

math NEWS



Now presented via
interpretive dance!

Volume 116, Issue 2
Friday, May 27, 2011



lookAHEAD**mathNEWS**

May 27	Issue #2 Noms Issue #1
June 4	National Doodah day. Silliness ensues.
June 6	Issue #3 begins gestating
June 10	Issue #3 bursts from CorruptED's chest

Math Faculty

June 13	Final day to apply for Black Tie for Orientation
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MathSoc

Tuesdays	Games Night in the Comfy at 6:30pm
May 27	SCUNT. Time to beat the engineers at thier own game!

CECS

May 25	First round employer interviews start
June 15	First round employer interviews end
June 17	Rankings open
June 22	Continuous Cycle begins

Misc

May 27	Anime North begins
May 29	Mount Everest loses its virginity
May 32	Still doesn't exist
June 26	GRT moves to summer schedule
July 1	Canada Day

Games Night

Board Games Nights are still happening yo, every Tuesday at 6:30 PM, in Comfy (MC 3001). Come! Bring your friends! Bring your enemies! Bring that annoying guy you know! The more people playing games the better, and if we get enough people we can justify pizza, so really, y_o?

Oh, and a tentative date for 24-Games day is Saturday July 23-Sunday July 24 (noon-to-noon, as usual). Last Saturday before finals, as has become the norm.

We are also looking for another (themed) event (with prizes!) to run this term, so if you have any ideas, shoot an email to games@mathsoc.uwaterloo.ca.

Games Co-Director

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Earth, Fire, Wind, Water, Heart, by their powers combined
mathNEWS Editors: Jeff Bain, Will Morrison, Harrison Gross, Michelle Conway, Sacha Koohgoli

mastHEAD

Where I complain about how busy I've been lately.

Hello once again my dear mathies! The spring term is now well underway and we're on our second issue now. But we're not the only ones in full swing. Lots of fun fun fun fun activities on and around campus have been going on to allow us to take advantage of the sometimes not terrible weather we get during Spring term (When it's not thunderstorming like the end of times). So many, in fact, we're not sure we really have the time to do everything.

It's with this fact in mind we must decide where our priorities lie. For most of our writers, I guess that's with us, which is good because otherwise the Editors would have to do way more work to make *mathNEWS*. So, it's with this wonderful sacrifice our writers are making that we ask this week's *mastHEAD* question: "What that you love did you give up to come to *mathNEWS* production night??"

Meaningless Quips("Dinner!"), Megaton Panda (" American idol! (Go Scotty)"), k! ("My pride - many awkward glances were exchanged when Iwas discovered sketching toilets"), Tbor ("Natty light, Jungle Juice, 4Loko and Everclear") Trix ("My Virginity!"), waldo@<3.LE-GASP.ca ("time and effort"), denis1080 ("Toonie Tuesday at The Grill! Missing out on a pulled pork sandwich, but easily compensated by pizza!"), horrorscopes ("my innocence... *mathNEWS* writers are crazy"), !ED ("Oh shit, Glee was tonight. Santana is hot."), !able ("Time.sleep(3600)"), Tie-Frosh? ("Food- so hungry..."), GroovyED("Sleep & Sanity"), Concealed ("Ninja Training"), ConED ("sleep, I need a bed"),

CorruptED ("My sleep, my grades, and my sanity")

CSC FLASH

Greetings bit manipulators!

CSC 2011.05.27-v2.0 boot sequence initialized. PLEASE IN-PUT DATA: Members are requested for talks! If you have an interesting research project, topic of interest, or anything else neat you want to talk about, please contact the CSC to hold a talk this term. It can be any length on any topic, and we'll help you get set up, write the talk, or even find a topic! We've also got a number of other talks in progress; keep your eyes peeled for them. There will also be the usual code parties this term, full of open source contribution, hacking out some personal projects, and some fun contest puzzles to solve. The code parties are scheduled Fridays at 7PM on June 3rd, 17th, and July 15th. We're also planning a super fun social event this term, with our picniCS and campfirewall in July! Stay tuned, keep hacking, and come visit the office!

Calum T. Dalek
Chairbeing Extraordinaire
<https://csclub.uwaterloo.ca/>



Computer
Science
Club

MathFOC Sez

Orientation!

Hey Marvelous Mathies,

In super exciting fantastic news, we are officially reopening applications for black tie positions. More information on that soon! These openings officially close on June 13th.

We now have office hours! Woot! Check out the MOO door (MC 3048) to see when you can come visit us.

Are you first-aid trained and want to be a first-aid leader? Well then come by the MOO during office hours and bring your first-aid card! It is as simple as that!

Have you paid your leader fees yet? You can also come by the MOO and drop those off as well! We promise we don't bite!

And finally I pose this very important question. How much wood could a woodchuck chuck if a woodchuck could chuck wood? These questions and more are being asked during our trivia competition used to determine team names! Help your team out by answering the questions asked at orientation.math.uwaterloo.ca/leaders/forum/question-threads/.

<3 MathFOC 2011
Gee, Heather, Jesse

MEF SEZ

Hello Mathies,

The Mathematics Endowment Fund (MEF) is currently soliciting Funding Proposals and looking for Funding Council members for the Spring 2011 term.

MEF is an endowment fund operated by the student body with the mandate of funding projects that improve undergraduate mathematics education. One of MEF's primary goals is to give back to math students through the funding of various initiatives. If you are working on some interesting projects and need some funding, **SUBMIT A PROPOSAL!** If you have any questions about the process (we will put up detailed guidelines soon on the website!), or want to discuss your proposals, please, by all means, contact me (see below).

Funding Council members for the Spring 2011 term are needed for representatives for all years and programs. A full list of the Funding Council positions can be found on the MEF website. Interested in becoming a voting member of the Funding Council? It's easy! First, you need to get an application form either from MEF website or from the MEF office. To become a year rep, you need to be nominated by five students in your year. (i.e. Five signatures!) To become a program rep, you need the approval from your program advisor. (Just talk to the advisors - they will most likely appreciate and support your initiative!) As a funding council member, you will need to review the proposals and attend one funding meeting in July. (Refreshments will be provided!)

If you have any questions, please drop by the MEF office (MC 3038) during my office hours (TThu 10:00 - 11:00 am, Wed 3:00 - 4:00 pm). Or send an email tomefcom@student.math.uwaterloo.ca

Sincerely,
Gwen Weng
MEF Director
Spring 2011

VPAS Sez

Things are starting to get underway for the term now! We have most of our directors set and ready to go and we're looking forward to a great term!

We are, however, still looking for one Movies and More Director who will take care of Thursday night movies (or other events) with the help of the current director. If you're interested, email me asap so we can get you started!

We're also looking for some board members to help out with games nights, movie nights, social events, computing and website. Again, if you're interested, let me know soon so we can put you to work!

Another volunteer opportunity is coming up tomorrow (Saturday, May 28th): U@Waterloo Day is an open house for high school students who have either accepted their offer to Waterloo or are still deciding between schools. We need volunteers to help out at the faculty booth, the MathSoc booth, and to give tours of MC. The event runs all day (you can volunteer for only a part of it, though!) and you'll get an awesome pink math t-shirt and a free lunch for your troubles! So - yes, you guessed it - email me if you're interested in helping out!

Lastly, we've decided on most of our events for the term (not all of the dates though, unfortunately) and they're all going to be lots of fun! Games nights are every Tuesday at 7pm in the Comfy Lounge and movies are the same but on Thursdays. There will also be a 24-hour games and movies night coming up sometime in July. We'll be hosting a trip to Wild Water Kingdom during the middle of the term (excellent midterm relief!) and a [day or overnight] trip to Wasaga Beach, which will be hosted in part by the Women in Math Undergrad Committee. In conjunction with the other societies on campus we will be taking part in a semi-formal event at Fed Hall as well as, hopefully, an inter-faculty blood drive competition. Finally, the term will end with our legendary Pi Approximation Day (July 22nd) and Pints with Profs (July 20th).

Hope to see lots of volunteers and event participants out this term!

Alex Russell
vpas@mathsoc.uwaterloo.ca

Website Sez

You should visit the mathSoc Website! It's useful for finding out what's going on! Check it out at <http://www.mathsoc.uwaterloo.ca/> and see all we have to offer!

ELECTIONS!

Hello mathies!

Elections for the Mathematics Society Vice President Events and Finance for Fall 2011 will be opened 8:30am EST on May 30th and will remain open until 5pm EST May 31st.

Who are the candidates?

For Vice President Events the candidates are : Elizabeth McFaul and Alex Russell. For Vice President Finance the candidates are Tim Thatcher, Jessica Janssen and Sean Hunt

For more information check out <http://www.mathsoc.uwaterloo.ca>

To vote go to: <http://www.mathsoc.uwaterloo.ca/vote/>

FedS Sez

The big thing to talk about recently with regards to FedS is the Fed Hall issue. The essence of the issue is that the University has informed FedS that it will not be renewing the lease on Fed Hall when it comes up for renewal in April 2012 (the University, not FedS, owns Fed Hall). This act is completely legal, however, students are concerned by the fact that it was made without student consultation, especially seeing as the building was paid for in full by students.

I'm proud to say that MathSoc recently passed a motion condemning this action and mandating the current executive to organize an opposition to it in conjunction with the other societies. FedS' council, however, has yet to pass a definitive motion on the issue. From what we, as your math councilors, have heard, math students strongly oppose the taking of Fed Hall from students, and we spoke as such during the most recent FedS council meeting. Unfortunately, others were not of the same opinion and a motion similar to the one recently passed by MathSoc's council failed to pass through FedS' council. We instead decided to take more time to gather feedback from students.

So, this is what we are asking of math students: send us your feedback! Let us know how you feel - even if you just want to say "I am opposed/not opposed to this act." We need concrete feedback to take back to council in June!

In the meantime, we will be working closely with a couple very concerned math students, the MathSoc executives and other societies' executives to organize opposition to this.

On a lighter note, nominations will soon re-open for math councilors. Two spots should be open by June 12th. If you're interested in sitting on council, keep an eye and ear out for further updates!

Any questions, comments, and concerns (and feedback!) feel free to contact us at mathcouncilors@gmail.com!

Jesse McGinnis & Alex Russell
mathcouncilors@gmail.com

When Life gives you lemons ...

BURN LIFE'S HOUSE DOWN.

When life gives you lemons ...

- ... give life limes.
- ... mail them back with no return address.
- ... throw them at people.
- ... sue.
- ... squirt lemon-juice into your enemies' eyes.
- ... use them to power your alarm clock.
- ... make lemon-grenades and bomb the government.
- ... use the lemon juice to write secret messages.
- ... differentiate.

BlueberryMuffin

dissedCONNECTIONS

Wanted: The ability to Jedi Mind trick my way past exams. Any interested Jedi willing to tutor me can contact me at my office on the 7th floor of MC. # 73.141592..

Found: A man who claims to be Batman. So far all he's done is respond to everything else with "MY PARENTS ARE DEAD!" Not sure what to do with him. Ideas?

deanQUESTIONS

Hello everyone. After interviewing the Dean of Mathematics, Ian Goulden, last term we thought it would be a good idea for a continuing feature. We are taking submissions for the new **deanQUESTIONS** section. If you wish to submit your questions to the Dean, please submit them to the **BLACK BOX** or to our email at mathnews@student.math.uwaterloo.ca. Now, on with the questions!

mathNEWS: What are you wearing? Do you plan on seeing Harry Potter 7 Part 2? Do you like Greek letters more than frat boys do?

Dean: I'm wearing a jacket and tie today, because there is a visitor from industry, and I don't want to look too casual.

YES, my family and I are planning to see Harry Potter 7 Part 2 as soon as it is released - I read all the books with my daughters when they were younger, and more recently (they're 11 and 14 now), we've gone to the movies as they come out. They are great fun, and I'm sure the last one will belong to the category of movies I like best - basically, mindless violence with a happy ending!

I like the greek alphabet as a source of symbols for complicated math equations - I have no comments about frat boys.

mathNEWS: Was sitting in the SLC & saw the screen playing slides of the Distinguished Teacher Awards. Arts... science... arts..environment. Where's math?? I've looked up the award & it doesn't look like anyone from math won last year either. Question: Any words of motivation to students to nominate next time around?

Dean: The last Math Professor that won the University's Distinguished Teaching Award was Ian Vanderburgh in 2008, and before that Steve Furino in 2007. We have our own Math Faculty Awards, called the "Faculty of Mathematics Award for Distinction in Teaching" - up to two are given each year. Currently we have posters up asking for nominations for the 2011 awards, deadline May 31 (though there is some leeway in the timing - you can still nominate your favourite Professor). In 2010 there were two award winners, Professors Serge d'Alessio and Alfred Menezes.

I believe that we have some great teachers in our Faculty, who care a lot about the students, and would be tremendously excited by any efforts that students made to help them win awards. I would love to see a tradition in Math of students nominating their best instructors for teaching awards, at both the Faculty and University level - our best instructors care very deeply what students think of their teaching efforts, and this would be a definite way that students could help raise the profile of teaching in the Faculty.

mathNEWS: MATH IS SEXY! Agreed? Comments?

Dean: I keep trying to tell that to my wife but I don't think she's convinced.

Missed Connection: I saw you there in the MC. You were showing pencils up your nose and staring at me uncomfortably. I want this connection to stay missed, so can you stay away from me?

For Sale: My virginity. Please, I will totally settle for like 3 cents. I am not very picky!

Rainbow Mathies 9

Internalized Homophobia 101

Hello Mathies! I feel left out since my article isn't meshing with our unofficial theme this week. So, lets change this with a review of Pirates as though all the characters are gay! Stuff happened, then Johnny Depp kissed some guy, then other stuff happened. Overall, A++++. Anyway, back to your regularly scheduled programming. Back in Fall '10, I wrote an article giving hints on how to be an effective Ally. One of the points was to try and recognize how one's internalized homophobia may be affecting their interactions with queer individuals. When writing that bit, I realized that I could easily spend an entire article of the subject, expanding it to the entire community. Here is part one of this article, which will be shorter than usual and will give a brief overview of what internalized homophobia is. The next article who it affects and how it effects them. Part two talks about ways internalized homophobia can be recognized and changed.

What is Internalised Homophobia? An overview.

According to Wikipedia, internalized homophobia refers strictly to any feelings or expressions of homophobia directed at the self. Personally, I prefer to extend that definition to unprompted or unconscious praxes and can affect everyone in the queer community, not just homosexuals. It refers to homophobic ideals that were learned or ingrained in a person by their socialization and are not necessarily desired. This is differentiated from traditional homophobia by the overtness or the uniqueness of the actions. Internalized homophobia, however, is not necessarily purposeful and is often the surfacing of a socialized queer-negative belief or norm. For example, intentionally attempting harm to queer individuals is an overt action against them, while presuming or ascribing additional negative traits to feminine-acting men is a realization of society's disproportionate valuing of masculinity. In other words, internalized homophobia has a root in passive learned beliefs rather than active ones. Because of this, anyone who grew up in a society which has a history of undervaluing queer identities (in other words, practically everyone) is subject to this form of homophobia. Since these concepts are so deeply ingrained in the way we interact with society, they are pervasive and as a result very destructive. Sadly, it is also tricky to recognize at the time and, as a direct result, difficult to prevent. Overall, homophobia caused by our interalized, learned values is a sad truth of our society and its one I hope that we progressively change.

Sadly, this is as much as I have time for this week. Next issue will be much more involved, I promise! As always, if you have any commentary, questions, concerns about the series or you'd like or just someone to talk with, you can email me at dtaleman@uwaterloo.ca. If you are queer identified, and are looking for someone to talk to or for supportive allies, there are always resources available to you. You can learn more about GLOW and its offerings, including a phone line at www.knowyourglow.ca. Counseling Services is always available to you; their offices are open 8:30-8MTTh and 8:30-4:30WF, located in Needles Hall across from Student Awards and Financial Aid. If you need support and assistance immediately, you can call the Waterloo Crisis Center at 519-745-1166. If you'd feel more comfortable speaking with someone from a queer specific service, please contact the GLBT Youthline at 1-800-268-9688.

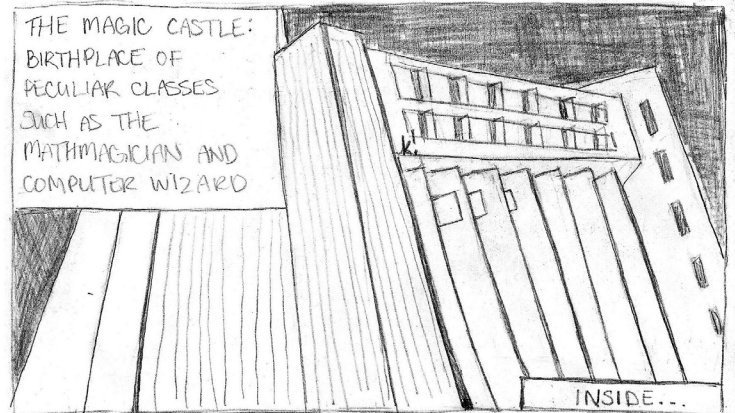
(define this (not cool))

Pirates 2:

Electric Boogaloo

The new Pirates movie: Awesome or awesomer? After watching it this weekend, my verdict is Awesome, though I will not accept a lower grade. Granted it was predictable, but it was a *Pirates*. You were expecting something unexpected? The fight scenes were cool, Jack loves himself over all others, a new villain can control an entire ship with the motion of a mystic sword, and the Spanish are Catholics. Yes it was predictable, and yes it was clichéd, but hey, that just means that it was exactly what those of us who enjoyed the previous movies wanted to see. No, it was not a work of art, but it continues the franchises high cool factor. Would see again.

Tie Frosh.5



quod est absurdum

Interesting Math

A return of a column, and Cayley graphs

The return of a column.

For several years, ending with the completion of his Master's, Vince Chan wrote an eponymous column each fortnight, exploring all sorts of mathematics from hard analysis to recreational mathematics. It is my intent to resume the column, for a couple reasons. The foremost reason I have is to expose my fellow undergraduates to the magnificent breadth of mathematics. Far too often have I witnessed a Pure Math student talking past an Actuary who in turn is being ignored by an Applied Mathematician, and the whole discussion is missed because a Business student was at Laurier. It is my firm belief that we are all first and foremost Mathematics students and I hope that with this column I can do a bit to end this disconnect. Certainly I do not expect to make all of us experts on everything, just to give everyone some common mathematics to discuss. A secondary goal for this column is to encourage reader- and writer-ship of the other mathematics publication on campus, *The Waterloo Mathematics Review*, by reminding people that it exists and hopefully giving them article ideas.

Vince attempted to write his column for a general audience, aware of the non-mathematical readers of *mathNEWS*. I intend to take a slightly different tack: I assume that if you are reading *mathNEWS* you have at least some interest in mathematics, so I will proceed in the style of Tim Gowers' Very Short Introduction to mathematics and will do "without anecdotes, cartoons, exclamation marks, jokey chapter titles, or pictures of the Mandelbrot set". While Vince was rarely guilty of this, only occasionally discussing jokely named theorems, I'd like to state this as a warning to my future self, who might be tempted to cut corners when deadlines get tight. I also state it as a warning to the reader conditioned on what is standard fare for popular mathematics books.

In writing this column, I have to attempt to answer "what makes a particular piece of mathematics interesting?" This is an entirely subjective matter, and so this column will inevitably fill with mathematics I find interesting. I don't think I can articulate my answer at present, instead I hope that it will become clear after several iterations of this column.

Cayley graphs.

I'd like to introduce an interesting open problem in this article, which sometimes goes by the name of the Lovász conjecture. Briefly stated, the conjecture is that the Cayley graph of a group is Hamiltonian. Of course this sentence is meaningless without the associated definitions, and it might not be immediately apparent why it is interesting.

Groups. For those who haven't seen them, or who have forgotten, we first briefly recall the basics of group theory. We will not need any more group theory than what we introduce here, but some previous exposure will add to the appreciation. A group generalizes the notion of multiplication or addition on their own. Formally it is a set G with an operation $*$ such that:

1. There is an element e such that for all $x \in G$ we have $e * x = x * e = x$
2. For every element $a \in G$ there is an element a^{-1} such that $a * a^{-1} = a^{-1} * a = 1$ a^{-1} is known as the inverse

of a

3. For every three elements $a, b, c \in G$ we have that $(a * b) * c = a * (b * c)$ Some readers might protest that $a * b = b * a$ is not one of our axioms. We do not want it to be, this is not true for matrix multiplication. When this does happen, the group is called abelian (or commutative). Familiar examples of groups are the integers under addition, the integers mod n under addition mod n (known as the cyclic group of order n), invertible $n \times n$ matrices under multiplication, and sets of transformations that leave geometric objects fixed (symmetries).

There are many ways to describe groups, one that will be our focus is in terms of a generating set. A subset of a group $S \subseteq G$ is a generating set if we can construct any element in G by taking repeated products of elements in S and their inverses, similar to a basis for a vector space. It is easily seen that every subset of a group generates *some* group, in the same way that every subset of a vector space generates a subspace. Generating sets reveal a lot about the structure of a group, a quick exercise is to show that if a group is generated by a single element then it is the cyclic group of order n for some n , where we consider the integers to be the cyclic group of order ∞ . Generating sets can be used to characterize more complicated groups as well, we explore one approach to this.

Cayley graphs Given a group G with a generating set S we can construct a graph to represent how the generating set forms the group in the following way. Let each group element be a vertex, and add an edge (a, b) if $a = gb$ or $ga = b$ for some $g \in S$. This graph is the *Cayley graph* of G with respect to S , denoted $\Gamma(G, S)$. The obvious example is $\Gamma(\mathbb{Z}_n, \{1\})$, which is just the cycle on n vertices. G gives us a set of automorphisms of $\Gamma(G, S)$, if we map each vertex a to ga for a fixed $g \in G$.

In fact, Sabidussi's Theorem gives us a characterization of Cayley graphs: a graph Γ is the Cayley graph of a group if and only if G acts on Γ in the way described above (more formally: if the action of G is simply transitive).

Using Sabidussi's Theorem we can use Cayley graphs to provide a dictionary between graph-theoretic and group theoretic properties. An easy one is that the Cayley graph of the direct product of two groups is the cartesian product of their Cayley graphs. The characterization also allows us to bring group theoretic tools to bear on graph theory problems, at least when discussing highly symmetric graphs (Cayley graphs are one such set of graphs). Properties of Cayley groups are also related to algebraic properties of groups, Witte and Gallian survey some in their paper discussing what is known about the Lovász conjecture, and I won't go into them here.

The conjecture We recall that a Hamiltonian cycle in a graph is a cycle that reaches every vertex. With this final tidbit we are ready to state a form of the Lovász conjecture: For any group

G with at least three elements, generated by $S \subseteq G$, the Cayley graph $\Gamma(G, S)$ has a Hamiltonian cycle. (Exercise: why do we exclude the group with two elements?) Why is this interesting? If true, it tells us that there is a particular way in which the generators generate every item in the group. It also sheds some light on the complexity of deciding if a graph is a Cayley graph, which in turn is a possible tool to attack the computational complexity of the graph isomorphism problem. Attempts to prove the conjecture, and several partial results, also lead us to the

natural geometry of groups for which we have a proof. The cyclic groups have (when using a single generator) a Cayley graph of a cycle. We know that a finite abelian group can be written as the product of cycles, this suggests a proof of the conjecture for finite abelian groups based on showing that Hamiltonian cycles behave nicely under cartesian product. Indeed, the conjecture is true for finite abelian groups, the full details of the proof are the problem of the issue.

Problem of the issue

If you skipped the preceding discussion and just want a problem, you might have to re-read for the definitions. Show that the Cayley graph of a finite abelian group of order three or more has a Hamiltonian cycle.

Edgar A. Bering IV
ebering@uwaterloo.ca

Stories from Chicago

“I got dragged to a furry convention once.”

The time was 3:30 A.M. Central Standard Time. A friend of mine and myself were attending an anime convention (disturbing to many), and it was late at night. We were at the station for the train near the hotel line. While sitting there, a guy came up to us and started talking.

“Yeah, my co-workers tricked me into going. I work at dog shows, you know? They all told me they was going to some convention and told me I should go along.”

“The hell happened then?”

It was fucking weird as hell. And then this chick in a raccoon outfit was stalking me by the end of the night, nuzzling me every chance she could get. I didn't say it, but I was thinking, ‘Damn girl, just take the head off that suit at least.’”

Later on the way back to the apartment, we were on a bus, when a woman with a cart filled with things began arguing with the bus driver that because she had medical problems the camera on the bus would automatically take her picture and then deposit money from the government into the coffers of the CTA. She was eventually removed from the bus. I hope she has a place to stay now, I think she was likely homeless.

Ice Nine

Pirates!!!

That movie was so inaccurate

While watching each of the Pirates of the Caribbean movies, I was repeatedly struck by how horribly inaccurate they were. In real life, pirates are nothing like what the movie portrayed them as. Primarily, given the inequality between men and women that existed at the time at which the movie is set, the fact that a woman would rise to the second-in-command (effectively in command) — even if she is the daughter of the captain — is ludicrous. Secondly, no ship in the world can be controlled by a sword (no matter how cool it looks) to say nothing of the wind. But the magic that takes place in the movies has to be dismissed, or I will be complaining all day how water cannot function as a portal into a magical realm where one's life can be sacrificed to give life to another.

As said above, the absolute lack of sexism in the movie was disturbing. Women were treated with equality bordering on respect in most cases. Even the creature they were keeping alive simply to extract tears was taken care of in the best way they could, without sacrificing safety. The woman who was the second in command was universally respected and/or feared, de-

Frat Boy History

The Incorrect and Counterfactual History of Fraternities & Sororities at UW

The history of FSA goes all the way back to the nineteen hundreds. In 1984, a large number of mathies were drunk while doing a Math 135 assignment. They built such a bond they decided to don the Greek letters from their assignment (which they had been staring at all night). Because none of them had friends, and they were so close after the long night, they decided that they would call each other brothers. Naturally there were no women in the course at the time.

A short time later, a group of Artsies who were learning Greek and Philosophy learned about the new brotherhood, they thought that they would get into an Aristotlic society. They were let into the society because they had large numbers of women and alcohol. Soon with Software Engineering and dual degrees, Engineering and Science got through to joining and they brought drinking games and distillation of alcohol. Lastly, AHS and Environment joined in with popped collars, hacky sacks and ultimate frisbee.

At this point they found out they had a large thing in common with certain Greek Letter societies in the states, and they were then referred to as a Fraternity.

Eventually, Sororities were made because FEDs demands female involvement in any club on campus. As a male member, I don't know too much about them, but I assume that they have bachelorette-style parties, pillow-fight-filled sleepovers, and period synchronization.

If you haven't learned enough about Fraternity and Sororities that you would believe this article, you clearly haven't come to our parties/yoga sessions/D&D campaigns/fine dining shindigs. Find a brother or sister on campus that is not your own, such as myself or just walk into the FEDs office and demand to speak to a large number of Exec/Past exec.

Tbor

spite the fact that her father does not care about her, and could easily overpowered by a few of the men. Other female characters in this series have also been respected, and there has not been a single rape, again despite the fact that most of the males in the series are pirates.

The other part of the movie that bothered me was the lack of running away. Every time that a fight loomed, the pirates got ready and fought instead of simply running away and leaving the rest of the pirates to their doom. As the saying goes, you don't have to be the fastest ship, you simply can't be the slowest ship. Furthermore, on several occasions pirates tried to rescue one another instead of hoping the captured didn't give them up. The standard piracy was not to attack the ship, but to threaten a fight until the others surrendered and the pirates could simply take what they want.

I gave up several hours of my time to a movie portrayed pirates in a highly inaccurate life. I will not dignify it with increased discussion of its problems.

MeaninglessQuips

Orange News

How's your orange, baby?

This is Orange News. Tonight we bring you an exciting tale of some sort. That's because Orange News rocks. Remember that.

Recent rumours have been brought to the attention of the Orange News Team regarding a certain code, nicknamed the Euclid Code, thus named after the leader of a secret society of mathematicians who lived long ago and tried to thwart evil engineers throughout history. The Euclid Code contains messages hidden deeply within mathematical texts and artefacts that, when put together, lead to a certain treasure-hunt-type quest. At the end of the quest is the Holy Abacus, which has been put down as myth and legend by most people.

According to stories, the Holy Abacus was the same abacus used by Jesus' cousin Jordan back in the day. Jordan was an accountant who used math on a daily basis. Finding the Holy Abacus would confirm the existence not only of ancient accountants, but of Jesus' cousin, and thus would deeply shake the existing beliefs in religion, math, science, philosophy, history and pulmonology.

Orange News sent their highly accomplished, inexplicably attractive, and still single star reporter to investigate. This reporter travelled to Euclid's birthplace in Greece, but didn't find anything other than angry protestors who complain about the financial situation over there. So I came back here instead to look for the next link in the chain that is the Euclid Code.

Most modern mathematicians who believe in the existence of the Euclid Code think a certain relic that relates to the quest must be found in North America's most prolific centre for brilliant mathematical minds, the University of Waterloo. After a swift process of elimination, I have deduced that it must be found within the library at the DC building, called the Davis centre after David Charon. Together with a hot female sidekick and while running away from the police all the while, I have rummaged through the deeps of the DC library for the next link in the Euclid Code.

After the librarians kicked me out for disturbing everyone around me, and until I could come up with a clever disguise, I

talked to some people to find out where YOU, the real students of Waterloo, think the next piece in the Euclid Code chain might be found.

A DC Librarian said "I don't think there's anything of the kind in any of the books in this library, I would have heard about it... wait, aren't you the guy we kicked out for being disruptive? Get out of here!"

Ken, an ActSci major who looks very striking ever since he started wearing contact lenses, thinks that "There's definitely something hidden on the 7th floor of the MC". An interesting idea.

Tudor, a cool guy with a sexy accent, said: "You know that circular room in the DC? The fish-bowl or whatever they call it? Well, I heard rumours that if you walk 6 times around the wall of the room counter-clockwise during a full moon wearing nothing but socks, a door will appear in the corner of the room. Maybe that's where it the Euclid Code is." That's another idea worth checking out.

An actor who played a professor of symbolism in a movie with a plot that's eerily similar to my article was quoted, "Life is like a box of chocolates, you never know what you're gonna get." I have to point out that you're probably going to get chocolate. The actor is also known as being an animated cowboy, though, so I shouldn't have expected anything profound from him anyway.

Regardless, the quest after the Euclid Code continues. Anyone who will crack the code and find the Holy Abacus is sure to find riches beyond his imagination, and revolutionize the world as we know it. Unless the code ends up being something like 'the Holy Abacus has been inside your heart all along', which would just be sucky.

If you'd like to help us solve the Euclid Code, or if you want to be quoted in the next edition of Orange News, or if you just want to talk (God, I'm so lonely, please talk to me), send any and all queries to orange.crush.uw@gmail.com. Until next time, have a good night, and good news.

Orange Crush

Note to My Future Self

With a 15% success rate that my future self will receive this message

- Withdraw money from ATM for spending at Anime North, because there won't be any money in the ATMs around the Toronto Convention Centre.
- Don't forget to eat.
- Remember to pack two days' worth of clothes, a light snack and a drink.
- Find someone more reliable than *mathNEWS* writers to aid me in my quest for Genius Bowl domination.
- Bring lots of inexpensive pencils to Genius Bowl

New in the World of Mad Sexy Science

This week: Clones and Their Many Uses

Ever looked in the mirror and thought "I'd do that!" Well, thanks the miracle of mad sexy science, you can!

Well, sort of. You would have to subject your clone to the same rigours of time as you have endured, meaning that you won't be able to do unspeakable things to yourself until you're old and withered. Mad Sexy Science's fast-growing clones are still in development, so as of now, they age a lot faster than expected. Meaning that you wouldn't be able to do unspeakable things to yourself BECAUSE you're old and withered. And thus, Mad Sexy Science is furthering the cause of science by furthering the main use of clones in everyday life.

Tune in next week for Mad Sexy Science's secret to immortality! (The secret ingredient is baby tears!)

Impulse Vector

In Other News

Because new news are just better than not-so-new news

In campus news, there was some scandal involving our Federation of Students when they didn't want to release their meeting minutes, but *Imprint* asked them to do it anyways, so then they released summarized versions. Or something. Honestly though, I don't think I have the right to criticize Feds after voting for the Rhino party last term.

In more campus news, Michaele Jean, our former governor general (G-G) came to UW and talked about stuff like globalization, the importance of helping poorer nations, and how freakin' awesome Canada is (not her exact words). Canada's current governor general said in response: "Well, I've spent much more time in Waterloo, so I'm way better! I rule!"

In Toronto news, the elephants are leaving the zoo. That's a real tragedy for people who love elephants, but don't love them so much that they mind seeing them caged up in the freezing winter. The UW Magical Animals Club is trying to get approval to replace the elephants with ice-powered legendary heffalumps (lv. 6). Good luck with that.

In national news, a terrible fire completely devastated Slave Lake in Alberta. That's a terrible tragedy and I'm not going to try and make fun of it. I've got enough drunk Albertans beating me up on hockey-related arguments.

In international news, according to some people, the world ended last Saturday on May 21st. So, yeah. Haha, fools.

In entertainment news, most of your favourite shows have been cancelled at the end of this TV season. In a show that hasn't been cancelled, Ashton Kutcher is replacing Charlie Sheen for *Two and a Half Men*. Luckily as UW students, we download episodes but don't watch actual TV, so we don't care that much. Still, Ashton Kutcher is pretty hot.

In business news, European securities are plunging after it has become increasingly apparent that the European Union's debt crisis is not going to be resolved for a while. So, short sell? European officials said something in response, but I don't know what because I don't speak European.

In other news, and this is 100% true, on a recent Sunday afternoon I went for a walk, without really noticing where I'm going, when I suddenly found myself in a park, and inside the park was a fenced area, and inside the fenced area was a small, red, house-like structure, and on the wall of the structure was a sign that said "Sandy the llama", and under the sign was (as I can only assume) Sandy the llama. Sandy got up, walked to the fence, and gave me this really evil look. So I ran away. The Orange News Team would like to remind readers to note where they're going when taking a walk, and to always carry llama-repellent spray, because apparently you never know when you'll be confronted by an evil llama.

And that's all for this edition of In Other News. If you'd like the Orange News Team to take a look at any specific news items, or if you have any information about random llamas in the City of Waterloo, contact us at orange.crush.uw@gmail.com.

Thank you, and good news.

Orange Crush

Throwing a spontaneous 150-person house-party

Hi everybody! I am Denis Cormier, the new MathSoc rep for the SE2014 class. This is my chance to be part of the holy grail of bi-weekly newspapers. This might be my first day "on the job", but I actually have something to write about!

Parties!

Yes, parties! Parties come in all shapes and colors. You may have birthday parties, tea parties, math parties, and parties that don't celebrate anything in particular. I want to talk about a few tips and tricks to deal with a specific kind of party: The spontaneous 150-person house-party inside a house that doesn't fit 150 people!

Tips to Avoid Disaster

Here is a list of things you should consider doing before you decide to oversaturate your house full of people that won't bother cleaning up after themselves.

- Lock and mark rooms that are "Off Limits". If there is no lock, improvise by sliding weights behind doors. Be careful though, this tip entails Newton's third law: Every action has an equal and opposite reaction. By adding resistance, you could be encouraging your guests to break in.
- Lay tarp on the floors. Note: This could trigger reverse-psychology on your crowd, and cause more disaster.
- Greet your guests. This gesture lets them know that you are aware of their presence.
- Take pictures of locations where breakable items are located (especially if you're at your parents house), and put everything out of harm's way.
- Have enough garbage cans for your fellow guests. A good ratio for this is ("number of guests" $\times 10^{-11}$) / 2G. Oh yes, you need to take into account how people will seemingly "gravitate" towards the trash cans (hence, the use of G).

• Sprinkle baking powder on those vomit stains. Enough said. I could go on, but these are the main ones. Now, if you think you're prepared to host a crazy party at your house, prepare yourself, unless you don't mind having everlasting vomit stains, and broken bottles to clean. Either way, the cleanup phase will be long and tedious.

Au revoir, fellow readers!

denis1080

Rapture, the aftermath

Last Saturday Rapture occurred, and brought all those who were pious believers onto the next world. !ED was lucky enough to mug an angel and sneak his way up there. Unfortunately, paradise was filled with self-righteous zealots who spent all day preaching. So he returned.

!ED

FIP to be Square: What's your average when your balls are in play?

Innuendos galore!

I am frankly incredibly happy that *mathNEWS* and the other school paper, *Imprint* are publishing in alternating weeks this term, because I have taken my rudimentary fantasy baseball column from last term to the latter as well (In the Sports section!). For all the one or two people who've read my article last term, you can now double your bathroom reading!

Baseball, for the statistically inclined, is a fascinating series of Bernoulli trials with a finite number of potential outcomes. As discrete events, it becomes easy to do trendspotting among the data over large sample sizes.

As the use of statistical analysis in baseball becomes more popular, people are starting to become aware of statistical norms that flag the potential rise or fall of a player. The most commonly heard term these days is called BABIP, which stands for Batting Average with Balls in Play. When a batter makes contact with the ball and sends it into fair territory, be it a fly ball, line drive or ground ball, the result will either be a hit or an out created. Taking only those encounters and discarding things like walks and strikeouts, an average is calculated as the percentage of balls that are sent in play that result in a hit, and that percentage is the BABIP.

Even though BABIP is influenced by the batter's skills, it's still a remarkably consistent number. For pitchers, the BABIP represents the number of balls their opponents have sent into play against them that resulted in hits, and that number is even more consistent due to the variety of batters faced. Pitchers after all, have no control over the ball once it has been delivered and struck. Hitters on the other hand, can influence their BABIP with their ability to hit the ball in the sweet spot, or run out the ground ball into an infield hit.

So what does this all mean, exactly? Well, take a look at the BABIP of any given pitcher. The league average for BABIP in any given year is roughly .300, which means 30% of any ball sent into play will turn into a hit instead of an out. If a pitcher has a BABIP of much higher, it means he's been quite unlucky and it's likely that it will regress to the mean. On the other hand, just because a batter's BABIP is under .300 doesn't necessarily mean he's unlucky. In that case, you'd want to compare his BABIP to his career BABIP for meaningful interpretation.

With that said, here's a few guys who I'm highlighting as either victims or beneficiaries of the bouncing ball luck so far this year... I'm using a cutoff of 120 plate appearances of 50 innings pitched to highlight the regular starters.

Pitchers

- **Matt Garza** (.362 BABIP): Garza has been the poster child of bad luck this season. He's striking out a career best 11/9IP, but when opponents put the wood on the ball, they're get-

ting hits 36.2% of the time, leading the league in that regard. Even without looking at any of the other stats, it's safe to say Garza is in line to regress to a better ERA, as his FIP of 1.83 will attest (FIP will be discussed next week in *Imprint*!

- **Chris Carpenter** (.338): Yes, he's getting older, and his skills are probably declining, but much of his woes this season has come on the BABIP, with a 33.8% chance of balls falling for hits. Contrast to his last two years of roughly 27%, you can see where his inflated ERA comes from. Don't pay full price for him, but he's worth a buy as well.
- **Josh Tomlin** (.175): Josh Tomlin of the Indians is on the other end of the spectrum. Balls that are hit against him are only dropping in for hits 17.5% of the time. That's just an unsustainable number. Contrast it to last year, where among starters of 100IP+, the lowest BABIP was Trevor Cahill at 23.6%, and you can see where Tomlin might unravel. Similarly, look to sell Alexi Ogando if you can, as he currently spots a BABIP of just .199.

Batters

- **Dan Uggla** (.197): Uggla, weighed by his huge contract, is probably suffering from both pressing too hard and a healthy dose of bad lucks. Ranking 3rd worst in hitter BABIP with just 19.7% of his batted balls dropping for hits, it is miles below his career 29.5% mark, so there is obvious reason for optimism. He is someone I advocate buying strongly, as his power will still be legit and it'd be a great boon when the rest of it comes around.
- **Travis Hafner** (.415): Coming to no surprise as anyone, the aging Pronk is just not the same as he used to be. Despite a career BABIP of .320, he's batting well above his head at this point, with almost 10% more of the balls in play ending up as hits. Of course, no one will offer you any value for Hafner because he's been disappointing in recent years, but it's a good illustration of how BABIP can be used to identify the lucky hitters.

That's a crash course in BABIP for now, here's hoping that those of you who manage to actually get to the end of the article will continue to enjoy these introduction to Sabermetrics articles!

Baseball Panda (Now with more *Imprint*!)

Global warming

Many people have been looking for a solution to global warming for years. Some have been investing in high powered AC units, ignoring the prisoners dilemma and screwing over all humanity. I will join the ranks of the first category by suggesting my own solution to the growing crisis. Nuclear Winter.

I believe that with a bit of planning, we could use the already available stock of nuclear weapons to create nuclear winter, and give people some relief from the heat. Potential targets include active volcanoes, to add to the nuclear fallout with giant ash

clouds. Other targets include the whiny assholes with the huge AC units.

I pray that the nuclear superpowers of our age will take this message to heart, and begin blowing the crap out of anything that might reflect some of the sun's rays back into space if it was vaporised. Humanity is watching. Some of it may have tentacles, claws, or poisonous barbs when this is over, and you wouldn't want to be the one that pissed them off, now would you?

A Review of the new Pirates Movie

This is not going to be fun.

So Disney have decided to extend their supposed Pirates of the Caribbean trilogy by releasing a fourth installment entitled, *On Stranger Tides*. I'll just get right to the point, it was a predictable and overdone film filled with slapstick humour and minimal value for your money.

Certain scenes were drawn out for FAR longer than they needed to be and nothing seemed very original about this movie. I literally sat there thinking to myself about what would happen next and it would happen right in front of me! I blame poor script-writing and using internet memes as source material (especially for the mutiny, Leroy Jenkins much?). The music was also overbearing and redundant (seriously! I'm sure we've all heard the theme by now). Also, adding new characters didn't REALLY do anything to liven things up and nothing about their conflicts and battle scenes excited me.

Even though this film was equally as horrible as its predecessors, admittedly there was ONE component which I genuinely enjoyed (but I will not be divulging those details anytime soon). If you're a fan of the series AND you like sitting through predictable slapstick, then this movie is CLEARLY for you. If you're not a fan of the series, then this movie is NOT for you. Seriously, there will be better things you can use your money for. I'd rather spend mine on materials to make Pinkie the Pink Tie's new cape!

waldo@<3.LE-GASP.ca

N Things to Find in the New M3 Building

No, you still won't find Waldo here. Dude is good at what he does

- A prison for Stats and ActSci students
- More suffering mathies per square foot
- Attempted wittiness from travelling *mathNEWS* writers
- A study space that is not the Comfy
- Confused people who are not construction workers
- Ninjas
- Ideas for *mathNEWS* articles

waldo@<3.LE-GASP.ca

N things found on/near the 401

Between the hours of 6am and 11am

- Roadkill ...I should have picked up that deer for lunch
- A truck from Alberta. Figures
- A car from Pennsylvania
- An SUV from New York
- Over 9000 transport trucks!
- Construction, So much construction
- Some jerk in a Mercedes who played leapfrog with me
- Cars slowing down to look at guys fixing a lamp...

thecountryconvict

Review of Pirates 4: The Fountain of Youth IN 3D!

What I Didn't Get My Rocks Off To This Weekend.

This weekend, I viewed an adult movie which proved to even the most ardent porno watcher that extended series draw out the experience far too long. The amount of mermaids, drowning, and tentacle monsters really thinned out the plotline to the point of invisibility. What person would want to watch a full-length porn movie if it doesn't have a cheesy plotline reminiscent of Disney movies?

Another thing that really got me was the high quality of acting. After doing multiple porn movies, Evan Stone now has Oscar-quality acting, and Jesse Jane has learned enough about what's going on in that she doesn't have that neo-classical look of stupidity. Why would I watch an erotic film where the actors know what they were doing?

Lastly, the addition of 3D really added nothing. When will the adult industry learn that it must be filmed in 3D to gain the added effect. Now they just try and make guys feel inadequate to specially-effected members.

I hope that instead of increasing the budget of these movies, they could instead snuff out the franchise, and let us continue watching internet porn in peace.

Tbor

A Review of Pirates

There are several points I would like to make regarding pirates. First of all, while piracy is illegal, it is an excellent way to get things, like software, without having to pay the costs of acquiring it legally. Given the proliferation of piracy however, I believe this pressure will eventually force companies to abandon the traditional model of selling software, and instead switch to a model based on selling support contracts.

By moving towards this model of business, companies that need support and stability can purchase it, while private users who simply need the product can use it without having to pay. This way, the users have a choice as to which product they use for a given activity. Furthermore, for most users the preferred product will be the most stable, feature rich, and powerful one on the market. This will lead to the most demand for support for that product, leading to the company behind that product getting the best return.

...

I've just been informed that I was supposed to do a review about a movie, which apparently was about pirates. Having not seen any such movie, I shall abort this article abruptly. Apologies for any mental disturbance and sense of unresolved tension this article may have left you with.

Concealed

Thor Review

Because there are way too many Pirates reviews

So Marvel has released the next super hero movie for this summer, Thor. The only downfall of this film is that Thor needed WAY more shirtless scenes.

ConED(the female editor)

Because I can

And I may as well be stupid while I'm young...

There are certain things that happen as the human body ages. Most notably, wisdom and intelligence scores go up with age class, so thus vision and hearing get better. Unfortunately, constitution decreases. This means that healing is slower, and the body is less resistant to injury and poisoning. Given that doing interesting things often entails the possibility of injury, it is optimal to do this while young.

It was brought to my attention this production night that several students have taken it upon themselves to give away watermelon on Tuesdays near the science building. I would like to congratulate them for doing the absurd, and inquire why they are doing it.

- Change your Facebook profile information and pretend to have undergone a complete personality shift. This means name, statuses, pictures, everything that identifies you and yourself. Bonus points if people defriend you because they no longer know who you are.
- Walk in elaborate patterns. For instance, only step once in each square on the ground. Or, if the tiles are smaller, no stepping on the cracks. Make sure that your pattern is well-defined so that you can explain to people that inquire. Bonus points if you do it on your hands, or walk only on railings.
- In honour of the gentlemen with the watermelon, bake some cookies/cupcakes and give them away to people. If you feel the urge, make up some reason why you are giving them

away. Bonus points if they are either delicious or horrible (Pepper cookies anyone?)

- Apply to jobs for which you have no qualifications. These can be things like applying for a writing job if you failed the ELPE, or applying to be a senior developer in a language you have never used. Bonus points if you get an interview.
- Related to above, dress completely wrong for an interview. Wear a Hawaiian shirt to an interview for a position that requires formal wear, or be excessively formal/casual during the interview. This is best done once you already have an offer you plan to accept, or for a job you do not actually want. Bonus points if you get an offer despite this.
- Defenestrate yourself. (Make sure to remove the screen first). Alternatively, climb into your own window. If you feel special and have a proper roof, sleep on your roof. Bonus points if you quote Firefly while doing it.
- Have parties with unusual themes. Possible themes could be hats, cosplay, or post-Rapture. Bonus points if you get blank stares when you tell people about it.
- Learn how to bungee jump/skydive. Both of these are activities that you can tell people that you have done, and have them be amazed at your bravery. So, this is best to do early and often! Bonus points if you do them within the same weekend.

MeaninglessQuips

A Correction

Even the best can make mistakes

In the last issue of *mathNEWS*, the Orange News Team made a few incorrect attributions. We said that the editors said certain things that were not said as we said that they said as they said. The editors certainly did not say the things we said they said, and in saying so we have said things we should not have said about things that were in fact never said.

I hereby offer my sincere apology for my misattributions and for any confusion resulting from the sayings we said they said while they didn't say what we said they said. Sorry.

If you prefer a personal apology, or if you'd like me to record a message on your answering machine for a nominal fee, please contact me.

And of course, to find out what your editors actually say, do make sure you come out to the next *mathNEWS* production night. The editors say production nights are awesome.

Apologetic Orange Crush

Weird fact: Raptors are allergic to grapes

Good luck feeding some to them

Local Guy make his move

People on bench look in awe

Onlookers are in awe as Bob Simpson walked to the girl confidently. In an unprecedented move, Bob initiated verbal contact with a girl.

"This is going to be funny," one of the viewers said as the scene unfolded. "He doesn't stand a ghost of a chance. Wait for it, he going to get turned down any minute now. Wait for it..."

And wait we did, as we saw that Bob had somehow achieved the impossible and created a sustained conversation for a span of time greater than 30 seconds. One witness said that the girl even giggled at the joke that Bob must have made.

After 3 minutes 27 seconds, Bob and the girl were seen exchanging numbers. At 3 minutes 52 seconds, Bob was seen whistling a jaunty tune and walking back to his friends on the benches.

The girl, interviewed afterwards, was found to have no mental complications and confirmed that she in fact had been talking to Bob Simpson. "He just seemed like a really cute guy. He was pretty funny with that joke of his too. Man, I'm laughing just thinking about it..." She started to chuckle at this point, and the interview ended.

Observers still don't believe it, and will be watching Bob after his date on Saturday, where he optimistically hopes to get to second base.

Horrorscopes

Predicting the unpredictable

ACTSCI: Your idea to sell Rapture insurance has not panned out as you thought it would. Unfortunately you have way too many claimants.

Your unlucky number: \$40 000 000 sent to American South Religious zealouts.

AMATH: Sitting through Pirates of the Caribbean, you realize how blatantly its physics spits in the face of math. All is forgiven when you see the shirtless priest.

Your unlucky number: 7 minutes of heaven with a six-pack.

ARTS: You forget that you're enrolled in courses this summer. Normally this wouldn't make much of a difference, but then you miss your final exams as well. This will develop into a pattern until you get kicked out. But that's okay! An arts degree isn't worth anything anyway.

Your unlucky number: 3 more months until your pointless exams.

C&O: You try to optimize your summer fun while still maintaining the grades to stay in your program. You fail miserably. If you have a boring summer but maintain good grades you suck at optimizing things, so what are your grades worth, really? If you have an awesome summer but flunk out... well you've flunked out.

Your unlucky number: 17 times you regret getting drunk.

CS: After several attempts at binasm, you release all over Marmoset. Marmoset is not pleased. Give up now.

Your unlucky number: 3 test tokens.

ENGINEERING: You apply to too many jobs and have to go through 981 interviews. Overconfident about making it this far, you try to juggle both interviews and midterms. What a mistake that will be. Not only do you end up without a job for the fall, but you fail the term as well. Better luck next term— no, wait, next year *troll face*.

Your unlucky number: 2 terms of sitting around like a bum until UW will let you back in.

PMATH: You go through Harold Camping's calculations and realize that he was off by a decimal point. Rapture actually happened 5426 years ago, and we're now living in the aftermath. You shrug it off and go back to your homework.

Your unlucky number: 1774 years of paradise before the event.

SCIENCE: Space. Wanna go to space. So much space. Space. Spacespace. Look at all that space. Spaaaaaaaaaaaaaaaaaace!!!!

Your unlucky number: 1 new meme until the next sequel comes out. Space.

SOFT ENG: You come to realize that your part-math and part-eng background isn't like being a beautiful mixed-ethnicity person; rather, you are a horrible freak of nature accepted by no one. And when you inevitably "choose" to "switch" into CS, you still won't be accepted for being a former softie.

Your unlucky number: i friends in your university career.

STATS: You fail to be taken up by the Rapture, and unfortunately you still have that assignment to do. You miscalculated the probability of being taken up against having to hand in that assignment. Now go back to work.

Your unlucky number: 0% (within Stats anyways) likelihood of being taken up to Rapture.

UNDECLARED: You STILL can't decide what courses you should take this term. But the deadline to add a course has already passed! You freak out and can't decide on a course of action, because you are indecisive. You don't drop those courses you're destined to fail, and fail those courses, because you are a failure.

Your unlucky number: 16 weeks of failure that you'll never get back.

The rest of you: If you're on campus for the summer you must be doing something wrong.

Mu

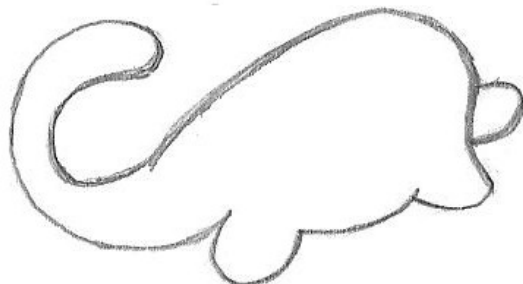
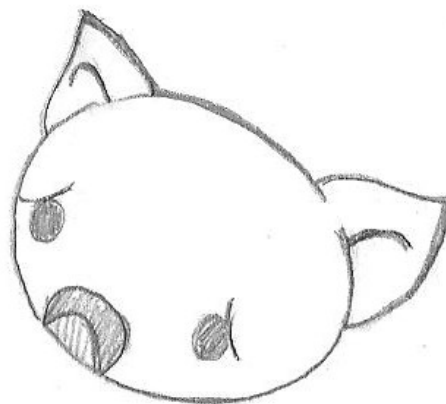


fig5-2: segfault



profQUOTES*Because profs are funnier than mathNEWSEditors*

(Discussing status symbols and the middle class) “Does anyone need a hummer? No, it’s a penis on wheels.”

Wood, MUSIC 140

I don’t want to say 3 coupled equations are 50% harder than 2 - but they’re not exponentially harder. I don’t want to say exponentially harder. Hmmmm, how about ‘lots’ harder. It’s a physics term I just made up. It’s more than linear, but less than exponential. Yeah, I like that.”

O’Donovon, PHYS 363

(Backs up into chair) “This chair is going to kill me.” (puts chair aside) “I’ll put it over here so that it kills someone else.”

O’Donovon, PHYS 363

“Anyone taken a Chaos Theory course yet?” (No one raises hands) “You’re all control freaks!”

O’Donovon, PHYS 363

“When I say it’s interesting, I mean it’s complicated. No wait, I mean when I say it’s complicated, I mean it’s interesting. No wait, I mean it’s hard.”

O’Donovon, PHYS 363

Prof: “No calculators on exams. Bring only your brains.”

Students: “What about pencils?”

Prof: “Yeah, you can bring those too. I don’t expect you to write in blood.”

Wang, MATH 213

“You gotta pay attention. I didn’t pay attention for thirteen years... now I have nine kids.”

Wang, MATH 213

(projector doesn’t work)

“I’ll do the engineering thing and hit random buttons until it works.”

Wang, MATH 213

“I totally lost my sense of humour about five kids ago. “

Wang, MATH 213

“We’ll pick on Bob the Systems Design engineer throughout this term. “

Wang, MATH 213

(turns on projector, sees blue screen)

“Looks like a typical Microsoft screen.”

Wang, MATH 213

“I love being in a position of power.”

Wang, MATH 213

“If no one volunteers, I will throw the chalk and whoever it hits must come up.”

Bizheva, PHYS 122

“This is a very important theorem, so tattoo it onto your brain.”

Broadbent, MATH 239

“I would hope that the compiler would complain about an inline recursive function.”

Atlee, CS 247

“If you’ve never been to my office on the 6th floor, please bring a compass and a week’s supply of food.”

Wolczuk, MATH 235

“If you don’t know how to row reduce, start crying.”

Wolczuk, MATH 235

“Because I always think of the students, and today, on the first Friday of the term, I am sure all of you would appreciate a theorem to prove for tonight. So the proof of this theorem is left as an exercise.”

Wolczuk, MATH 235

“If you don’t remember any of this coordinate stuff, you’ll still be OK... for the next three minutes at least.”

Wolczuk, MATH 235

“Everybody get up and do 10 jumping jacks. Don’t we get enough exercise in math?”

Wolczuk, MATH 235

“We have three minutes left in class, but today’s Friday the 13th, so I’m scared of continuing.”

Wolczuk, MATH 235

“Don’t go out picking flowers in a field with your girlfriends because you will likely be raped by a god.”

Faulkner, CLAS 104

“Pretend I’m on a cooking show and I pull the well done turkey out of the oven”

Subich, MATH 138

“And all the Mathies and Engineers are thinking ‘It’s gonna be a lot of soft Artsie bullshit’”

Smith, ECON102

“Infants... influencing the environment to get a boob in their face”

Meaney, PSYCH 101

“One thing about families is you get to share things. Like diseases.”

Furino, CO 480

“I’m afraid to ask - are there any questions?”

Chan, CS 466

“Hades is, like, the original emo.”

Tatu, CLAS 104

“Narcissus keeps trying to reach down and touch himself, but not in THAT way.”

Faulkner, CLAS 104

“Computers are perfectly not racist ... however, they are subject to race conditions”

Bishop, ECE 224

A quantum theory of nachos

The moon is made of cheese. And tortilla chips.

I was sitting at home one day, wondering what to eat. I had tortilla chips, but had run out of cheese. Then it hit me, Like the apple falling on Newton, but less healthy. The universe must be made of nachos.

I like my nachos to have equal amount of cheese and tortilla chips. Therefore, when I make a plate of nachos, I use up a certain amount of cheese and tortilla chips. Eventually, I run out of one of the two ingredients, and have to go buy more.

If I used up cheese and tortilla chips in a ratio other than 1:1, there would be a beat frequency in the cheese/chips cycle. Eventually I'd have a time where I ran out of cheese and chips at the same time, but that never happens. This means that one can use the cycle as a clock, giving rise to time in a universe made of nachos. An alternative theory is that there is a beat frequency in the cycle, but the ratio of chips to cheese is almost 1:1. This would eventually result in an equilibrium, a sort of equivalent to the heat death of the universe.

The other epiphany was that I cannot eat less than a certain amount of nachos at a time. Therefore, there is some smallest possible unit of nachos, a quanta of nachos, which I shall call a Serving. Tortilla chips and cheese also have a smallest possible unit, half that of a Serving. However, one cannot have nachos without both cheese and chips, so the Serving is still the smallest unit of nachos.

I realised that string theorists were close, but missing the big picture. They've discovered the stringy bits of cheese from the nachos, but have missed the rest of the ingredients.

Research on a possible third ingredient, named "salsa", is theoretical but looking fairly promising.

At this point, I got slightly derailed, as I found some cheese in the back of the fridge, and made nachos.

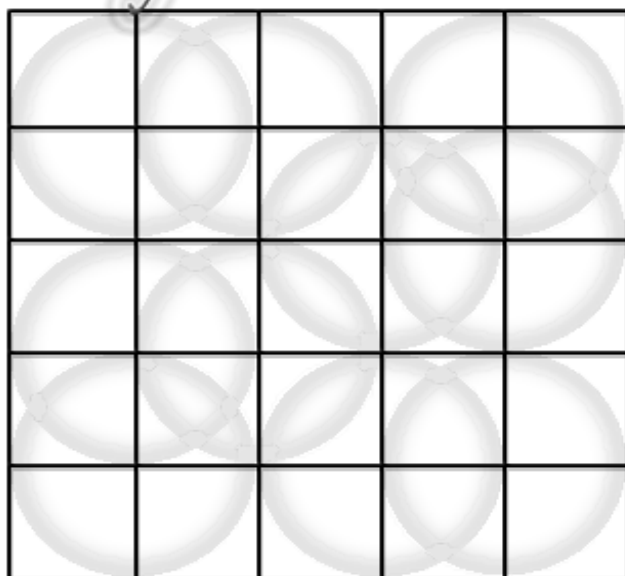
Concealed

Grid-with-numbers-in-it game

Brought to you by ever-overworked editors

At the time of this writing, your trusty editors were sitting in their lair deep within the heart of MC, staring out the window at a torrential downpour, and trying to figure out why the gods of technology had seemingly abandoned them. They decided to press onwards in the name of mindless entertainment, and a hope of dinner. We now present to you a grid with some numbers in it. We leave it up to you to figure out what to do with it.

1			9			8		
3	9	8	7					
		7			6	9		
6			3					
	2	3	6	7	9	1	5	
					1			6
		6	1			7		
					8	5	2	9
		2			7			4



Place the following 10 squares on the 10 circles so that the overlapping numbers match up.

3 7	0 9	5 4	8 4
1 1	1 8	3 7	0 3
7 1	1 8	2 5	7 7
4 8	8 6	1 3	1 5
2 0	5 8		
4 4	2 0		

gridCOMMENTS

Slackers!

Greetings, theoretical *gridWORD* players. I say theoretical because I have no evidence that anyone in fact attempts the *gridWORD*: I received no submissions to last issue's grid. That is to say, any submission, no matter how incorrect, would have won the prize.

There is a new grid this week, and there will again be a prize. So please submit your solutions to the grid along with an answer to this week's *gridQUESTION* (which is the same as the last one: "What *gridQUESTION* should never be asked if I want to preserve my sanity?") to the **BLACK BOX** on the third floor of the MC.

- 15. Raise
- 16. Sideways
- 17. Despots
- 18. Orchestra conductor's platform
- 26. Alpine travel device
- 28. Extreme pain
- 29. Musical sea shell
- 31. Incompetent
- 32. Slink, edge
- 33. Bulls
- 34. North American wild cat
- 35. Hog
- 37. Insult

Quick Clues

Across

- 1. Long narrow inlet
- 4. Little red book author
- 6. Command
- 9. Sweetened fermented milk
- 10. Less aged
- 11. Bewitch
- 13. Fancy
- 16. Missive
- 19. Alpaca relative
- 20. Tiny
- 21. Conservatives
- 22. Brink
- 23. Places of sport
- 24. Portray
- 25. Unit of magnetic flux density
- 27. Uncommon
- 30. Thin, supple, graceful
- 33. Lubricate
- 35. Fire bird
- 36. Gave way
- 38. Symbol
- 39. Cancel, halt
- 40. Lock

Down

- 1. Doomed to die
- 2. Cathedral instrument
- 3. Discourage, dismay
- 4. Legend
- 5. Semiprecious agate
- 6. Musical study
- 7. Oblong steel block
- 8. Hill, rocky peak
- 12. Historical period
- 13. Gradual assimilation of knowledge
- 14. Apart, to pieces

-perki

