

math

NEWS

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Frosh Issue, 2008

Nano-Tech's Death
Star Nears Completion,
Mathies
Declare
"Balls..."



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What is a *mathNEWS* anyway?

Find out at the Disorg: September something-th

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 day TBA 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 is TBA, but it will **start 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			6	7		3
	4	8		6		5	7	7		1	8				5	4
	7			3		2	1			2			4			
	5			1	3	8	9		9			6			7	2
	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		1
	9			7	6	1		4	9	2				3		

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The Editor: 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. Employeers 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

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

Horrorscopes

Captain Mathematica

The world has not forgotten how you obtained your powers through a secretive mathematical experiment. Your diligence and dedication to the nation of math has made you an idol to all. Smash calculators on your face and do the math by hand! It makes you cooler.

Your lucky number is 99 decimal place accuracy.

The Silver Solver

You are used to order and balance to things; although, every time you get involved someone giant mass decides to divide by zero. Sometimes non-involvement is best for everyone. Consider it a cosmic vacation.

Your lucky number number is 16 planets destroyed all on their own.

Lemma Croft

Despite what people say about your form, you still are a positive role model to young mathies everywhere. Sure, you may be smaller than other proofs, unnaturally so in some cases, but you support even the most important of theorems.

Your lucky number is 12 visible pairs of ribs and an unnaturally strong constitution considering.

Professor Axiom

Being infallible may start getting to your head. Just because you don't even need to be proven to be right doesn't mean that you should gloat to the other teams. Sit in a wheelchair to give them the false impression that you have a weakness.

Your lucky number is 2 deceptive wheels with clickity-clackers.

Scarlet Width

You need to stop using your power over probabilities for your own personal amusement. Just because you can make unlikely, yet unbelievably hilarious things happen, it doesn't mean that you have to. I guess that's what makes it special.

Your lucky number is 45 pianos falling of people. Simultaneously.

Batmax

Hiding away in your cave with your cool gadgets is great way to improve your grades and ruin your social life. Dress up as a debonair, wealthy individual so that no one questions your waning social skills. Otherwise, turn evil and become the most talked about person around!

Your lucky number is 7,700K or more angstroms so that you can see. With sound.

Harry Plotter

You find that no matter what you do a strange, lonely guy is constantly out to kill you because of your impressive graphing magics. Don't feed the fire! You can bring peace to your enemy if you just give him a graphing calculator or similar software.

Your lucky number is 1 enemy turned friend with Maple.

Indivisible Woman

You prove your strength over the integers and on prime fields, but your arch rivals the Real Numbers are coming to make you a mere fraction of your former self. You better start preparing invertibility shields and just pray and everything they throw at you is one-to-one and unto.

Your lucky number is 1 unchanging form.

Supermean

People mistake your name as an indicator for your personality, but really you know that you aren't that super. Witty repartees will make you appear so awesome that people will just to con-

tinue to assume you are super. Take off your glasses occasionally to further the illusion.

Your lucky number is 2 spectacles distorting your image.

Integratable Hulk

People are getting tired of you saying "You wouldn't like me when I'm discontinuous infinitely many times over a finite interval". It's not catchy enough. You should concentrate on it more than worrying about the uncontrollable power dwelling within you.

Your lucky number is 74 terrified, but confused bystanders.

Piderman

Your life gets turned upside down after you get bitten by a radioactive pie. You wake up one morning feeling completely irrational and have a dutch apple filling. Start hanging out with Pop 'N' Fresh because he runs slower than you.

Your lucky number is 13 hungry people chasing you with forks.

Dare Dividal

You can hear a mathematical operator coming from a mile away. Your amazing powers are only nerfed compared to the awful movie made about them. Exact your vengeance on the perpetrators of the heinous film and show them what a real Dare Dividal would do.

Your lucky number is 1 brutally beaten Ben Affleck.

The Human Torque

Competition in the real world is fierce and you're feeling the pinch when you start getting replaced with machines that do the same work for a fraction of the price. Don't despair! There will always be demand for your specialty!

Your lucky number is 4 job offers as a carriage wheel.

Power Rangers

You must protect your secret identify at all costs. To do this make sure that you transform in wide open areas as frequently as possible. Don't worry, the only ones who know are the most incompetent pair of humans who eventually get turned into chimpanzees.

Your lucky number is 19 failed attempts to expose you.

The Averagers

Generally speaking you're pretty okay. Other people tend to be better or worse, but when push comes to shove you do exactly what's expected. It's nice to be reliable, but sometimes achieving more can be beneficial. At least, for people who aren't average.

You're lucky number is 70 in every class.

Fantastic FOC

Achieving ultimate power is a great feat. Celebrate by abusing your power at every given opportunity. Many people in your position before have made decorative crafts out of their conquests. It's just a suggestion.

Your lucky number is 42 names on your necklace.

Tie Guardians

You laugh at everything as the days grow longer and you slowly forget what sleep is. Take some time to talk with your hallucinations and pray that you can tell the difference between reality, dream and an n-dimensional kernal space.

Your lucky number is 168 hours without sleep. Suckers. Wait... I'm a Tie Guardian... Aw, crud...

Michaelangelo Finistauri

Continued on page 9

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

You're not a real mathematician until you've tried to prove that the World Series converges.

Wolczuk, MATH 138

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

Hoffman, PMATH 330

The correlation between the decline of priates and global warming is ridiculously high, something like -0.95! So clearly the lack of pirates is causing global warming.

Chisholm, STAT 230

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, CS 488

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

Pidduck, CS 330

If you keep talking like this, you will not be able to hear my sexy, sexy voice.

Bergeron, STAT 340

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

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

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

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

This Filler is brought to you by Laziness and Apathy! For when 'Meh' is more than enough.

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

Scientists discover new element

In a recent breakthrough in the world of chemistry, the University of Waterloo's science department discovered the existence of a new element. Now added to the periodic table is the new element Explosium. Explosium has no mass and is highly volatile. Unlike other elements, Explosium is neither a metal nor a non-metal. Explosium reacts with every element and is in a constant state of exploding.

Other discoveries surrounding the new element include the realization that the sun is composed out of 73% pure Explosium. Even one molecule of Explosium can result in the total destruction of any planet, forcibly creating a miniature sun. At absolute zero, Explosium still explodes.

There only exists one molecule of Explosium on earth, which is owned by millionaire Katrina Rexworth of the Megalomaniacal Organization of Mad Scientists (or MOMS for short). The molecule, valued at the cost of all life on Earth, is contained in a permanent vacuum. In the event that the vacuum should fail, even for a split second we all would be instantaneously obliterated.

The US Government has announced that it plans on utilizing Explosium as a way to continue its costly war. The rest of the world already fears the destructive potential of a redneck cretin without the added power of Explosium. Goku, from Dragonball Z, says that nothing is more powerful than the force of Explosium and "... even my Super Albino-Monkey-on-Steroids Form cannot withstand Explosium".

The Hee Ho

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. Freedonian
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

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

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

What Would Captain Picard Do?

I stood outside of the election polls, preparing to vote in a diligent and honest manner on the day of elections when I noticed something was amiss. Instead of the standard polling stations of democratic justice, there was an odd half-organic and half-mechanical station. As opposed to the standard votes, turbid androids were assimilating the voters into a collective consciousness of machinery. Having no life, I immediately recognized the threat: the Borg. For some reason they decided to take over the electoral process in, of all places, Canada. This led me to the question: What would Captain Kirk do?

In less than ten minutes I had one night stands with every woman I could find. Realizing that this literally did nothing for my situation, I thought about the next generation and what would Captain Picard do?

Before using any logical thought, I prepared an entourage of nameless people to go and investigate the situation as best as possible, regardless of any foreboding instincts that I had. We casually walked right up to them, and one by one, everyone who didn't have a name was immediately assimilated. I miraculously escaped without incident. From my reconnaissance I drew one conclusion: it was working properly, so it likely had nothing to do with the engineering faculty or students.

I decided upon one action: send in more people I don't know. So I went to the SLC and found some arts students who still had half a term to finish their only assignment. Guessing that they would last long enough to give me time to make some sort of simplistic analogy for the situation at hand, I sent them all off, and then acted sad when they all perished.

Three minutes later, overcoming my powerful woe, I realized that the androids were trying to infect the government in a manner very similar to how a virus will infect and spread itself through a series of hosts. Within moments I devised a complicated plan involving a large chunk of wood, called the natural log, and enough pink ties to play jump rope. I rushed back to the election polls (which were now slightly less heartless and mechanical with the Borg in control) only to find that by introducing art students into the collective, the Borg had absorbed with them an entirely new philosophy: laziness. The Borg were sitting around, playing poker, drinking and spouting mindless dribble about how difficult their only task for the term is. I thought to myself: they will make fine leaders as soon as they are finished learning how to embezzle and have scandals. Having a sense of pride in my accomplishment, I felt I needed some form of non-monetary reward and I pondered: What would Captain Kirk do?

Michaelangelo Finistauri

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

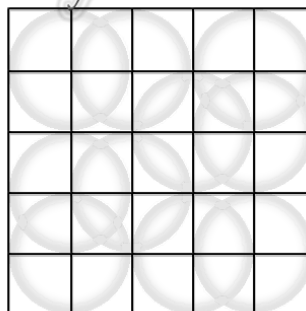
another issue that took time and effort.) Feel free to drop by our office (MC 3046) when it's open to look at our *mathNEWS* Gallery/Shelf o' Memorabilia, which includes, among other items: a piece of Red Room paneling, an EMS Library Sign dating back before the books were moved off the fourth floor 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

umbrellas



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

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

curica

The Horror Continues

A-Teamsters

You have a wonderful ice cream van that you can use to quell the evil in the world. Even if it doesn't hold ice cream. Share your goods with all of the faculties so that they owe Math something in the near future. Remember: kindness is a guise for need.

Your lucky number is 24 fools pitied.

Arts

It's always good to enjoy a nice cut of meat, even if it is made from your mascot. Sometimes appreciation can only be expressed through the culinary arts.

Your lucky number is 3 cuts of il Porcellino.

AHS

Be cautious when you go out into the woods today because you'll get a big surprise. Apparently the teddy bears will be having their picnic. Their picnic using your food. Bears can be such mooches.

Your lucky number is 3 picnic baskets missing.

ENG

Your appreciation for toys and phallic tools has gone too far. Such public displays are inappropriate and should at best be chronicled in the *Imprint* later.

Your lucky number is a 6-page review in the *Imprint*.

ENV

Your frosh week has left you yearning for the days when high scores mattered and you didn't need to soft reset every time something bad happened. It's better to just enjoy the game! Just like Mario used to.

Your lucky number is 2 plucky, plumber brothers.

Science

Although, it's nice to be honest sometimes self-criticism can sound a little harsh. Calling it fiction may be a bit of a stretch, but we appreciate your honesty.

Your lucky number is 1600 appeased math students.

Diary of a Lemming

Monday - Walkin'

Tuesday - Walkin'

Wednesday - Walkin'

Thursday - Walkin'

Friday - AAAAAAAAAAAGGGGGHHHHH

HWT

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.

The MUDPit

UW-MUD v 0.1 alpha

Enter, Math Student, and choose your destiny.

You find yourself in a CS 246 class.

> inventory

You have a textbook on UML diagrams, a pencil, and a half-eaten sandwich.

> use textbook professor

With a loud yell, you hurl the textbook at the professor.

Damage: 5 (physical)

A CS 246 professor is angry, and charges at you!

> exit building

Prudently, you exit the MC in haste. You find yourself facing DC.

Blind penalty: 20% (natural light)

> look around

You see several bikes.

> take bike

It's locked securely to the bike rack.

An angry CS 246 professor exits the MC.

> use pencil bike

Using your significant mastery of the locksmith's trade, you use the pencil as a lockpick.

Lockpick: success

An angry CS 246 professor casts "C++ Syntax Lesson"!

Resist Sleep: success

> go north

You head north on bike and travel for some time. You find yourself in a grassy field with many cows.

> use cow

Moo. What did you expect?

> cast cow

You assume a spherical cow of uniform density! It appears a short distance in front of you, and promptly begins to roll in your direction. > exit

A malicious MUD program pauses execution of your command to allow your character to be flattened by the spherical cow, thus ensuring hilarity all around.

candu

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 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.