C++ topics. I make no guarantees on whether these topics are useful, funny, or just plain crazy.

For this issue, we'll take a look at goto, which some consider harmful.^[1] There are two things I want to discuss: crossing initialization and destructors. For once, this article will actually be somewhat useful.

Crossing initialization

Jumping from a point where a variable is not in scope, to a point where it is in scope is illegal. (It's actually a little more complicated, you'll want to see section 6.7, paragraph 3 of the C++ standard.^[2]) The following code snippet is ill-formed, and your compiler should give an error:

```
void func() {
    goto abc;
    Foo f = 1;
abc:
    return;
}
```

If you think "Oh, I never use goto so I don't need to worry about this," you're mistaken. The jump from a switch to a case label also counts. So the following code snippet is also illegal, since you could jump to default where f comes into scope without being initialized:

```
void func(int n) {
    switch (n) {
        case 1: //{
            Foo f = 1;
            return;
            //}
        default: //{
            return;
            //}
    }
}
```

I Don't Have a Spinny Chair

Once upon a time there was a Stubbs that stumbled across a chair with magical properties. (It could spin.) So what the Stubbs did was eloquently put the thoughts and experiences to words in a biweekly publication. (He wrote for mathNEWS.) That writer that did write in writing in the written work proceeded to procure unwanted criticism for his prose. (People said mean things.)

Fuck you Ben.

To fix this, add back the braces which were commented out above. This ensures Foo is in its own scope, and we don't cross over its initialization when jumping to default.

Destructors

You probably know that if you transfer out of a scope, objects will be destroyed. But did you know that transferring *backwards* to *before* a variable is initialized will call its destructor? (Please don't try this at home. Or at work.)

```
void func() {
    bool retry = true;
abc:
    Foo f = 1;
    if (retry) {
        retry = false;
        goto abc;
    }
}
```

The above function calls Foo's destructor twice: once when you jump backwards to abc, and the second time when you exit the function. There's a few more details, but I'll direct you to the section 6.6, paragraph 2 of the C++ standard.^[2]

(After writing this article, I discovered a Stack Overflow answer^[3] that is basically a clearer and more detailed version of my article. Whoops. It does quote from an older draft of the standard, but I don't think goto has changed much.)

Next time, we'll look at something a little more mundane: string literals.

notbob

http://www.thocp.net/biographies/papers/goto_considered_harmful.htm
 http://isocpp.org/files/papers/N3797.pdf
 http://stackoverflow.com/a/7334968

Music Love

- The flute isn't the only thing I know how to blow.
- I'm french horny for your tromboner.
- Don't worry, I play oboe. I can handle double the wood.
- Composers know how to score.
- You make my trombone slide to 7th position.
- I broke my G string fingering A minor.
- If you lick my reed till it's wet enough, it'll open for you to tongue easily.
- Would you like to put your mouth piece on my clarinet?

wibz

Drop your Minecraft username in the BLACK BOX or email it to us at mathNEWS@gmail.com to be whitelisted on our Minecraft server (129.97.134.134).

Stubbs

The Charlatan's Guide to Living a Life 3310 Kilometres Away

Or: The Humour Obtained When Someone Going to Bed When You Do Is Weird

The quoted distance is, probably roughly, the as-the-crow-flies distance between the University of Victoria and the University of Waterloo. This is intended to be a mildly humourous look at some of the absurdities that arise when you leave your heart behind while the rest of you goes off and does the right thing by changing schools for graduate studies. The prose has been made intentionally less absurd than in past articles, mostly because the author is tired of writing like Carson Cistulli. It is also probably less coherent than usual, mostly because the author is up late, even for him. Grammar took one to the chin, tonight.

"Why are you still up? / Why are you up so early?" For the time zone accustomed traveller, it can be amusing when someone who is used to only one time zone becomes confused as to why you woke up so early. "Why, it's only 7 am!" is a common reply, mostly because three hours is less than otherwise thought. On the flip side, sometimes conversations definitely turn to "... Are you sure you should be up this late?" as a valid line. Meanwhile, no one talks early in the morning, so it works out better for the West Coast speaker. The one drawback is that people tend to fall asleep on you during conversations, sometimes without any warning.

Participating in a Musical Comedy Without Being There. This one takes an almost fanatical dedication to the company. One way to do so is to help write the script, or else help arrange music for the band. This can be all sorts of fun, until you realize that you won't get to see it all go down during the run. Unless, of course, some kind souls live-stream it! And then your life suddenly brightens up, and you're over the moon (even if it was blown up during the show). Mood swings are a thing for which to watch out, here, but if things work out well it's wonderful. Caring desperately about the politics in the far-off locale. Frequently, posts on Facebook show up about the elections about to occur, and referendum questions, etc. As a concerned citizen, research should be done to champion the obvious cause, and hopefully people will understand that you still care about students paying for a mandatory bus pass, even if you don't use yours anymore. On a related note...

You're old enough to be unsure if things still work the way they did. Change happens! All the time. Not that it isn't scary as hell. But when you go to answer a question for someone on Facebook and realize that you haven't taken a course at that university for over nine months, it sinks in that you don't know exactly how things work anymore. This uncertainty is fear-inducing! And really, that time period is so weird; you could've gone and become pregnant after finishing your last exams, and it's been long enough that the child has probably been born already. No, *you're* awkward. ... Your *face* is a toaster!

Writing for math**NEWS**! Perhaps one of the best ways to pretend that you still mean something to the society way off in the distance is to contribute to said society! Hence, (Jordan) content of sometimes questionable quality appears fortnightly, Cauchy sequences converge with terrible in-jokes from years ago, and moreover they are aimed at people probably no longer consistently read the publication (names shall not be named (You hear that, Voldemort? (Yes, I just made a Harry Potter reference. I'm old, screw you.))). Nevertheless, it's a great time anyways, and feeling like you're a part of something is worth a lot, even if you don't get a say in what pizza the writers have, and even if you can't answer the mast**HEAD** question. (... I vote for Meatatarian!)

Scythe Marshall

Second Generation Programming

I recently sat down for an interview that started with an odd question. Not the illegal-to-ask kind, although I have been asked those before, but an innocent, innocuous, curious question. It was preceded by my interviewer saying hello and looking over my resume for a question to start with. Like a deer in headlights he stopped, said "hold on" followed by a very awkward ten second silence, and then: "Are you Victor's kid?" Being referred to as a "kid" during an interview can be a little off-putting but it is an inevitability I was hoping would never happen. I never applied to my father's workplace partially for that reason. I have value in my own right, and while social connections are the way to go about getting jobs it was never worth being compared to my father. In any case, shrugging it off, I knew that my interviewer had been his coworker and I was expecting it to potentially occur.

This morning I walk in, bright and early, ready to sell myself as the co-op of choice. I look around at the other fifty co-ops in the same boat at any given time, shrug, and try to build up a healthy but not adverse amount of confidence. Battling technical difficulties, I work my way through the interview, near the end, ask my questions, and right as I am about to be hung up on: "Is your father's name Victor?" I sat there, dumbfounded, for who knows how long. I mustered a weak "Yes, have you worked with him?" Turns out that they worked together over a decade ago.

Most people believe that every connection brings you closer to your interviewer and closer to the job. It is true, but every connection carries a cost. LinkedIn used to carry a cost in its early days if you linked with someone who had poor connections. As it grew, the expectation of users to be able to prevent and sever those bad connections quickly disappeared. The biggest cost of those is now a public map, worse than Facebook in some ways, of your employment history and the people you interact with. In my case, the cost is an expectation. To this day, I know nothing about my father at work other than everyone respects him and that he works overtime whenever it is needed. It is like some sort of massive mysterious expectation that I certainly can not live up to. Every generation is dwarfed by the previous until it succeeds where the previous has failed. If anything, this has taught me one important lesson: you cannot hide from your past.

How to Enjoy Campus Pizza

Many people dislike Campus Pizza, giving it epithets such as "Campus Cardboard". But I feel that this is rather unfair to the business. Namely, you can actually enjoy Campus Pizza, if you make sure to take some and/or all of the following advice:

- **DO**: Order it fresh and in small batches, lest some of it get cold and become stale and inedible.
- **DO NOT**: Order slices in store. These will be reheated, and when reheated, such pizza is terrible.
- **DO**: Order late at night, preferably 3-4 AM, as the lack of competing orders will ensure your pizza is fresh and delicious.
- **DO NOT:** Eat Campus Pizza if it is offered at corporate info sessions, orientation week meals, or other such places where free food is offered. The mass ordering/distribution will make it all crappy, cold, and tough.
- Finally, **DO**: Eat it while drunk late at night. The grease will be some of the best you have ever tasted, and you'll have the benefits of confusing your friends in the morning when they ask where you got the delicious pizza from.

So I gave you a meme for a

/alentine.

I know you like classy guys.

.. I don't I-like you

or anything! Baka

Last Week's Solutions:



Warner Focusing on DLC, not Patches for Batman: Arkham Origins

This past Friday, Warner Brothers Montreal announced through its support forums for Batman Arkham Origins that they are working on new DLC and do not have plans for releasing another patch to address the issues that have been reported on their forums. So, rather than fix a game that is broken for some of their consumers, they have decided to try to make and sell DLC which could be just a buggy for some people. It is absolutely outrageous that a developer would even think that this decision is acceptable 4 months after release, and when people are still reporting issues that prevent them from finishing the game.

When I pre-ordered this game for PC, I thought I would get a game that was in working order since I loved Arkham Asylum and City. I played the game on launch day and the only bug I ever encountered at the time was fixed in their first patch, but the bug still shouldn't have made it past QA. Since then I haven't gone into the game because I beat the main story, and felt no need to go back to it. However, I was one of a few that didn't encounter game breaking bugs such as infinitely falling through the floor, or having my save file corrupted in those first few days. When people drop any amount of money on a supposedly finished and working product, they expect it to work properly. In the case of games, people would at least like to be able to finish the game, and not have to deal with bugs that should have been resolved before launch. This attitude of developers to release the game now, and fix it later is eroding away gamers' confidence in developers to produce quality games. Perhaps a bigger example than Batman Arkham Origins would be EA's Battlefield 4, which was released with many problems and bugs. At least EA, which was voted Worst Company in America in 2012 and 2013, has committed to resolving the issues. In fact DICE, the game's developer, has put all other projects on hold until the bugs are resolved. Rarely can people say that EA is doing a better PR job than another company.

What disgusts me the most though is that instead of being open about this decision and making it in an official new or blog post Warner Bros Montreal decided to only release this information in their support forums in a non-stickied thread almost a month after a user inquired on the forums about the possibility of another patch. They are being completely dishonest in every way to not only people who currently own the game who would like the game fixed, but also future consumers who might pick up the game not knowing that they are essentially rolling the dice on whether or not they will have a smooth experience. A gamble I hope no one who reads this article takes.

AddictedGmr

Europa Universalis IV

Suck it, France!

A couple of weeks ago I wrote about this awesome historical strategy game starting. In the save I had been playing, I was the English and had gotten my royal British bum kicked by the French in the Hundred Years War. What then happened was I updated the game and the save file was corrupted.

-_-

So, determined this time to win the never-ending war, I started again, in the name of British pride!

England starts off with 9,000 soldiers in Normandy and another 9,000 soldiers in Gascogne. Of course, when the game starts there are 40,000 evil French soldiers bearing down on them. Those righteous soldiers needed saving if an offence was going to be successful, so I quickly asked for military access into Brittany and Aragon to spirit the brave souls to safety. England has another 19,000 soldiers in the motherland and so those troops were put on transports and sent to join the others staging daring raids to destroy smaller, stupid French armies that were caught close to the borders.

Meanwhile, more soldiers were being trained with mercenaries bought to swell their ranks even further. My intention was to have them join their brothers in fighting the darkness that was the French nation. However, the continuous war was taking its toll on the population. Revolts were springing up in Wales,

Cornwall and Derby that needed to be put down else the war effort would truly fail.

From the constant raids and blockades, the French were weakening, and the time to wipe them out was at hand! A battle of epic proportions was fought just outside of Paris and the English were victorious! The remaining English forces then gave chase to the retreating French scoundrels, cornered them and left them devastated.

But then a decision had to be made. Whilst the war in France had been going very well, the revolts at home had gotten out of hand. There were 37,000 rebels in London alone—a force that size could have destroyed all remaining French and English forces combined. Seriously, if they had just joined my army, we could have won the war in a fortnight. But no, they had to siege London.

The decision to be made was to either siege the provinces in France and actually win the war, or go deal with the rebels. I decided to win the war and continue to ignore the rebels/give in to their demands. (There are 37,000 of you and all you want is 10% off your taxes? Deal.)

And now the French are English. Soon, it won't even exist at all, and all will be good with the world.

horrorSCOPES

Valentine's Edition

ActSci: You have to find a date for Valentine's day. Going through the statistics tables and the (age/2)+7 rule, you find the perfect partner. Unfortunately, they're in Singapore. *Your unlucky number is:* 8495 miles to get laid.

AHS: You have to find a date for Valentine's day. You wear a low cut shirt and short shorts. Sadly, you forgot to shave. *Your unlucky number is:* 798 frozen leg and chest hairs.

AMATH: You have to find a date for Valentine's day. You find the approximation of a date, and spend the night with a blow up doll. *Your unlucky number is:* π holes to enjoy.

ARCH: You have to find a date for Valentine's day. The person you ask is like Engineering 6: underage. *Your unlucky number is:* 17 years young.

ARTS: You have to find a date for Valentine's day. Finding the idea sexist and singleist, you stage a protest. It attracts all of the creeps to hit on you.

Your unlucky number is: 17 people hit with a picket sign.

C&O: You have to find a date for Valentine's day. You write a generating function to return one for you. *Your unlucky number is:* Ø results.

CS: You have to find a date for Valentine's day. Marmoset will keep you up and sweating in your room all night long! *Your unlucky number is:* 2/10 release tests passed.

CM: You have to find a date for Valentine's day. You attempt to model the attempts at a date, but instead spend your evening instead fixing your MATLAB code.

Your unlucky number is: 40oz bottle of vodka for company at the end of it all.

Double Degree: You have to find a date for Valentine's day. You get lucky and score one from each university. Unfortunately, they find out and go out with each other instead. *Your unlucky number is:* Three-minus-onesome.

ENG: You have to find a date for Valentine's day. You discover that humping a robot is painful. *Your unlucky number is:* 8 bruises in unmentionable places.

ENV: You have to catch a date for Valentine's day. You ready the bait and bear trap. *Your unlucky number is:* 1 amputated date.

General Math: You have to find a date for Valentine's day. You're fairly certain that it's on February 14th. *Your unlucky number is:* 45th day of the year.

Undeclared: You have to find a date for Valentine's day. Sadly, you've spent so much time on choosing a restaurant that they have all filled up by the time you call to book. *Your unlucky number is:* 500g of ramen by candlelight.

Grad: You have to find a date for Valentine's day. Unfortunately, all of your other coworkers are either married or are in steady long term relationships.

Your unlucky number is: 4 litres of Hagen-daaz and watching The Notebook alone.

KI: You have to find a date for Valentine's day. All you find is a tub of moldable purple plasticene. *Your unlucky number is:* 3 contracted UTIs.

MATH BUS: You have to find a date for Valentine's day. You don't find the evening worth a large investment of your money, so you opt for a cheap night. Your partner doesn't find you worth any investment of their time.

Your unlucky number is: \$70 saved.

MATH PHYS: You have to find a date for Valentine's day. You see your partner as a quark: charmed. However, they also see you as a quark: strange.

Your unlucky number is: s and c just aren't compatible.

Math Studies: You need to find a date for Valentine's day. The thing is, you're a math stud, not a math genius. You can attract people, but can't keep anyone interested. *Your unlucky number is*: 50.3% term average still keeps you in.

PMATH: You have to find a date for Valentine's day. Unfortunately, you're not very good at complex analysis. Your unlucky number is: *i* dates.

SCI: You have to find a date for Valentine's day. You genetically engineer the perfect partner. They reject you too. *Your unlucky number is:* 23 pairs of rejecting chromosomes.

Soft Eng: You have to find a date for Valentine's day. You've spent so much time in the lab, however, that you've forgotten on how to wear pants. You scare away any potential dates. *Your unlucky number is:* 2 scrawny legs.

Stats: You have to find a date for Valentine's day. The standard deviation for attractiveness is high, but you're on the wrong end of the curve. You end up going out with a chimpanzee. *Your unlucky number is:* 12 pounds of flung poo.

Teaching Option: You have to find a date for Valentine's day. You hook up with your student's parents. That night, your student finds the three of you together. *Your unlucky number is:* 68 hours of therapy.



!bar

profQUOTES

"Professor Xiaoyun Wang found collisions for MD4 by hand, so "The theme of this lecture is 'what's so good about death?" she totally owned Ron Rivest" Callaghan, PHIL 110A [Substitute] Menezes, CO 487 *Prof:* "So are we all happy [about this concept]?" "Mathematics is a very useful marketing tool for convincing the Students: [no response] unsuspecting public." Prof: "I'll take that as a no and move on." Menezes, CO 487 Purbhoo, MATH 249 "I dont' understand why people pay for satellite TV... especially "I'll pretend you are all in a coma and hooked up to IV drips now that I've found out about torrents!" but can still hear me." Scholz, PHYS 122 Purbhoo, MATH 249 "As long as the embryo hasn't robbed a bank, we're not too wor-[Writes on board after a sketch of proof] "Some details were ried about that." harmed during making of this proof." Macfarlane, PSCI 363 Purbhoo, MATH 249 [on having conflicting midterms] "Well, you have two hands, two "If you want to impress your girlfriend you should buy her a eyes. One hand for each midterm. I don't see the problem here." Higgs [boson] necklace. It'ld be worth billions. Of course it'd Rubinstein, AMATH/PMATH 332 decay before she could observe it, but you can't have everything." Mann, PHYS 124 "Ooh, I should have given it a name..." [gives a name to a function on board] "Oh! I did, I called it gamma." "How many of you have heard of the uncertainty principle? I Marcoux, PMATH 450 assume from chemistry? Great. Now let's do it right." Mann, PHYS 124 "You don't really need a hint for this week's assignment, but I'm gonna give you a minor hint just to pretend I'm kind." "Imagine a finite state machine designed for dentists. It has 3 Liu, MATH 138 states: anesthetics, extract, cleanup. Does anyone know how to spell anesthetics? I'll write laughing gas. Now say we have an "Basic math, I can't actually do." unused state, and you wouldn't want it go straight to extract." Ali, STAT 230 Mann, CS 251 "I don't have funds to support church burning on my grants." "There won't be multiplication question on the midterm, so I Katz, MATH 239 can tell my 10-year-old daughter I didn't put it on your exam because it's too hard." "You guys need to spend more time on the internet." Mann, CS 251 Katz, MATH 239 N Things to Enjoy at Sochi N Ways to Descend a Staircase Ice-skating mascots Slide down the banister. Whee! **Ring mishaps** In slow-motion. You can never be too careful! Or silly. Jellvfish dancers With your back to the railing, like a ninja. The trousers of Swedish athletes As part of your dramatic entrance. Be careful not to fall! Honey containing bees Following the overly-detailed instructions in Cortázar's Yellow water Instrucciones para subir una escalera, but in reverse. Hotels with no lobby In steps. Funny bathroom signs Painted grass lightningbug Hotel rooms without door handles A ton of stray dogs Unflushable toilet paper **Follow us:** Going to the owner's bedroom to check into a hotel

on Facebook (MathNEWS), on Twitter (@UWmathNEWS),

or in person (MC 3030)!

• Complimentary photos of Putin

Manholes without covers

Side-by-side toilets

Showers of Sensation

•

Peas and marmalade for breakfast



Please pardon the two-letter words, the lack of rotational symmetry, and the almost-a-quarter black-to-white ratio. I'm sure you understand!

Four out of five submissions were perfect – sorry, Anonymous Engineers! The answers to last issue's *grid***QUESTION** ("What is the saddest thing about summertime?") were "having your supply of Turkish Delight cut off" (Daniel), "no snow" (Henry), "no classes with cute girls" (Jennifer), and "Olaf melting" (Ramesh). I'm not sure why Turkish Delight is inaccessible in summertime, and I think we've had enough snow, and there are plenty of classes with cute girls during spring term. So Ramesh wins! Besides, Frozen is the best Disney movie. Congratulations, Ramesh! You may pick up your prize at MathSoc.

Submit your grids to the **BLACK BOX** (by the Comfy Lounge on MC 3rd floor) by 18:30 on Monday February 24th. Include your name and your answer to this issue's *grid***QUESTION**—the best answer decides the winner (of a \$5 C&D gift card) in the event of a tie: "What is the point of love?"

unit

10 11 12 13 14 2118 192223 24 2526 $\overline{27}$ 28 30 29 31 3436 37 38 39 404143 444548525354555657585960 6162 63

1. Pigeon's purr 1. Traded tots 4. Ump 2. Lummoxes 7. Eggs 3. Make a choice 10. Today's tagline (with 12A) 4. Sick 11. Sternward 5. Glee 6. Otherworldly (or doomed) 12. (see 10A) 13. Munch 7. Unity 14. North. south 8. Calf meat 15. "Archaic" dalton 9. Stargazers 18. Time-wasting 15. Expiates 16. Poppas' partners 21. Left, right 22. Swart 17. Condemned?? 23. tic tac 18. Popular poisonous mush-25. Furor uterinus room genus 26. Edition of limited function-19. Mel's and Denny's alitv 20. Lacrimogenous layers 27. Fifth in cosmic abundance 22. Loose or dead 28. Subordinating conjunction 24. sin/cos 30. Impertinence 29. Calixte's "crazy" 32. Old snow 31. Expectorate 33. Post-p.m. 32. Alkaline mires 34. Head 33. Breath 36. "Sins" and "continents" 35. Sis's sib 38. Tell tales 37. Caudal appendage 39. Sanskrit master 38. Unit of illuminance 41. Goddess of the hunt 40. Unknown aloft thing 42. Cat's coo 42. Plague 44. Weightily walks 43. Not seldom 45. " the season!" 46. Loosely 46. Salmon, smoked or brined 47. Lamb-locks 48. Mouths 49. Succulent plant 50. Levv 50. Writings 52. Calls the kettle black 51. An ellipse's is π ab 52. Bed threads 54. Tiresome 53. Yore "your" 56. Evil spell 57. Before 55. Web and game go-with 59. Default name 56. Female fowl 60. Former friend? 57. Night prior 58. Take a mismake 61. Wilv 62.69+7D 63. Head-hole

Send us your articles, profQUOTES, grid solutions, love letters, and puzzle solutions to mathnews@gmail.com.or submit them to the BLACK BOX

This Week's Grid: