

math

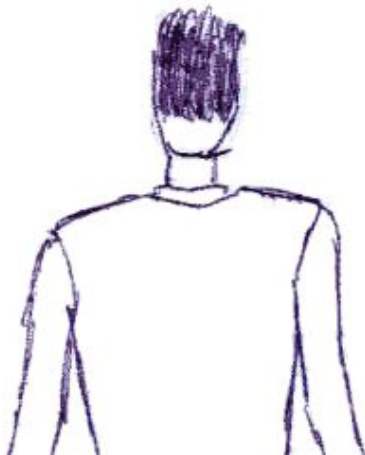
NEWS

Volume 105, Issue 0

Frosh Issue, 2007



Residence Capacity:
As many students
as we can squeeze
in...



If and Only If
By AngeLED



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What is a *mathNEWS* anyway?

Find out at the Disorg: Thursday, September 13th

mathNEWS is like an old friend. It shows up, pretty regularly, on every other Friday, makes you laugh, cry, and scratch your head trying to solve puzzles, and then says "see you in two weeks!" Best of all, you can take it into class, and let it entertain you there (unlike "dancers"), and your professors won't care. Heck, sometimes they read it while teaching.

Now, *mathNEWS* doesn't just appear magically, it gets put together by a very tight knit group of writers, productionists, and two editors. Why two editors? 'Cause, really, neither of us are good enough alone to do the job, let alone any job... maybe that's why we are unemployed, and just do volunteer positions.

If you are interested in coming out and helping with *mathNEWS*, you should come to our **disorganizational meeting on Thursday, September 13th at 4:30 pm, room TBA**, or feel free to stop in on one of our production nights (we post posters in the stairwells on production nights; they generally occur every other Monday, and the first one will be **Monday, September 17th starting at 6:30 pm in MC 3038**), check the door to our office (or come in if we are there!) at MC 3046, or email us at mathnews@student.math.uwaterloo.ca.

All of us here at *mathNEWS* are always looking for new writers, proofreaders, artists, puzzle-writers, and general what-have-yous. Everyone who helps out gets to party with us at our end of term bash, and eat lots of pizza with us, not that sixteen slices makes you feel good two hours later ... but whatever.

Sudoku!

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

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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 *mathNEWS* editors; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or *mathNEWS*. Current and back issues of *mathNEWS* are available electronically via the World Wide Web at <http://www.mathnews.uwaterloo.ca/>. Send your correspondence to: *mathNEWS*, MC3046, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to useridd@mathnews@student.math.uwaterloo.ca on the Internet.

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The Editors: Michael Perkins & Michaelangelo Finistauri

Why you should write for *mathNEWS*

Why should you write for *mathNEWS*? Yes, you, the one reading this right now. No, not someone else who might happen to be reading *mathNEWS*, just you. I really think you should write for *mathNEWS*. "But why?" I hear you wonder. Yes, I heard that, I hear all. Well there are many reasons to write for *mathNEWS*.

- **Fun.** This cannot be overstressed. It is fun, or at least it should be. If you're writing for anybody at any time and it is not fun, then something is wrong, or maybe it is the ELPE, or a work report, or ... fine. But writing for *mathNEWS* is fun. Whether you just have your own personal fun at home and e-mail the article in to us, or come out to Production Night and have some free food fun, it's all really quite a lot of fun.
- **Rewarding.** In so many ways. From e-mail from 14 year-old boys who use AOL to letters from Iran, your material can generate a response. There is also the rewarding feeling of creating a piece of writing and knowing it will be published. Some also find the free food a kind of reward.
- **Looks Good.** On, say ... a resume. Employers always want good oral and written skills; what shows that better than contributing to a bi-weekly publication? You don't have to answer that.
- **Getting Published.** *mathNEWS* is an official publication with an ISSN number. Two copies of every issue go to the National Archives. Beyond being released to the entire campus every other Friday, and mailed to our subscribers, your work will also be published online on our website (www.mathnews.uwaterloo.ca), which is pretty highly rated on Google.
- **People Read It.** People *will* read it. At least people pick it up. Some might try and tell you no one reads *mathNEWS*, but after a few week of distribution detail you discover just how many people read *mathNEWS*. Late in the afternoon when I return to campus to clean up at the end of the day, I see people walking home with *mathNEWS* in their hand. I see both students and faculty picking up copies. Some profs get issues mailed to them. People at bus stops waiting to take the bus home have copies in their hands. Look — right now, you are reading *mathNEWS*.

We give you the opportunity to be published. You have the chance to make people, your fellow students, laugh and/or think on Friday mornings. You can rant, point out what you find funny about life, or just express yourself however you like. Anyone can contribute to *mathNEWS*. So please, send us an e-mail at mathnews@student.math.uwaterloo.ca.

Phat Albert

VPF Says

Hee ho, Froshies. This is your official MathSoc Vice President, Finances, Angelo here! I hope that your frosh week was an enjoyable experience, and hope that we've piqued your interest in some of the non-curricular aspects of student life. There are many clubs, organizations and events that you can get to and enjoy. Math Soc is one of them. So if you have any questions, please stop by the Math Soc office, it's in MC3038! Cheers.

Michaelangelo Finistauri

Prez Says

...Way too much

Welcome all you shiny new members of the Faculty of Mathematics! Hopefully you've all had a good summer and are in the process of enjoying what I'm sure is going to be an action-packed Orientation Week. It's a great way to kick off your four to six (or more!) year stint here at UW.

Allow me introduce myself. I'm a 4-somethin' Computer Science major, and I also happen to be your MathSoc President. You might be asking yourself, "What's a MathSoc?" That's a pretty good question. To put it simply, MathSoc, or Mathematics Society, is the student government for undergraduate students in the Mathematics faculty here at UW. That means it is our job to represent you and help to ensure that your time here is as fulfilling, or at least as mildly entertaining as we can.

MathSoc provides for student representation to the Faculty administration, the Federation of Students, to the rest of campus and the whole crazy world out there. If you have a question or a concern about something, I'd be glad to field it. Even if I have nothing to do with it, I usually know who does, so I can help get your concerns addressed.

Also, MathSoc runs a variety of services for the betterment of student life. Many of those can be found either in the MathSoc office (MC 3038) or on our website www.mathsoc.uwaterloo.ca. We offer cheap photocopying, various stationery (think work reports) supplies, games and textbooks for borrowing, Math novelty swag, laser printing and more.

Also of note is our online Exam Bank, which is easily the best on campus if I do say so myself. You'll probably use it a lot in the months and years ahead, and can find it conveniently on our website. We also carry a pretty full line of Math approved calculators, already stickered and everything, and at substantially lower prices than elsewhere on campus.

We also run the Math Coffee and Donut Shop on the third floor. It's a great place to get a quick coffee, tea, sandwich, soup, or what-have-you for not a lot of money. Watch out though, the C&D only takes cash, so use your meal plan dollars at the cafeteria.

Finally, MathSoc runs a variety of social events throughout the term. One of the first will be Cove Night, where we rent out the Campus Cove arcade in the SLC for your enjoyment. Look for that in late September. Also this term will be our annual Charity Ball in November, which is always a blast. Bring your friends to this great semiformal event in support of a deserving charity.

Well, I promise that this will be my longest message this term! If you think MathSoc sounds like something you'd like to get involved in, drop by the office or send me an e-mail. We're always looking for people to get involved in many different ways. We've got something for everybody!

Hope you all have a great term, and don't forget to study!

Andrew Fransen
President, F07 MathSoc
prez@mathsoc.uwaterloo.ca

mathNEWS

Seriously though... what's this mathNEWS?

Well, *mathNEWS* is the University of Waterloo Faculty of Mathematics Student Newspaper. (Or publication, or magazine, or newsletter... whatever the editors feel like calling it.) We publish about every two weeks, usually on Friday, and contain articles, art, etc... written by people just like yourself! Being student funded (some of your MathSoc fee goes here) and a volunteer publication, we are always in search of people who can write. Or draw. Or proofread. Anything, really. We'll even bribe you to come out to Production Nights every other Monday with free food. You don't need any experience, just interest. Plus you'll get to see your name in print!

The content of *mathNEWS* itself will vary from term to term depending on who's editing. However, there is usually a *mathNEWS*quiz, a *gridWORD*, and *profQUOTES*. The former two offer prizes for correct solutions. The *profQUOTES* are a collection of actual quotes as uttered by actual professors during actual lectures. Look for those elsewhere in the issue. In terms of other articles... well, have an opinion you want to express? A weird proof you thought up? Something that you think is funnier than what we're printing? A solution to one of our puzzles? Then if you're too shy to come out to an actual Production Night, submit such things to us by emailing mathnews@student.math.uwaterloo.ca or by dropping your submission into the BLACK BOX on the third floor (between the C+D and the lounge).

In the past, *mathNEWS* has on occasion gone nuts and put out a parody issue like the recent Mathlean's and the not-so-recent Toronto Moon, $ybar_m$, Daglobenpost, Mathim,

Combinopolitan and Impotent. It doesn't happen often because those things take a lot of time and effort, but if you are nice to the editors they may give you a complimentary copy. Oh, and yes, *mathNEWS* really has been around since 1973. (Issue 500 was another issue that took time and effort.) Feel free to drop by our office (MC 3046) when it's open to look at our *mathNEWS* Gallery/Shelf o' Memorabilia, which includes, among other items: a piece of Red Room paneling, an EMS Library Sign dating back before the books were moved off the fourth floor of MC into the "new" DC building, and a silk-screen from Math Frosh Week 1979. You can even just come by to say 'hi' or drop off an article in person.

Oh yes, we have a web page, www.mathnews.uwaterloo.ca. You can find past issues there and maybe learn more about us. So enough rambling... the *mathNEWS* DISorganizational meeting is usually held during the first week of classes in September (watch for posters). That's when we see about getting our act together for another term. Hope to see you there too!

Greg Taylor
Past Editor

Updated and Transcribed by Michael Perkins

This is your first taste of...

FILLER!

profQUOTES

Don't profs say the darndest things? *profQUOTES* is the most popular feature of *mathNEWS*. This is where you will find funny, stupid, or ambiguous things uttered by professors and record by students like you. If you think one your professors has said something quotable, send it in (along with their name and the course name) to *mathNEWS* either by email (mathnews@student.math.uwaterloo.ca) or dropping it in the **BLACK BOX**, and you will probably find it in the next issue! It could be an incentive for you to stay awake in class.

Below are some of the better quotes uttered in these class rooms with in the last few years.

"Do you mind if I take off my pants?"

Irving, MATH 137

(written on board)"We can "graphically" represent a graph with a graph diagram, called a graph."

Mosca, MATH 239

" $0 \times 0 = 0$, except on the STAT 230 midterm, where it could be any number of things, according to you guys."

Chen, STAT 230

"If I were at Western in London, Ontario, I would now show you 29 examples. But we're not at Western ... we're smart here."

Willard, PMATH 330

"Let's start on unsatisfiability ... this doesn't have anything to do with your sex life."

Hoffman, PMATH 330

"I can't say 'I am a baseball fish cat,' although some days I feel like a baseball fish cat."

Vasiga, CS 241

"This is university, we're loosy-goosy. You can drink, you can vote, you can use goto."

Vasiga, CS 241

"There are four S's in 'STATISTICS': one, two, three... There are four S's in 'STATISTICS'."

Chen, STAT 230

"It's what professors do! Take something completely obvious, make it incomprehensible and call it a lecture!"

Mackay, STAT 231

"Now I'm going to verify infinitely many of these and leave the rest for you."

Godsil, MATH 146

"There are three series you should know or you'll fail the course: geometric; harmonic; and there's probably one more... I fail."

Hewitt, MATH 138

"This symbol means 'it does not exist'. If you cross it out, it still does not exist. If you cross it out twice, it exists even less."

Sendov, MATH 138

"Who thinks 20%? No one? Usually somebody goes for that... you guys ARE smarter than the people at York."

Brecht, CS 354

"We're going to talk about nets; anyone in the class a fisherman? (dead silence) This morning in my 247 class I was talking about saddle points, so I asked if anyone had ever ridden a horse and no one would admit to it. Then I asked if anyone was a hiker because mountain passes look like saddles. Then I asked if anyone had ever been in a car driving through the mountains. Finally someone admitted to having been outside once."

Hare, PMATH 453

"You're junior co-op students; your employers don't have the time to fire you."

Smith, ECON 101

"I did something very dumb today at lunch. I had [too many] cups of green tea today at lunch. I can just see myself staying up until 3 a.m. tonight vacuuming."

Koeller, MATH 137

Prof: "Is that clear now?"

Student: "No... and don't bother explaining it."

Prof: "Don't bother?"

Student: "You lost me three chapters ago."

Prof: "We haven't done three chapters yet..."

New, MATH 138

"Now that equation will look funny when you take it home and show mom."

Oldford, MATH 136

"This is so easy an Arts student could — well..."

Orchard, CS 370

"Even an Arts student can solve... OK, maybe not."

Orchard, CS 370

"I'm going to get myself into a scandal of exposed-boob proportions if I keep spouting off about arts students."

Orchard, CS370

[tying his shoelace] "Someday they're going to find my body and determine that I died of a clothing malfunction."

Kaplan, CS488

"I'm sure a lot of people would love to eat a barbie."

Pidduck, CS330

[puts a box around an important theorem] "Didn't your mommy tell you that when you were a kid? You're important, go in the box? Or was that just me?"

Lucier, PM340

"Do all of you know where Russia is? If you don't, I hope that you won't admit it."

Kapur, PSCI 282

"You can even explain it to your grandmother. I explained it to my grandmother once, she's not alive anymore."

Verstraete CO 342

"Rock Paper Scissors is a game that also exists in Germany... it's very complicated."

Konemann, CO 459

Fun Ways to Spend \$5000

I've got \$5000! I've got \$5000! Okay, I don't actually have \$5000, but if I did, I could think of a lot of fun mathie ways to spend it...

- Buy a top of the line computer. Cry because nobody cares.
- Hire a helicopter to hover above the Dana Porter Library and drop pink ties off the side
- Fumigate Comfy
- Go to Vegas and bet on black
- Write cheques to people for pi dollars
- Convert it to 500,000 pennies. Flood the engineering building.
- Try and bribe the Catholic Church into changing Lent to 13n7
- Buy 500 limit shirts and donate them to people who ask for change.
- 40 feet high, still there still pink? Try 4000

SquirrelToken

10 Alternative Uses For Textbooks

So you were all excited and bought all your textbooks during Frosh Week. Now, the day of the exam, you say to yourself "I spent \$150 on that book, I really should open it at least once."

So here's a list of some things you can do with textbooks:

1. Assault weapon: some of textbooks weigh several kilograms and are easily thrown.
2. Weight training: Books are heavy, weighing quite a few pounds each, and are easily lifted.
3. Look Smart: Books are a means to show off the fact that you are educated and usually weigh less than a stone.
4. Fly Swatter: Once, during a lecture, Prof. Jackson took his backpack and threw it at a wasp on the ceiling. Do you really think that it would have killed the wasp without a textbook in it which weighed more than 2 newtons? Really?
5. Building Cardhouses: Textbooks are sort of like big cards. So you can make really big cardhouses. Since most people won't have enough books to make a really kickass cardhouse, get your entire class involved, you know you have enough books when you are counting the books by the ton.
6. Hammer: Textbooks can bang things just like a hammer. They may even weigh many carats more.
7. Screwdriver: To put a screw in the wall, line it up where you want it and bash away. Works better if textbook exceeds 12 troy ounces.
8. Lullabies: The best way to fall asleep at night is to attempt to read a textbook. Or perhaps have someone bash you over the head with a textbook. (Crap I can't think of any mass unit to provide the necessary cohesion to this article ... ABORT ARTICLE!) [*...and he was just about to mention how balancing textbooks on one's head can improve posture — TaxiEd*]

Dave Nicholson

**This is filler!
It is used to take up extra space
on the page that we couldn't fill
up with articles or comics.**

What If Yoda Were An Academic Advisor?

"Down to General, you go."

"STAT 231, you must confront STAT 231 again"

"Political Science, heh, Geography, heh, a Mathie craves not these things."

[Student]"I won't fail Graphics, I'm not afraid"

[Yoda]"Oh, you will be, you will be."

"Pass or do not, there is no bell."

"Concurrency is the path to the dark side, Concurrency leads to OS, OS leads to Real-time, Real-time leads to *Suffering*."

[Student] "MATH 135 is so much different from high school."

[Yoda]"You must un-learn what you have learned"

"He is too old, yes, too old to begin a Bachelors degree"

"Yes, yes, to Shirley you must listen."

[Student] "I only got 20 on the Euclid"

[Yoda] "That is why you fail."

"Always two there are in a Masters program, a supervisor, and a grad student."

"A Mathie's strength flows from caffeine, but beware of the dark side, laziness, partying, procrastination, the dark side of the force they are."

[Student] "Is the Faculty of Arts stronger?"

[Yoda] "No, no, no, quicker, easier, more seductive."

"Sterile!, Humid!, My office this is!"

"Only a fully trained Mathie with the force as his ally will conquer the Professor and his Dean."

"Do not underestimate the power of CS 134, or suffer Snuggles' fate you will."

[Student]"I finally passed STAT 230"

[Yoda] "There..is..another..STAT..course"

"When 400 level you reach, look as good you will not, hmmmmmm?"

Ian W. MacKinnon

Bradley T. Smith

The Pink Tie Guy

A little bit of history for you, it was about 40 years ago that the great and awesome Ralph Stanton (a professor known for wearing groovy ties) headed the idea for math to be its own faculty. And that's why we give you pink ties: to honor not only Professor Stanton, but to also commemorate that UW is the world's largest math, computer science and statistics department!

AngeLED

So You're Overloaded With Assignments... Again

A few ideas to survive the end of term crunch

So, suppose it's now in the last month of classes — about the time that professors start to notice that they've pushed all the assignment deadlines back and that they still need all those marks. They've considered their options and have decided to still assign the remainder of the original assignments. Only now the material won't have been taught before the assignment is due and all the other professors have had the same idea. This phenomenon, which occurs regularly near the end of the term, can be destructive to unsuspecting students. In the interest of preserving the sanity of the Math faculty student population, here are some ideas for surviving the end of term assignment crunch:

- Start early—sure in a perfect world, but we're not in a perfect world. So to compensate,
- Skip testing. My motto: if it compiles it probably does what it's supposed to do. This will also remove the chance of a note on your assignment reading "Did you even try to compile this?" In the unlikely event that you have compiler problems — or proof problems.
- Go for cuteness marks. True, this could work better if you can bat your eyes or flip your hair but in general a nice note at the end of an assignment wishing the marker a wonderful day won't hurt. After all, you'll catch more flies with honey than with vinegar. *[If you're a guy, this won't work as well as you think, trust me. — iEd]*
- Keep liquor handy. This may not help you finish all your assignments on time but failing is more fun after a few.
- Writing proofs. In general I've found that throwing in Euler or Fermat is a good strategy. No matter what you're trying to prove, chances are one of them wrote a theorem proving it. Want to mix it up? Work in a little Newton, Euclid or Descartes.
- When all else fails, remember that what doesn't kill you only makes you stronger. Of course, that's assuming it doesn't kill you.

WestCoastChic

Taking a Minor

One smart thing to do with your degree is stick more words on it. There are two common ways of doing this at UW, heh, well, maybe three, but this column is far too short to discuss taking a joint. You can do the double major thing, or you can just throw a minor onto your degree. So what kind of minors are there? Well, there are those in math and those not. For mathie minors, you need a bunch of courses, but frequently they just overlap the ones you're taking so it turns out to be like four or five courses, perfect for filling up your math-course requirement without taking all STATs or something foolish. Now, for outside of math minors — perfect for those thinking of becoming teachers who want a non-math "teachable" — these take ten courses, so plan ahead. It gives some structure to your electives, but they require you to take specific stuff that is only available in certain terms — hey, like why I can't finish my English minor on time. So, in conclusion, think about one, but try to plan early.

Allen MacLeod

Honest Slogans for Local Businesses

You know how certain businesses have certain reputations? Well, we at mathNEWS think that they should have slogans that truly reflect the nature of their clientele. It will make things easier when you are determining where to spend your (parents') hard-earned cash. Observe:

- **Mel's Diner** — *If you're going to pick up some random from a bar, the least you can do is buy them breakfast the next day.*
- **Sweet Dreams** — *Once you've had bubble tea, you can look down on your fellow man who hasn't.*
- **Phil's** — *A great place to find that random you're going to take to Mel's tomorrow morning.*
- **Generation X** — *Because your favourite entertainment is too weird for mainstream.*
- **Aussies** — *We sell smokes and lotto tickets, what else do you need from a convenience store?*
- **Farah's** — *A non-judgemental cashier for when you buy porn, condoms, and pickles at 2 in the morning.*
- **Front Row** — *When you have that homoerotic dream about your best friend, you'll want the hot waitresses, beer, and sports we provide.*
- **Bombshelter** — *The random you pick up here will probably be of higher calibre than the one at Phil's.*
- **Travel Cuts** — *Just because we're owned by a crazy socialist student union doesn't meant we don't know were the best party destinations are.*
- **Fubar** — *Double bag it.*

Ian W. MacKinnon

Diary of a Lemming

Monday - Walkin'
 Tuesday - Walkin'
 Wednesday - Walkin'
 Thursday - Walkin'
 Friday - AAAAAAAAAAGGGGGHHHHH

HWT

Taking a Miner

One smart thing you can do with your free time is kidnapping. There are two common ways of taking a miner at UW, heh, well, maybe three, but this column is far too short for such interpretations. One involves kidnapping, while the other, umm, also involves kidnapping. It's really all about who you kidnap. I am not a big fan of kidnapping the young, so I'm going to recommend you take a grown-man miner. Of these, there are several kinds available for the taking. Uranium miners tend to have radiation issues, so try to keep your distance. Coal miners are typically less biologically dangerous; however, there is the mess issue. Those who work in sepulchres or open-pit mines don't usually get covered with as much murk and mess, so I find them the best after the act of taking a miner, but getting them is awkward. Miners who work in shafts can be taken from their shafts a lot easier than kidnapping open-pit workers. So, in conclusion, kidnap guys who work in clean shafts. Or Shaft.

Davey R Adams

Feds Club Naming Algorithm

Want to start up a new club with the Federation of Students? The first thing you'll need is a name. The daunting task of selecting a name for your new club has now been made a lot easier. A randomized algorithm has been developed to facilitate the efforts of student leaders. In fact, it has already been used to generate names for a number of UW clubs. Furthermore, it is remarkably easy to use, consisting of four easy steps:

Step 1: Pick an ethnicity randomly from the following list:

1. Chinese
2. Japanese
3. Liechtensteinian
4. Freedomian
5. Torontonion

Step 2: Pick a religion randomly from the following list:

1. Christian
2. Muslim
3. Jewish
4. Atheist
5. Satanist
6. Jedi

Step 3: Randomly pick a description of what your club is from the following list:

1. Students' Association
2. Fellowship
3. Debating Club
4. Political Action Group
5. Swing Dancing Club
6. Aggressive Recruiting Association (wait, scratch that one...)
7. Bloc Quebecois Youth Wing

Now, put it all together; read the results from Steps 1 to 3 in order, and you've got your club name! For example, you might come up with the "Torontonion Jedi Swing Dancing Club." Other typical results of running this algorithm include the "Japanese Muslim Debating Club" and the "Liechtensteinian Atheist Political Action Group." This new algorithm is capable of generating 180 new club names, each with a distinct mandate: look for some of them at the next Club Days!

Craig Sloss

Doing a Joint

One smart thing you can do to stick more things on to the end of your degree is to do a joint. A joint is in some ways easier than a full blown degree, but harder in other ways. Some people seem to lose intelligence after doing a joint, where as, others seem to get smarter. It all depends on if your name is Denny or Lizak. In the math faculty, it is quite easy to do a joint, and lets you weasel out of dumb courses, such as Numerical Computation (CS370). However, you do need two extra math courses, but, eh, who cares, those arts courses tend to bring down averages anyway...

Petrovski Lovinski

Imprint is Good for Something

While at work on an assignment late one night (in as rather unenthusiastic state), I decide to get a snack. So I head into the kitchen and grab a yogurt covered granola bar.

Zoned out as I am (from doing the CS assignment), I have some difficulties opening the packaging. After completing the difficult task, the granola bar (covered in yogurt) slips out of the packaging and falls for the floor.

As I am about to burst out into tears, my granola bar lying on the floor and dirtied by the unknown diseases that lie about the bottom of my kitchen, my roommate yells, "What a save!" I look down, and there is my granola bar, covered in yogurt, lying on an issue of Imprint (and not covered in unknown diseases).

Rejoicing, I head back into my room; eating my granola bar (covered in yogurt) while another one of my roommates comes up with a wonderful use of Imprint: "Really, we should cover our floor with Imprints."

Pete Love

Get Your Degree in Math

Earn \$\$\$ Fast!

Are you tired of degrees that can take eight, nine, or even ten years to complete? Does your brain dehydrate and shrink because it doesn't get enough exercise? Does your current degree charge you upwards of \$10 000 a term? Well, say good-bye to all that with the new Bachelors of Mathematics!

That's right! Come to Waterloo and you can earn your Bachelors of Mathematics in just eight terms! And with an extra six terms, you can earn yourself a co-op degree as well!

Just listen to these testimonials:

"I was paying \$7000 a term (US) but my mind was barely active, now that I'm in Bioinformatics, I'm paying thousands less and I never stop working!"

E. Rider

"I was about to sign up for an eight-year course in combinatorics in Iran when a friend told me about Waterloo. Three years later, I've only got five terms left!"

L. Etterdrawer

And Math at Waterloo has so many options! You can earn your degree in:

- Actuarial Sciences
- Applied Mathematics
- TV/VCR Repair
- Combinatorics & Optimization
- Computer Science
- Telemarketing & Optimization
- Pure Mathematics
- Software Engineering
- Statistics
- TV/VCR Repair

So sign up now and receive a free key chain valued at over four dollars. Operators are standing by.

Simon L'Avier

The Seven Dwarves at UW!

Fairy Tales Can Come True

As times change and new resources come available, only those who make themselves flexible and willing to cope will be successful. That being said, the Seven Dwarves from the fairy tale of “Snow White” have run out of ore to mine and decided that they needed a career change. So they all came to the University of Waterloo to become well versed in other things. Where are they? We’ll give you hints, but see if you can spot them in any of your classes!

GRUMPY: No matter how perfect their marks are, they will never be satisfied and feel that they failed on some level. No matter how many of their friends actually fail, they will still cry more. Grumpy will also feel ashamed after drinking a glass of milk only to find some of it remains in the glass, and mentions they are not complete when they don’t finish writing all the decimals of a third on an assignment. You may need to talk Grumpy out of jumping off the balcony on the grounds that they won’t do it perfectly.

SNEEZY: Spends all free time at health services, and believes that even the slightest discomfort is the result of some greater disease. Regardless of how contagious the disease is or how it is typically contracted (i.e. from birth), Sneezy will manage to have it manifest in their bodies in such a way that no one else will ever become infected. Mention SARS to Sneezy and they will quarantine themselves for a fortnight.

BASHFUL: Bashful is in ActSci, and despite what you may think, does not live in residence, but a dark ominous cave with other ActScis. When Bashful emerges to hunt for food, do not attempt to socialize with Bashful for you will frighten them to the point that they will flee black to said dark cave. Once a year Bashful doubles as a participant for Groundhog Day.

DOPEY: Having recently been exposed to the party scene, Dopey has consumed every possible substance that he has come into

contact with. To fund these new-found vices, Dopey has begun frequenting online gambling sites. Dopey’s access to their parents’ credit cards notwithstanding, Dopey seems to have an infinite supply of disposable income. Dopey frequently wants you to feel sorry when the sequence of their marks converges towards 0. *[Well, technically the lowest mark you can get is a 32... — iEd]*
SLEEPY: Sleepy is one of those interesting people with limitless potential in their field of study. When you pass Sleepy in the hall, they will likely be sleeping. Sleepy spends a lot of time in the Comfy Lounge in a corner with a comfortable blanket on them. If Sleepy ever shows up to class, then they will probably have sleep-walked in by accident. Throughout the entire school term, the only time Sleepy will get up is to walk to an exam in hopes that they can sleep well.

DOC: Doc is one of those geniuses who spends the majority of time selling some of the more interesting things to Dopey. In fact, Doc’s unofficial co-op job is apprenticing to an Apothecary. Doc could have done very well in school, but decided to major in Arts instead to ensure weeks and weeks of free time for a successful business. This is Doc’s 18th year in university.

HAPPY: The cheeriest person around, and the only reason this is so is because Happy never goes to class. Happy has decided that learning is entirely an individual thing, and studies on their own free time. Free time being the loading times from one computer game to the other. Happy will always be happy for as long as you know them. Usually during the first term — not many people are happy after that, not even Happy.

In fact, there’s an eighth dwarf called High Strung. The other seven don’t like talking about him much.

So there you have it, UW! Where are the dwarves? They may be in one of your classes so look out.

AngeLED

Super-easy Quiz!

Find the word that does not fit in the list below.

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If you think you have the correct answer, please go to the MathSoc office and say “Give me a random job that may take hours of my time.” in order to claim your prize.

e.

Feed Me!

Faithful Readers,

It has come to my attention that I am hungry. It has been more than a month since I have been fed. I’m usually stuffed full of Mathie goodness, but I was abandoned for most of the month of August. Now that all you Frosh have arrived, perhaps you’ll be so kind as to feed me.

You can feed me most anything. I’m not very picky. Some of my favourite foods include: Squiz answers, Crossword solutions (those cryptic ones are especially nummy), *prof*QUOTES, articles, and money. Especially money. Of course I’ll eat other things too. If you’d like to feed me some comic strips or restaurant reviews or Panama, I’d love to have those too.

Please send all food to me courtesy of my slot. It can be found on top of me. I can be found between the Comfy Lounge and the Math C+D. And now you can feed me online too! I can’t use the Internet myself (as I have no opposable thumbs — or hands in general), but if you e-mail the nice people at mathnews@student.math.uwaterloo.ca they’ll feed me at no cost to you! Please don’t send in food as attachments though, as they give me gas. Just stick it into the body of the e-mail and it’ll be scrumptious!

Sincerely,
The *math*NEWS BLACK BOX

How To Feed Yourself

So, you've finally moved into rez. If you're lucky, you'll find yourself living in Village One, and, if you're really lucky, you'll find yourself living in a single room. However, if you're like I was last September, then you'll be living in a closet in Ron Eydt. (But, not to worry. If the noise gets too extreme, you can always escape to the Great Hall in Ron Eydt's main building. It's much quieter there.)

However, wherever you're living, you'll eventually encounter something called "UW cafeteria food." Be warned! This "food" is not really food, but a mixture of meats and frozen vegetables drenched in gravies and sauces of unethical origin. If you eat that stuff for one whole term, you'll end up causing extreme damage to your gastrointestinal system. But fear not! There is an alternate food source!

"And what's that?" you may ask.

Squirrel.

That's right. Nowhere else in North America will you find squirrels with even half the succulence, or one-quarter the charisma, as the ones that you'll find here. And, with it being Fall, the time is ripe for the harvest.

Now, before you bolt outside and give chase to these four-legged delicacies, allow me to give you a few instructions on how to catch and prepare them properly (employing mainly legal and entirely realistic methods).

First of all, in order to catch a squirrel, you'll need a means of "bagging it," so to speak, and what better thing to bag a squirrel with than that handy-dandy laundry bag that came in your frosh kit? Don't worry. So, grab your bag and head out!

As a beginner, you'll want to start hunting in the squirrels' key feeding grounds. And, by key feeding grounds, I mean the green by the path connecting Village One and Ron Eydt. It's a virtual buffet on weekday mornings. The main reason for this is its close proximity to the squirrel population's primary food source — the stream where Ron Eydt dumps its leftover cafeteria food (which, incidentally, is leftover cafeteria food from Village One — pay close attention to their menus).

Anyways, back to the squirrels. So you've scanned the horizon and found the perfect, mouth-watering morsel. Advance without mercy and bag it swiftly. As you do so, however, be careful not to trip over any of the other lesser squirrels that may be standing between you and your main course.

Now here comes the hard part. Since the majority of squirrels tend to become quite uptight when wrapped in unfamiliar linen, your bagged creature will likely start flailing up a storm. Now is the time to take a heavy object and end its anguish, if you get my drift. This is where your MATH 137 textbook comes in handy, although an anvil will work just as well. Just remember, wipe the stains off of your book after you're done or you'll frighten your TA.

Now that you've got the messy part over with, it's time get even messier by skinning your entree — see "The Joy of Cooking" for full instructions. No, really, I'm not kidding about this one. After that's done, you're ready to cook. Sure, you could cook on a measly Maytag four-range, but why do that when you can cook it twenty-three times faster in the searing waters of fire in the bathrooms of MC? Last I checked, it's the only place on earth where water leaves the tap at 150°C. All you have to do now is clog the sink, fill it with water, stir it a bit, toss in your squirrel, stir it a bit, maybe add a few herbs and spices, stir it a bit, and voila! Pure taste-bud debauchery! Flash-boiled squirrel!

Of course, with hibernating season coming up and all, your squirrel will be relatively fat. Did I say relatively? I meant totally. And, since it's been busy gorging on leftover cafeteria food, you're still technically eating cafeteria food through a bizarre twist of the food chain. Come to think of it, killing three squirrels a day is really tiring, not to mention extremely inconsiderate of the squirrel community. And what about class? Logically speaking, your homework isn't going to do itself. And, before you know it, midterms will be ... Hey! Isn't that the Math C+D over there on the third floor of MC by the Comfy Lounge? Why, yes! [gasp!] No way! Oh, yes way, my friend, yes way. They have the cheapest food on campus, an assortment of caffeinated beverages, and, best of all, they don't serve squirrel! What!?! [splutter splutter] Then why are we still standing here? Let's go!

Soooo, now that this article has conveniently morphed into an advertisement for the Math C+D, there's only one coherent thing left to say: first year is really fun! You'll have an awesome time! Just don't "forget" to do your assignments. Oh yeah, and try to get some sleep once in a while. Also, if you'd like, come out and write some articles for *mathNEWS*! It'll be great! [*First Production Night is 6:30 pm on Monday, September 17th! -perkiED*] Enjoy your term!

Angela

The Frosh Cornered

All I Need To Know I Learned In Frosh Week

There are several things that one must remember from Frosh Week. Unfortunately, most of these things will be forgotten for various reasons. Below are a list of things frosh should learn over the course of the week.

- In a pinch, protractors can be used as spoons.
- On the move-in day, if you let your parents go through your orientation kit first, there is a VERY uncomfortable silence when they see the condoms.
- You should do your best to get on the Dean's List, because then you are allowed into the Dean's office, and let's just say there's a big bowl of candy to take from there.
- The Comfy Lounge has always smelt like that.
- Telling jokes you heard at 5:00 am during tie guard will not help you pick up, as what was funny then is incoherent rambling now.

- A good pick-up line is, "What's your co-op stream?"
- Through an odd warping of space-time, profs are able to talk for 2 hours in a 50 minute period.
- The more you learned in your final year of high school math, the more you have to un-learn in MATH 135 and 137.
- If your roommate is an engineer, you had best sleep with your tie on to protect it. Much in the same way (s)he will sleep with their hardhat on.
- Hypnotized jocks are more fun than a barrel of monkeys.
- Imprint absorbs twice as much liquid as the other leading brand of paper towels.
- Software Engineers do not like being called "Softies," but that's their name regardless of the undertone.
- You should have taken the blue pill.

Ian W. MacKinnon

Ten Tips That'll Help You Through Your Undergrad

1. **Always Go to a Prof's Office Hour at Least Once** - Your first year classes are smaller than they are at other schools, but they're still fairly large. Nevertheless, hardly anyone will go to a prof's office hour. Most profs spend their office hour in their office wondering why no students come by. They are a great source for help, and first-year profs tend to be really good instructors with experience teaching to n00bz like you.
2. **Work Together** - Find a couple of people in your M-section that you work well with, and study with them. Stick with this group as best you can, as classes are always a lot easier and more fun with a group of buds. Be careful about "Excessive Collaboration" though; that's the nice way of saying "cheating". There is a fine line between you and some friends discussing a problem and you copying someone else's answer to an assignment. The Faculty has become exceedingly efficient at catching cheats (especially in CS: don't think changing variable names will get you past the cheat-catching software). It's not worth it.
3. **Don't Count on Getting a Co-op job Through the System For Your First Job** - Co-op is a great program...provided that you get a job. CECS will tell you that employment rates are usually above 90%, but what they won't tell you is that the majority of people unemployed will be first-years. This makes sense given that most first-years don't have any relevant experience (Sorry, most tech employers won't care too much whether you worked as a lifeguard or at McDonalds). Especially if you are not going on co-op until the spring, you should begin looking for employment through other channels as soon as possible. If you wait for the co-op process to be over before you start considering other methods, you will find that most employers have already hired for the summer. You can always go through the motions, and not accept a job if Co-op comes through.
4. **Don't Expect a Glamourous Co-op Job Right off the Start** - Places like Google, Microsoft, and Amazon.com hire a lot of co-op students, whisk them away to warm places like California for the winter term, pay them exorbitant amounts of money, and let them work on cutting edge and exciting projects. If you think you're going to get one of these jobs because one of the employers are going to see a special twinkle in your eye, you're dreaming. Very very good jobs exist, but in order to get one, you might have to spend a few terms working in less than cushy jobs in order to gain experience. Don't thumb your nose at a government job, they're a great place to start your career.
5. **If you're in CS, Go Linux** - Linux is a pathway to many abilities some consider to be un-natural. If you want to score one of those co-op jobs that go above and beyond in how they treat they're employees, you're going to have to go above and beyond the curriculum in terms of what you learn. A lot of the better tech companies who hire co-ops know that to get the "hardcore" programmers they want to hire, they have to look for students who learn Linux and Python. Undergrads who know these technologies are those who learn them of their own accord since they aren't really taught in class, and these are the types of people that companies want. Also, the sooner you learn "*"nix" based systems like Linux, the easier 2nd year and beyond will be. Stop by the Computer Science Club on the 3rd floor of the MC for some tips on where to get started.
6. **Be Proud to be in Math, but Don't be Condescending About It** - The way the University markets itself, you'd think Math is the greatest thing since sliced bread. It's not; Coldplay is. Our faculty has a great reputation, but it also has come with one for a bit of arrogance; this really doesn't help. One of the quickest ways to be known as a prick in your residence is to mock someone for being in arts. Never assume you are better or smarter than someone because of what they're major is.
7. **Don't Go Home Every Weekend** - A lot of people in first-year haven't gotten used to being away from home for extended lengths of time, and if they live in T.O. (Which, in fairness, is a far more happenin' town than KW) will tend to go home pretty much every weekend. One of the downsides of this, is that you'll begin to resent coming back to KW, and it will just be the place where you have to study and work. To make your time at UW a little more survivable, try and have some fun here as well. Seeing what happens here on the weekend is a good way of doing that.
8. **Join at Least One Club or Activity at UW** - Along with making UW a place where you also have fun, get involved with a club, society, or project here. Being a math frosh, you'll be exposed to a lot of volunteer opportunities within math, such as the Math Society and *mathNEWS* [which is FAR cooler than MathSoc, btw — iEd], but there are other ways to get involved and share interests with others. The Feds have clubs from the Poker Club to the "Buffy Watchers Club". During the first week of class, there will be "Clubs' Days" in the SLC, where active clubs will have booths, looking for new members. It's a good place to go shopping for what you want to do extra-curricularly.
9. **Work Out a Couple of Times a Week** - It is very easy to gain a lot of weight in your first year. You'll spend a lot of time studying as a Mathie and working on assignments, and having easy access to a lot of food through your WatCard. To help fend off the "Frosh 15" (where frosh gain 15 pounds) hit the gym a couple times a week: there are great facilities in the PAC and Columbia Icefields.
10. **Close. Cheap. Clean. Pick Two.** - After first-year, you are going to be rather unceremoniously kicked out of residence. If you're 8-stream, you should probably begin thinking about where you are going to live in the fall for your 2A term in February or March. All housing in the KW can really be classified as 2 of "cheap rent, close to campus, or clean house". Residence falls into the "close and clean" category. Just keep in mind that you aren't going to find something that is all three, so go house hunting with realistic expectations.