## maduth NEWS

Volume 95, Issue 4

- Man, I'm hungry... Mmmm... Pizza...
- Don't we have to save Lois Lane...I mean April?
- Maybe I'll add a 7/7 Green Turtle to my deck...
- Dude, stop poking me, I want to be in front


So THAT'S what that smelly green stuff in the Comfy was...

## lookAHEAD

\(\left.$$
\begin{array}{ll}\hline \text { mathNEWS } & \\
\hline \text { July 5 } & \begin{array}{l}\text { Issue \#5 production night } \\
\text { 6:30 pm, MathSoc Office (MC 3038) }\end{array}
$$ <br>

July 9 \& Issue \#4 wreaks havoc\end{array}\right]\)| MathSoc | Movie Night |
| :--- | :--- |
| Thursdays | Canada Day (volunteer and get a free <br> meal and t-shirt!) |
| July 8 | Lemonade Day <br> July 10 <br> July 14 |
| Games Night \#4 |  |

## Teenage Mutant Ninja Actuaries

In the spirit of the teenage mutant ninja turtles theme that we have going this issue we at the Actuarial Science Club thought it would be a good idea to compare the ActSci Club to Shredder's foot, both to highlight similarities and differences: Shredder - Leader because everyone else is a robot, or halfman half-animal or a pink alien brain.
ActSci Club - Leader chosen in free elections
Shredder - Plans to steal energy and futuristic technology from identical scientists
ActSci Club - Plans to post SOA exam social events Shredder - Headquarters is a giant metal structure, always out of power, miles below Earth's surface
ActSci Club - Headquarters is an office on third floor of math building
Shredder - Arch-enemies with 4 mutant turtles and a mutant rat
ActSci Club - Arch-enemies with the Statisticians
Shredder - Rents nothing, not even cool transportation devices or army of robots with bad posture
ActSci Club - Rents study materials for a low fee Shredder - Plans World domination on a daily basis ActSci Club - Plans World domination on a daily basis I hope we all learned something today.

Deep within the fowl entrapments of the MC's 3rd floor, cries of freakish misery emanate from the depths of a dank and wretched corridor. Directly across the hall, is the lively and hygienic Computer Science Club! Come ask in our glorious realm of voluptuous wisdom as our services relieve you of your midterm stress. Our delightful atmosphere and extensive library will ravish you in your quest for deeper knowledge in computing technology. s/ravish you/beat you with sticks/ ${ }^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}^{\wedge} \mathrm{H}$
Professor Richard Mann presented an awesome talk last Thursday called: "Optical Snow": Motion parallax and heading computation in densely cluttered scenes. -or- Why Computer Vision needs the Fourier Transform! It was most excellent indeed. Indeed! Upcoming talks are: ... upcoming... as soon as people give us dates for them! More info to come, fo sho.

IMPORTANT: On Saturday, July 17, the CSC is holding a Case Modding Workshop. That's right: bring out your lame beige box and transform it into something 1337!!! The event is FREE and Open to ALL. Furthermore, the CSC got special deals on sweet case modding supplies; so if you HURRY to our office (or email exec@csclub.uwaterloo.ca), you can order your (cheap! cheap!) \$10 Case Modding Starters' Kit. It will come with kewl happy things to mod up yer b0x3n!

Also, come bring out your sweet wicked uber-1337 k-rad cases to the Case Modding Workshop day, to show them off in the case contest! There will be prize(s), so come by the CSC office before July 11 to register your case. Don't be shy; this is your biggest chance to publicly demonstrate just how geeky you really are. w00t!

The Case Modding Workshop will be held in RCH 308. pwn3d! omg lol wtf?
[- CSC Quotes removed to protect the innocent. The ceramic frogs are most pleased. -]

And now, it's time for...
,,,$---!$ Name That Game !-,-,-,-
> "Destiny shall draw the Lightning
> Down from Heaven; roll its Thunder
> Far across the Sea, to where I
> Wait upon the Shore of Wonder,
> On the day the Sky is Opened
> And the Tree is split asunder."

The first person to come to the CSC office and Name That Game will get a free cookie!!!*

* Cookie may not be desirable.


## VPA Says

Sigh, right now in the MathSoc office there is a big political dicussion going. Don't get me wrong, I think having these dicussions is very important but when you have more than a few people, each with different points of views, and when some of these views are held pretty strongly; you can imagine the painful dicussions that result. I think I may have just hurt someone's feelings by entering the discussion. To all my friends and anyone else who gets into a dicussion with me: please don't take me too seriously and know that I respect all of you (although people who take dicussions too seriously or are easily hurt might want to avoid dicussions).
On a serious note, over the past week there have been thefts of computer monitors and computer parts from various labs. This has forced the labs to be closed on the weekend and evenings. I'm pretty sure Catherine has mentioned this in her article but I'm upset enough about this that I want to mention it in my piece. We've been told that they don't believe this to be the work of students. I remem-
 ber last year from it was the different student soceities that were being stolen from. I'm really hopeing that students aren't involved with this. The idea of students doing this to other students makes me upset enough that I won't try and articulate it, for fear of not accomplishing anything but getting me more angry. On a less serious but still sad note, no one got my last article's challenge (but I'm not too surprised about that). Thus, I am offering a new challenge: The first two people, whose first name I don't know, to visit me during an exec office hour with the answer to the following question will win a $\$ 5$ gift certificate to the C\&D.

What sort of fun did I have with last issue's cover?
Other than that, not much to report. The university wide coop review is getting into gear. I hope to be getting students input in the near future. There are a whole bunch of questions the review committee wants students to answer which we will probably do via a focus group. But as always, my door is open to people and their thoughts. (Well maybe not always but you'd be surprised how often I'm in the mathSoc office.)

Greg
PS my apologies to Wendy for forcing her article to appear on the next page in the last article ;)

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Turtle Power: Mark Toivanen, Chris Harasemchuk, Louis Mastorakos

## Pres Says

## Tell me what you think

Nightly Lab Closures - As you may have noticed labs with flat panel monitors on the third floor began to close nightly a few weeks back after a few (around 6) monitors left the building. Then after PC labs were targeted for theft (hard drives, RAM and good things like that) PC labs started closing in the evening as well.
Earlier this week I met with the MFCF and CSCF directors to discuss the problem and attempt to come up with some solution. I will continue to be in contact with the directors and I would like to know what YOU think about the lab closures. Do YOU have any ideas to keep the labs open the maximum amount of time? Do YOU have any thoughts
 about long term solutions like video surveillance and electronic locks?
If so please tell me. My office hours are as always MWF 12:30 - 1:30 and you can always reach me by e-mail at prez@mathsoc. uwaterloo.ca.
Winter/Fall 2005 MathSoc Executive Nominations - Nominations for the following positions open today:
President
Vice President Academic
Vice President Activities and Services
Vice President Finanace
The term of office is Winter and Fall term 2005. Nominations are available outside of the MathSoc office.

Catherine Moore S04 President
Math Society

## mastHEAD

## Totally Rad, Dudes!

Hey, man, we need like, more writers or something. Or at least writers that don't have mid-terms on production night. Oh, well...what can you do? It seems that only the first years and a small set of upper years that care about being funny [and our uber-cool Artsie! - BeatleEd].
So, while watching Teenage Mutant Ninja Turtles II: The Secret of the Ooze on Saturday, we had quite a laugh with a line from the movie that we took really out of context, so we decided to ask our writers...What were YOU doing up on the roof?: Kevin (Building a ballista aimed at RCH), Kaitlyn (Sending smoke signals to Ottawa), e (eating food and catapulting squirrels), Cass (Committing an act of Artsie revenge (The Tie is mine...)), Pete (Helping Splinter "meditate"), Mike Biggs (I found the pool on the roof), Commander Celery (mmmm...tossed salad), Rain Note (I would tell you, but it's X-rated), Dirty Flame Axle (I don't know, but I thought insurance salesmen were pushy), Craig Sloss (What WASN'T I doing on the roof?), DanS (Same thing I try to do every night, try to take over the world.), Eric (A merry little jig).

Beatlemaniac (Coming...to a decision) Krease (In Soviet Russia, roof does you) Louis (I have a baby?!?)

## Voter Cynicism and the Federal Election

If you happened to watch the leaders' debates on June 14 and 15 , you may have noticed that one of the recurring themes is voter cynicism. Many people no longer have faith in the government's ability to respond to their needs, and feel as though their vote doesn't really matter all that much. Party leaders were asked how they would address this situation, and their answers invariably focussed around the Liberal party sponsorship scandal. In focussing on this, I think they really missed the point, and, based on my observations of the election, I want to talk about what I think are more important causes of the increasing feeling that the beliefs and opinions of voters don't matter that much.

## A Two-Party System?

Although Canadian voters have many more than two options on election day, some of our leaders act as though this isn't the case. This is perhaps most evident in Paul Martin's assertions during the debate that if people don't want to subscribe to Stephen Harper's vision of Canada, then the Liberals are the only other option - ignoring, of course, the fact that there are four parties with seats in the House of Commons, and countless other smaller parties trying to present alternative visions of the future of the country.

It's not hard to understand why he would make such a statement from a strategic standpoint - obviously, the two "oldschool" parties would like to maintain their stranglehold on the political system. But the kind of arrogance involved in pretending that there are only two choices in this election turns off a lot of voters. Sure, there may be seven candidates in your riding, but don't worry your little head about it - Paul Martin's narrowed your choices down to a managable two so you won't have to think too hard. You say you want to vote for the Christian Heritage Party or the Marxist-Leninist Party? Sorry, those options don't fit into the black and white (or red and blue) world of politics. Try again.

## Jim Who?

The Green Party is making its strongest showing ever in this election. Polling at 7 per cent is a significant gain for a party that doesn't even have a seat in the House of Commons. A sig-
nificant number of people are planning on supporting them, and certainly a larger number are interested in hearing what the party is all about. That being said, it's not particularly easy to find out a lot about the party. Media coverage of the Green party is minimal - the media prefer to focus on the MartinHarper horserace instead. Green party leader Jim Harris was not invited to participate in the leaders' debate, despite the level of interest in his party. (It's not like having five leaders there would be unusual - it's been done for the past three elections.) Like the party leaders, the media have fallen into the same trap of presuming to make decisions that ought to be made by voters - thinking voters don't need information about the Green Party because the Green party isn't worth voting for anyway.

## A Decision That's Already Been Made

Another contributing factor to cynicism is the feeling that voting doesn't matter, because the decision has already been made. The media foster this by being all too willing to declare the winner as early as two weeks before the polls even open. Why even bother voting? The pollsters have already saved you the trouble.

The parties worsen this problem by talking about negotiating coalitions as though the election's already taken place. Perhaps the most jarring claim along these lines was Harper's assertion that his party was on track to form a majority government. Since governments typically favour projects in ridings that support the governing party, many voters read statements like Harper's as "I don't care what you believe in - we're going to win, so you'd better jump on the bandwagon now so you don't get shut out of the pork barrel."

Each of the three problems described above have the same fundamental cause - a lack of respect for voters to make their own decisions. Whether it's telling voters their choices are limited to two, deciding that information about smaller parties just isn't important for voters, or acting as though the election's already decided, politicians and the media do a lot to suggest that people's opinions and votes don't really matter - which I suggest is the cause of a lot of voter cynicism in this country.

Craig Sloss

## Cast Your Ballot

## Exercise in Futility?

With 3 days [at the time of distribution of this issue] until the 2004 Federal Election, I wonder how our fellow countrypersons will cast their ballots, deciding who will take the helm and lead our nation for the next four, or less, years. As I anxiously wait for the results, I am left to ponder: does it really matter if I vote? There are many reasons for me to vote, as I may want the political party/parties with whom I share ideology to form the next government, or I may want to prevent the political party/parties with whom I disagree from forming the next government. However, in voting, what are the consequences? Either the candidate for whom I voted is elected, or the candidate for whom I did not vote is elected; in both cases, the riding sends a person to Parliament Hill to represent the constituency based on who has received the highest number of votes, and not necessarily a majority. Thus, our electoral system
squelches the voices of those who voted for a losing candidate, only to be heard through the other members of the political party who sit in the Commons, or worse, to be counted as one who voted for a political party with no representation, yet receiving a non-trivial portion of the popular vote.

The net result of this endeavour is a government that may or may not receive a clear majority of the popular vote (never mind the fact that voter turnout is approximately $60 \%$ ), yet is given the responsibility to establish the policies of our nation. So in the end, does it really matter? I've come to the conclusion that come Election Day, my voice may not necessarily be heard, but it surely will be added to the tally, and for me, that's all that matters.

Voting Mathie

## So, things are disappearing ...

## Just like in Teenage Mutant Ninja Turtles

So, a bunch of idiots have decided to rip off the school's RAM, CPUs and flatscreen monitors. Shame on them. Because of this, mathNEWS can't have its production in our favorite of all labs: the ONLY Math lab that's NOT hard to find (i.e. NOT on the $6^{\text {th }}$ floor $=>$ this would be the blue lab, for any of those still wondering). Yes, we can't use our production system because some people decided to rip the school off. Very similar to what was happening in Teenage Mutant Ninja Turtles, the only difference is that in the movie, the Foot were ripping off TVs, Stereos and all kinds of non-computer electronics, oh, and we don't have a set of 4 mutated amphibians to beat the culprits up and tie them up for the police. Maybe I should start walking the halls of the $3^{\text {rd }}$ floor MC late at night in a turtle shell with a pair of salami nunchucks (aka Combat Coldcuts) to beat up any offenders. That would be cool. Although I do think my sleep patterns might suffer (who am I kidding...I don't have sleep patterns).
I like UNIX. UNIX is a good OS. There should be less Windows labs and more UNIX labs. When I was in second year, I was forced to learn UNIX, or at least the bare minimum. I'm sure there would be less theft in the Windows labs if MFCF were to bring back those old, slow P-IIs we had back in my days. Man, did those systems suck for doing non-work. Apparently, the labs are now overflowing with half-working P4s. Half working, you say? They were apparently targeted for either the CPU or the RAM. How low is that? And we can have UNIX terminals with LCD screens, we just need to make sure they're the right ones. This was recently a topic of discussion between myself and a group of people, one of which was my head leader from back in '01, and the general consensus was that we should have a set of "dumb terminals" and even if they had LCDs built into them, it'd be too much hassle to steal them for the LCD and the terminal itself would be practically useless to anyone else. Me likes.

Beatlemaniac

## Header to the Tag

I am currently disappointed with the quality of the computers in this lab here where we're writing. I like it much more in the Graphics Lab. That's one sweet lab. Anywho..
Today I have decided to write some more random crap that I usually propogate over to the mathNEWS peeps who edit it and put it in their hilarious (directly proportional to the number of articles I've written) publication. And to think: these all get immortalized in the Canadian something-or-other. [Archives? Yep...and I get to have my name in them too:) - BeatleEd]
Luckily, I like this week's theme. TMNT was the bomb back in the day. It was awesome.
and so then Raphael is all like: "Dude, I hate you." But then Leonardo gets all pissed cause Raphael is being all smart-ass and he goes: "Shut up. I pwn you."
Can you imagine how much cooler TMNT would have been if they had cool 13375 p 34 k ? Wow. That would roXOrs. Ya, I'm done.

## HडADTOHEm

## $1 / 1910$ Splinter

One was a legendary warrior who trained Jedi Knights, the other is a mutant rat who trains ninja. But which one would you want as your mentor?



Edge: Yoda

| FAMOUS BATTLE |  |
| :---: | :---: |
| Lightsabre duel with Darth Tyranus <br> Edge: Yoda | Once bit Shredder in the face |
| FAMOUS QUOTATION |  |
| "Do or do not. There is no 'try." <br> Edge: Yoda | "I just made a funnyl" |
| GREENNESS |  |
| Green Edge: Yoda | Not green |
| PORTRAYALS ON TV AND FILM |  |
| Started as a puppet in the original trilogy, and later as an animation in the prequels | Started as an animation in the TV show, and later as a puppet in the movies Edge: Splinter |
| AND THE WINNER IS |  |
| By a 4 to 2 landslide, Yoda is fortune-cook | everyone's favourite source of kie wisdom. |

## Mathies are the Perfect Guys

If you are reading this, you are probably in math. It then follows that you are probably a guy. The combination of these two things then leads to the fact that you've probably got no girlfriend. This lack of girls for mathies is a disturbing trend, and so we here at mathNEWS thought that we would look into it. So I hopped into the mathNEWSmobile to look into this problem. As you will see the results were very surprising.
I started off by going to the very root of the problem, the girls. I then asked them something similar to the following "what are you looking for in a guy?" The results were nearly all the same. Everyone said they wanted a good sense of humour, and only a few were not looking for someone with a lot of intelligence. Another common answer was a guy who has a lot of confidence or who is just looking to have a lot of fun.
I also followed up with the following question "The media today seems to be very concerned with looks, and is in most ways very shallow, making it seem like the only important thing are looks and money. Have you succumbed to that same level and become so shallow that those two things are amoung the most important?" The responses to this question were quite unexpected. Absolutely no one answered "yes" to this question that asks whether they value things such as looks. The answers ranged from "of course I'm not shallow" to a simple "No" I even got a "How dare you accuse me of that!" The closest answer to a yes was "Well... those things kind of do help... but I guess they're not quite the most important..." The results of this, I determined that even if you're uglier than the ugliest ugly dog that was recently hit by a car, if you litterally do break mirrors by looking into them, or if you are required to always stay in a dark place because having people see you somehow poses a safty threat to their well being, well it doesn't matter, because as my research indicates that doesn't matter, girls don't care about that.
It was about here where I learned the truth. Mathies are the perfect guys. So perfect in fact that the women of this world are too intimidated by our perfection to go out with us. Let me show this to you. My research indicated that the only important qualities in a guy are: humour, intelligence, confidence and the ability to have fun. The facts are that every mathie (or at least the stereotypical ones) possess far more in each of these qualities then nearly any other type of person, as you will see here with my carefully crafted bulleted list:

- Humour: you need not look any farther than this publication to see that mathies possess one of the greatest senses of humour in all of the world. In fact ours is so immense that the vast majority of the population doesn't even get our jokes (look elsewhere in this issue for an example by me ). Maybe that special person just hasn't realised that you have such a great sense of humour. Why not bring up mathNEWS more often and show her just what it is. She will definately learn that just by being in a faculty that actually puts resourses into such a thing, you must have a great sense of humour.
- Intelligence: Well this one is quite obvious, you are in math. This alone puts you very near the top of the population in terms of intelligence. Be sure to let her know that you are in fact in math and are therefore smarter than basically everone she knows (except the other people she knows in
math or who have already graduated from math). After this, she will be very inclined to spend more time with you.
- Confidence: This one is quite simple. In proving that you possess all these other qualities, you will be showing amazing amounts of confidence. There's nothing like saying "I'm smarter than everyone you know" to tell someone "I'm confident"
- Fun: Mathies are better than nearly everyone else at having fun, or at least are based on my limited experience having completed my first year and spending a great deal of time with 2nd year students. You see, while the members of other faculties are off 'studying' it was always us, the mathies out there playing games of nearly every sort. № time is ever a bad time for a game of Settlers when you're in math (unless there is an assignment due in about an hour and you haven't started yet).

As these points illustrate, you are obviously one of the most perfect men in existence, and that if you find yourself unable to attract a member of the opposite sex, there are only two reasons why she may not immediately jump to the chance. She's either scared of your perfection, or she hasn't learned this truth yet. The answer to the first problem is to say word for word the following "I know that I am way too perfect for you, and you are indeed intimidated by my greatness, but I would be willing to go out with you anyway." If she just hasn't figured it all out yet then all you need is to tell her everything you read about in this very article. Good luck getting some.

Dans

## Do the World a Favor

## Go and Smack a Raver

"Excuthe mee mithter... Do you know where the glowthtick thtand ith???" .....

WHACK!!!
Like, what are you people,. 4 years old????? Screw rainbows and teddybears, I want my hardcore death music. Raver's are the most irritating subculture ever. Always so happy and cheerful, good god, you'd think they were hippies. Except not in a cool "Screw the whole world, I'm picketing for free speech kind" kind of cool. They're all like "PLUR", an happy rainbow brite and blech!
Now, PLUR is supposed to mean Peace Love Unity and Respect. But really, PLUR means Please Lick Ur Rectum. Lord knows what goes on during some of those mysterious raves.
Its not like I'm trying to dis good electronic music, I happen to be a fan of trance and other coolness like that. But some of these kids are so artificially happy, its just so...... WRONG!!!!!
So next time you're at a party, and some E-Tard kid asks for a drink of your water. Say "NO!" Then hit them over the head. Continue to punish them for their e-tarded stupidity by beating them while on the ground. You might even want to consider hitting them with sticks.
So yes, do the world a favor.... GO AND SMACK A RAVER!!!!!!
-Commander Celery

## Leaving On A Jet Plane

## A co-op weekend song

All my bags are packed I'm ready to go I'm sitting here inside this cube
I'm waiting for the clock to reach the time
The boss is yellin', there's still more work But you can't tell 'em that he's a jerk Time passes so slowly I could die

So play a game of solitaire
Why can't I win at solitaire?
Only an hour left to go
Cause I'm leaving on a fast bus Anything to get away from this boss Why can't I leave right now?

There's so many hours I've worked away Without such things as overtime pay I'll tell you now they count as this day off

Away for the weekend is where I want to be Away from work that's killing me When I come back I will be less stressed

So put all my work in a pile
Twiddle my thumbs for awhile
Watch the clock and pray that I can go
Cause I'm leaving on a fast bus
Anything to get away from this boss
Why can't I leave right now?
Now the time has come to leave this damn cube
Quickly now before there's an excuse
To keep you here and not let you get away
Dream about this long weekend
Drinking on the porch with friends
About the times that are so stress free
So count down til 3:30
Catch the bus at 4:30
By midnight I'll make it into town
Cause I'm leaving on a fast bus
Anything to get away from this boss
Why can't I leave right now?
Cause I'm leaving on a fast bus
Anything to get away from this boss
Why can't I leave right now?
Jenn

## The CS 246 Master Heuristic

Each class should have one method and two interfaces.

## मferb-raciend

##  (P)

One was a Dark Lord of the Sith, the other was the criminal overlord behind the Foot Clan. But which one is the very model of a modern evil mastermind?


Edge: Vader

| LACKEYS |  |
| :---: | :---: |
| Imperial Stormtroopers who couldn't hit the broad side of an AT-AT | Foot soldiers who do hit things from time to time <br> Edge: Shredder |
| ACCIDENTS SUFFERED |  |
| Horribly disfigured in a lightsabre duel with Obi-Wan Kenobi <br> Edge: Vader | Horribly disfigured when attacked by a rat |
| COSTUME FRINGE BENEFITS |  |
| Makes one sound like James Earl Jones | It slices; it dices; it makes julienne fries |
| Edge: Shredder |  |
| GREATEST DEFEAT |  |
| Gets his ass kicked by Ewoks Beat on a weekly basis by four at the Battle of Endor mutant turtles Edge: Shredder |  |
|  |  |
| PATERNALISM |  |
| Father of Luke and Leia Edge: Vader | Father of the Foot Clan |
| BASE OF OPERATIONS |  |
| The Death Star, capable of destroying an entire planet with a single blast Edge: Vader | The Technodrome, a huge structure with no apparant purpose whatsoever |
| AND THE WINNER IS |  |
| By a slim 4 to 3 margin, Darth Va hate | Vader <br> ader is the villian we all love to <br> e. |

## Federal Leaders Battle to the Death

## Layton, Duceppe disagree on which agrees more with the other

It was an exhilarating night of fierce combat to the death when the leaders of the four major federal parties challenged each other in the much-anticipated English-language battle-royal debate on Tuesday, June $15^{\text {th }} 2004$.
Observers conclude that Gilles Duceppe, leader of the Bloc Qu?b?cois, was the clear winner, as based on a new survey released on Friday that showed that the Bloc Qu?b?cois now has $65 \%$ support across English-speaking Canada. Upon discovering that the Bloc does not actually field any candidates outside of Qu?bec, most of its newfound supporters grunted and grudgingly restored their previous loyalties. Bearing a slight bruise on his forehead resulting from a particularly intense brawl with Conservative leader Stephen Harper over the latter's use of the term "cheese-eating surrender monkeys," Duceppe said after the debate, "So, you see, this shows that we, the Qu?b?cois, are clearly better than all you lousy Canadians."
Stephen Harper spent much of his time promoting the Conservative party platform. While this publication could report on the platform, management has decided that doing so would be completely redundant, as the platform was in fact taken from that of another prominent candidate for leader of a major country. Readers are encouraged to check the platform used by a certain individual who came to power in a fairly large country to the south of Canada three and one half years ago. Unconfirmed reports indicate that Harper's advisors requested that he remain silent on plans to sell Medicare, Canada Post, the road network, and most of the rest of Canada to various corporate interests.

Unsurprisingly, residents of the Maritimes were reported making enquiries about leaving Canada and joining Qu?bec in the event that a Conservative majority government forms and Qu?bec declares independence. What is perhaps more surprising is that the residents of Ontario, Saskatchewan, Manitoba, and British Columbia were reported asking exactly the same thing.

Jack Layton's presentation was reportedly mixed up with that of a local used car salesman. As a result, sales of 1980 Ford Pintos reportedly quadrupled in the days after the event. Some observers, such as Prime Minister Paul Martin, reportedly expressed some concern over his long-windedness.

The debate also included new one-on-one debates among each pair of candidates in addition to the existing free-for-all session. Debates between Duceppe and Jack Layton, leader of the NDP, were dominated by disagreements about which candidate agreed with the other to a greater degree. Unable to argue convincingly that Duceppe agreed with Layton more than Layton agreed with Duceppe, the former gave up and began a tirade on the fundamental superiority of Qu?bec.

Paul Martin had to be transported to the emergency room after the debate due to multiple concussions, two broken ribs, and a slight headache that he claims was entirely a result of his annoyance at Layton's incessant babble. Spectators spoke of the other candidates morphing into a pack of wolves and mauling on Martin repeatedly, though there are unconfirmed reports that this description was intended to be purely metaphorical.

Tlacahuepan

## Math in the Real World

## Confessions of an engineer dwelling among mathematicians

## A PMC talk by Tom Lee, Ph.D. <br> Vice President, Marketing and Executive Product Director, Maplesoft <br> Tuesday June 29 at 4:30 in MC 5158

"What is math?", "Why is math?", "Will people like me ... and my math degree?". What technical major hasn't asked this question and asked it often? It's easy to see where computers can lead to in life ... jobs, money, power, dates ... but math? How many millionaires know that Gauss Jordan is not a German basketball player? Like many theoretical disciplines, mathematics is undeniably rich and enriching. Unfortunately, for many entering the field, it is often difficult to see where all this enrichment leads.
As an engineer by education, Tom had always believed that engineers ruled the world and that mathies were some distant relatives who were probably nice people but definitely lived on the other side of the tracks. Then he found himself employed by a company which does math ... real math ... and they sold products to others who do real math. Over his $15+$ year career, Tom has gained significant insights into the true influence that math has on the world. In his presentation, Tom will offer comments on his findings. Some insights will be very practical such as, "Who hires mathematicians?". Others will be more philosophical like, "Mathematical thinking as an ef-
fective framework to deal with life's complexities".
Overall, the spirit and tone of the session will be informal and light. As a 3 -time alumnus of UW (BASc, MASc in Systems Design, PhD Mechanical Engineering), he regularly makes presentations to student groups on various aspects of technology and the tech industry. As VP of Marketing at Maplesoft, his job is all about engaging mathematicians in entertaining discourse. His past life also included senior positions for Certicom - the world's best cryptographers and another hotbed of mathematical zeal. He hopes his comments will both entertain and inform. He will bring Maplesoft T-shirts as draw prizes to encourage attendance.

For more info: email Terry (tanderson@student.math)

## Most romantic poem ever!

Roses are red,
Violets are blue All my base,
Are belong to you!
[Thx Donna!]

## How to Get a Free Car

... In Only 90 Hours a Day!

If you're like the majority of people in the math building, you're poor on account of the high price of tuition. [Take THAT CS majors! - BeatleEd] A direct consequence of this is the lack of car in your lives. Some of you cry out in anguish, "How ever shall I obtain vehicular transportation!?," and to answer your pleas is this article detailing how to get yourself a free car.
So, our final goal is "get a free car". Applying CS 133 stepwise refinement, and the lemma that there are certain car dealerships that will give you $10 \%$ off a free car if you've completed a degree at a university in the past year, this goal can be reduced to "earn ten degrees in one year" followed by "buy a free car".

## ASSUMPTION 1: $\mathbf{1 0} \%$ off $+\mathbf{1 0} \%$ off $=\mathbf{2 0} \%$ off

Now, I hear you ask me, "that isn't any better than paying for a car, since you have to pay for ten degrees worth of courses!" This is not true, gentle mathie! For you see, your tuition covers five courses in a term. After that, additional courses are free! Now you say, "but what about prerequisites?" Well, if you take all ten degrees simultaneously (rather than earning one every 1.2 months), this won't be a problem.

ASSUMPTION 2: You can take any number of courses in a term
By applying math, we see that 10 degrees times 40 credits per degree is 400 credits. Given that there are three academic terms in a year, this amounts to 133 courses per term, with an additional course in one of those terms. Let's estimate that each course has 40 hours of lectures, 10 hours of tutorial, and 20 hours of out-of-class work (weekly assignments, review, etc.) Additionally, each course has a 2 -hour midterm and a 3-hour exam. This gives a total of 75 hours per course, for a grand total of 30000 hours of school work).

## ASSUMPTION 3: These numbers are somewhat accurate

Let's continue the analysis of our free-car year with a calculation of non-school time. First, we allot a generous 6 hours of sleep each night, for 2190 hours. Next is transportation to and from school, which at 20 mins per round trip is about 122 hours. Personal grooming gets an hour a day (include showers, bathroom time, etc.) for 365 hours. Eating, an hour a day, also gets 365 hours. Total non-school time: 3042 hours.
ASSUMPTION 4: These numbers are also somewhat accurate
Thus, the grand total for this enormous year comes to 33042 hours. Given that there are 365 days in this year, this attainable goal of a free car requires a commitment of only approximately 90.5 hours per day. Now that the goal of a free car is within your grasp, go, mathies, and conquer!
ASSUMPTION 5: Students are capable of generating temporal singularities that compress 91 hours into a day
PS If anyone manages to pull this off, tell me. I'd be impressed.
Sheep Nine

## JobMine Forum

Now that we have worked through our first interview/match cycle using JobMine, we are interested in hearing your opinions and experiences about it. Please attend the forum on Tuesday July 6, 4:30-6:00pm, RCH 101 and tell us what you think.

Michelle Russell
Communications Associate

## Harper Claims Martin Soft on Porn

## Comment leads to unintended sexual innuendo

During a press conference at a campaign stop in New Brunswick, Conservative leader Stephen Harper promoted his party's stance against pornography, claiming that the Liberal party stance is too weak. "Paul Martin is soft on porn," said Harper.
Harper went on to propose federal subsidies to Viagra, so that other male Canadians with problems similar to Martin's can continue to enjoy pornography for the rest of their lives. "The Conservative party is impressed with the number of proposals on this subject we have received through e-mail," he wrote in a press release. "Like these proposals suggested, the Conservatives want to Fwd: Re: Get cheap v1.aG.r.A Onl1n3."
The Prime Minister was irate at Harper's comments. "My problems in this matter should not be the subject of a political debate," said Martin. "Taking political advantage of this only one day after I had some troubles in the sack is despicable. He should apologize."
Harper's comments were a continuation of the previous day's surprising admission that the Conservative party opposes child pornography. This position is sure to set his party apart from the Creepy Guy With a Camera Who Lives Near the Elementary School Party. Harper continued to emphasize his position. "Martin is soft on porn, but when it comes to child porn, no one is harder than Stephen Harper and the Conservative Party. What?" he said, as his campaign staff burst out in laughter.
Disclaimer: Apart from the fact that Harper said Martin was "soft on porn," nothing in the above actually happened. Seriously, you didn't think Harper would support subsidies on anything, did you?

## UW to Field Test New Restroom Innovation

The University of Waterloo recently announced that they had volunteered the university campus to be the test bed for a new and revolutionary innovation in restroom technology: unbreakable perforations.
At this time, hundreds of rolls of toilet paper imbued with this fascinating new PermaPerf technology from We're Assholes Laboratories have already been installed in numerous restrooms around the university campus, and the effect has truly been dramatic.
"We're all very excited about the beta test," gushed Poofer Goles, lead scientist at WA Labs and creator of the PermaPerf technology. "We feel it has amazing potential. I mean, just try to break these perforations. You can't. They're indestructible, like this pendant, and just as useful."
WA Labs will conduct most of their observations for the test through Imprint's "Campus Question" featurette and its various ripoffs in every other non-mathNEWS paper found on campus. They have explicitly requested that all replies to their queries omit the use of profanity, apparently based on test trials with their previous technologies.
The University of Waterloo has previously worked with WA Labs on various projects, including the QUEST system, the JobMine menu system, and the Nexus Windows Installer.

## profQUOTES

Are your profs funnier than the ones we keep getting quotes from? Prove it to us by submitting your profQUOTES to the BLACK BOX between the C\&D and the Comfy, by e-mail to mathnews@student.math.uwaterloo.ca or just yell them out really loud and hope an editor, or a writer hears them and writes them down. Better yet, go with one of the first two options.
"Well, our cheap 'iterative' method doesn't work anymore, so we're going to have to go back and do it in the missionary position now."

LeRoy, CHEM 123
"If you've declared someone your friend then they can see all your private parts."

Robinson, CS 246
"So that's inappropriate intimacy... which is kinda kinky within itself."

Robinson, CS 246
"I'm not going to write this theorem out. That would take 10 minutes. However, I am going to prove it..."

Schellenberg, MATH 136
"If I misspelled cancellation by putting too many L's in, just cancel an L."

Schellenberg, MATH 136
".. and tomorrow we're doing ... umm, tomorrow's topic is ... umm, memory?"

Serafini, PSYCH 101
"Could it be possible that you are too busy writing notes and forgot to listen?" Student: "I don't take notes!"

Serafini, PSYCH 101
"Does anyone see why this is obvious?" [pause] "I guess it must be obvious, because I can't see how I got there."

Sivaloganathan, AM 250

## Quest Hope

As I sit waiting for the Quest clock to hit three, I think to myself "I hope it works". The seconds creeeeeeeeeeep by as I shuffle my papers once again. I click and get the same dismal response, seeing the seconds oh so close to 0 . Again I try; Quest finally relenting. I enter the numbers and click as fast as I dare hoping I don't get enrolled in PHYS 121. Five classes I add, no more and no less, five being the number of classes in which I enroll. I quickly scan the results and click the little button, signing on to four more months of torture. Three CS courses what am I thinking. Waiting for Quest to process my simple request, I think to myself "What if I had a bottle of whiskey?". Waiting, and waiting, I begin to think that IE has crashed. My patience is rewarded with a colourful screen of yellow highlighted classes. I double check and triple check this list, almost thinking I missed one class. I logout and think "Thank God that worked without a bottle of whiskey".

Greba

Prof: "Let me write the proof down first." Student: "But I know what you're going to do." Prof: "That is a very dangerous thing to say. I don't even know what I'm going to do."

Tuncel, CO 454
I find when I teach from slides, I'm even more dull."
Van Beek, CS 245
"Binary search is not how you search through a phone book, even though J.P. Preti said it was. He lied, the first of his many lies."

Vasiga, CS 240
" $\ldots$ and I know you've all seen Lord of the Rings because you're all in Computer Science."

Vasiga, CS 240
"Some words are looked up more on Google. Some end with an ' $x$ ' and start with an 'se.' That's not Software Engineering eXtreme."

Vasiga, CS 240
[referring to finding bounds] "It gets a little artsy. There is no real correct answer... it's just what your professor likes."

Wood, MATH 138
"And now we're back to this sea of negatives..."
Wood, MATH 138
"This looks really hard. Actually, it is hard."
Wood, MATH 138
[showing animation of a picture rotating and zooming in repeatedly]"Some people unwisely think that this may make a nice screensaver"

Hendrik Lenstra at Fields institute talk
"... but we wouldn't teach you all this if it wasn't going to be useful sometime in the distant future."

Wood, MATH 138

## Splinter

## The Name Game

Why Splinter? Splinter sounds more like a pain in one's side rather than a powerful Master Ninja... Just a thought.

## Pete

## God: A Play

## By Woody Allen

Friday July 9 at 8:00pm
Saturday July 10 at $2: 00 \mathrm{pm}$ and $8: 00 \mathrm{pm}$
In the Green Room in ES2
Tickets are $\$ 8$ each and can be purchased starting June $28^{\text {th }}$ at the ES coffee shop or the turnkey desk at the SLC.

This will be the final architecture production done on the Waterloo campus so make sure you come out!!!

# Some Wasted Space, and a Joke I Laughed at 

The following story is completely true, I thought it was funny, and there are many of you out there may like this as well. However it might also be one of those "you had to be there" things. Whatever... I don't care read it or don't read it, print it or don't print it (to the editors)
So I'm at some guy's house with about 5 other people, only one of the other guys in there was in CS, the others not even anywhere close to being in math. We were watching Reboot, some episode where there's this virus that has somehow taken over like the entire Internet except for the computer that this show takes place in. Without getting into too much detail, let me just say that the virus eventually gets in, and infects everything, and proceeds to take over the Internet. You then see how absolutely every one of those things that are like 3 blocks on top of each other, and all those sphere guys are there "infected" just spouting off mindlessly in unison binary things such as "10110010" However to save the day bad virus turned good, Hexadecimal comes and sort of infects everyone, and turns them back to normal and all those one and zero guys go back to normal. It is at this point that the other CSer in the room says something along the lines of "It would have been cooler if those guys went from saying that " 10110100 " stuff to something like "AE9F 84CB" At this point in time the two of us just broke out laughing so hard. We really were laughing a LOT. It was even funnier with the fact that only 2 of us really got the joke. So yeah, it was pretty funny. Either way, watch Reboot with other CSers and make jokes, it's fun!

DanS

## No! You take the ugly one!

## Which one's the ugly one?

When it comes to this year's election, there's no real winner. If the Conservatives get elected, we're looking at tax cuts for the rich, increased cost of everything good (like health care, maybe even privatization, which Mr. Harper hasn't outlawed) and an almost guaranteed return to a deficit situation. Should the NDP win the elections, we're looking at a great health care system, tons of great social programs, more taxes and a massive deficit. The Bloc has a grand total of $0 \%$ chance of forming a government that will not collapse within the first week of its existance. The Green party doesn't have the support, nor the coverage necessary to make more of a dent than they already have and nobody in their right minds would vote for either of the communist parties or the christian family party (or whatever it is they call themselves...they're just CRAZY). This leaves the Liberals. Granted, they've not done the best job over the last 11 years, I'd rather see them in power than the alternative. Their math does work. They did balance the budget. Ok, so the sponsorship scandal isn't a good thing, neither is the state of the military or the bureaucracy in Ottawa, but these are thigns that they would hopefully fix. So, for those that aren't abstaining from this year's elections, PLEASE don't vote for the devil (whomever you think that to be...as for me, it's Harper)

Beatlemaniac

## Male Mathies Deemed Sexiest Men On Earth

Ok, well I am sure that many of you out there are already skeptical just looking at the title of this article. I assure you that it is the absolute truth. A poll was taken and you guys came out on top. Beating out Brad Pitt, Johnny Depp and Orlando Bloom, it is the consensus that you guys are just superior in so many different ways. This has spawned interest in the movie "Pirates of the Convergence: Curse of the Divergent Series." Filming is set to begin in the fall.
There is just something about you male mathies that make you irresistible. It might just be the stench of desperation that hangs like a cloud over the MC and the knowledge that you will be an easy catch. However, I believe that it is something entirely different. There is something that you are all hiding. Something that people cannot see but we all know it is there. It must be that huge, gigantic, enormous... BRAIN. (Get your minds out of the gutter people.) We girls know you all have it and it is the greatest turn on. Just listening to you guys talking about stacks and heaps, deltas and epsilons... (Dang it is getting really hot in here?)
So don't listen to those magazines that tell you to work out your muscles, wear the coolest clothes or cut your hair in a certain. The only thing you \need to work out is your brain. That is why it is so hard for a girl to stay single in math, there are so many great guys to choose from, the hard part is deciding. So, remember guys: if you've got it, flaunt it.

## What's your body type?

I have prepared this not-so-well-thought-out quiz for all of you. Here are the questions; score card is provided at the end.

You are at a bar and want to order a drink. Do you:

1. Order water.
2. Order a mixed drink.
3. Order wine.
4. Order Jolt.
5. Order beer.

Your best friend is brandishing a long knife and looking at you with his mouth watering. Do you:

1. Run away.
2. Point to the tastiest meat on you.
3. Suggest that you are mostly fat and he should try someone else.
4. Brandish a bigger knife and threaten to eat him instead.
5. Order beer.

You realise that you can no longer hit a number on your touchtone phone. Do you:

1. Eat the phone.
2. Buy a new, bigger phone.
3. Buy a dial wand.
4. Slash the phone with your newly brandished knife.
5. Order beer.

Now, go throw and add up your point total. If you scored a negative number, you're an idiot. Otherwise, you have some kind of body type. In fact, your probably have a body type even if you're an idiot.

Yes. That is all. I want free food.
e.

## HorrorScopes

## Predicting cataclysm for a good year now

ACC - Your luck is due to change, as you're about to become fabulously wealthy, marry the person of your dreams, and become ridiclously famous, all over...
Sorry, I had it upside down. You're about to go broke after a severe audit, your SO is going to leave you, and your friends are all going to forget about you. Tough luck, mate.
Your lucky number is a complete fabrication.
ACTSCI - So, failed any good exams lately? BWA-HA-HA, I crack myself up. Seriously though, have you?
I know you Actuarial types do more than write exams, but it's really easy to belittle someone when they make an undergraduate career out of failing things. I mean, I scarcely have to do anything. Look at PMATH; they're lauging at you now.
Your lucky number is $49 \%$.
AMATH - It's summer, and this can mean only one thing: barbeques. Yes, it means meat, flames and good times.
I suggest against the open pit for now. Landlords frown on big holes filled with fire in the backyard, even if it is cool and you can see it all the way down the block.
Actually, now that I mention it, that'd make some bitchin' marshmallows.
Your lucky number is 400 degrees.
BBA/BMATH - Being registered at two universities does not entitle you to vote twice in the Federal election. Goodness, they're not even in separate ridings.
Nice try, though. Ask STAT what they think the influence on the outcome would be if you could vote twice. Then be the wiseacre and ask about the skew in the results if everybody could vote twice.
Your lucky number is vote early, vote often [Hey, that's not even close to being a number... - inkEd].
C\&O - After getting tired of waiting too long for your coffee, use the black art of scheduling to optimize the flow shop. Then try and discover my secret identity so you can beat me up for badly abusing terminology.
Wait a minute, I'm not supposed to say that... crap.
Your lucky number is $\$ 2.95$
CS - Don't let rainy weather dampen your spirits! Wet grass is just as good as dry for playing frisbee. Just try not to slip.
AMATH will remain unconvinced of this fact. Drag them outside to play anyway.
Your lucky number is 27 degrees and drizzly.
MATHBUS - As tempting as it may be, I suggest against stuffing your ballot box on June 28th. While I think we can all agree the local Green Party candidate could use a couple of extra votes, if you're going to cheat, you shold at least cheat so that your candidate wins.
That being said, I can't really say any of the major parties has really wowed me in this campaign. I take what I just said back; go wild.
Your lucky number is 400 extra votes.
MATHSCI - Inspiration has struck, and it has told me to tell you to see Undeclared.
Operations Research - Good news! Tides will change in your direction when the death of a distant family member leaves you with a bad-mouthed cockatoo.

ES will be jealous. If they bother you too much, flip them the bird.
Your lucky number is the number of relatives between you and your 17th cousin 42 times removed.
PMATH - In the coming week, the heavens will open, and a great procession of cherubim and seraphim will descend from above, and the words upon their lips will be, "Great is the major of PMATH, for it is above all others..."
Whoops, I seem to have confused an angelic host with a rainstorm. My bad.
Your lucky number is a $70 \%$ chance of showers.
SOFTENG - Got a job yet? If you do, stop reading. Otherwise, the stars have this important tidbit for you: it never hurts to personalize a resume. In the past, the stars would've recommended crayon, but with the new JobMine system, they suggest instead the most outrageous HTML you can come up with. BLINK tags, MARQUEE tags, colours that clash; don't hold back. And if all else fails, cram a crayon in the disk drive. It should have approximately the same effect.
Your lucky number is a $45 \%$ success rate.
STAT - Doom, gloom, blah blah blah. I'd tell you what the stars told me about you, but the fact of the matter is, I also already know that you don't want to hear it.
It's your loss. I guess I'll just have to keep these exam solutions to myself...
Your lucky number isn't particularly funny.
UNDECLARED - I have discovered a truly marvelous fortune, but this margin is too small to contain it.
Your lucky number is a bunch of baloney.
ARTS - Let's see if I can figure this one out... first I make some kind of comment about you being dumb, then I suggest that you have loose morals, then I mention that you should get someone to fix the dumb mistake, and pay by methods involving said loose morals.
Man, I gotta come up with a better script for these things. Being predictable is no good in a fortune.
Your lucky number is the bottom half of the number 4.
AHS - Try not to push yourself too hard during these hot days of summer. Heatstroke never did anyone good.
On the other hand, it makes a lot more convincing reason for missing class than "shagged out".
Your lucky number is $4 \mathrm{~min} / \mathrm{km}$.
ENG - So I heard that yet another engineering degree is being considered. Goodness, before much longer, you'll be able to make a frosh team where each frosh's major is unique.
Fight the fragmentation by suggesting a merger between currently existing majors that are closely related. Like Civil and Electrical. Or Geo and Comp.
Your lucky number is 47 possible majors that could be covered by a SyDe degree.
ES - Incredibly, your knack for Geography will prove invaluable next week as you get stranded in Moldavia with a compass and a mango.
At least, I think it's Moldavia. And that might not be a mango... Your lucky number is, ah, 600 km from home. I think.

## More HorrorScopes

SCI - Well, SCI, it's a mixed bag this time around. The good news: you will become very popular. The bad news: I'd better not say.
Oh, don't worry. I just hope you're good at sitting on flagpoles. Your lucky number is 15 minutes of fame.

Eric Logan

## What the Foot and Stormtroopers have in common

- Your boss keeps calling himself the father of teenagers he's never seen before
- You work for the Empire
- You are never mentioned in the credits
- It's not your fault that you suck ass at fighting. It's all in the uniform
- You can't help but want to chuckle at the boss's ridiculous outfits
- The damsels you are sent to kill are too busy obsessed with Harrison Ford to care
- For some reason rookie, cocky teenagers never fail to kick your ass time after time after time...
- Your contribution to the Star Wars / Ninja Turtles phenomenon is pretty much limited to "Look sir, Droids!" / "I deliver a message - Shut it!"
- You are continuously fooled by the enemy dressed in your gear
- Half-pint


## Banshees Trapped in DC

Rescue attempts so far unsuccessful
Investigators recently discovered the presence of three banshees currently trapped in urinals in DC 1934. The banshees were found when authorities came to investigate an anonymous tip from a six-year-old child who would have wet himself had he not been empty.
Experts are uncertain when the banshees first arrived in the DC urinals, so clearly that's just a name. A consultation with Mr. Magic 8-Ball confirms outside estimates of around three months, but to be fair, he's a fucking hypocrite.
While the animal control workers continue to search for ways to release the banshees back into the wild, they have asked that patrons of DC refrain from using and flushing those urinals, as these actions are very painful for the banshees.
Authorities would also like to remind DC patrons that the informative plaques beside the paper towel dispensers in the same restroom are statements of fact and not recommendations.

## What The Turtles Pulled Out Of Their Shells in Rehearsal

- Golf Clubs
- Motorbike
- Turtle Wax
- A copy of mathNEWS
- Female Undergarments
- Being a Superhero for Dummies
- TMNT Action Figures
- A White Rabbit
- A ping-pong ball[Good Old Shell Game - Ed.]
- A flamethrower
- One of the other Turtles


## Macho Macho Cows

I want to be, a Macho Cooooows. Macho macho machooo cooows I want to be a macho cows.
Little did you know, but there was a lost TMNT character Mooie the Cow. He was awesome. He'd go around and eat grass and moo at people. He looked like a beefy cow. He was good for eating. Mmmm barbeque.
I like barbeques. Meat + Fire $=$ Good.

# The 26 coolest ways to say "Cool" 

Turtles Lingo

A. Awesome
B. Bodacious
C. Cowabunga
D. Dude
E. Excellent
F. Far Out

G Groovy
H. Hang Ten
I. Incredible
J. Jumping Jehosophat
K. Killer
L. Ludicrous
M. Mondo
N. Narley
O. Ostentatious
P. Poundtastic
Q. Quixotic
R. Radical
S. Spectacular
T. Tubular
U. Unbelievable
V. Vicious
W. Wicked
X. Xanadu
Y. Yowza
Z. Zoolander

## mathNEWS BYOB \#4

## Break Your Own Brain - Four some fun.

Who got things right? Who got things wrong? Who got things? Who got? Who? Answers are like a box of telephone books, you never know which one is from Kalamazoo. I promise the answers below will make significantly more sense then this paragraph.

Your answers may not be identical to the ones below, since our squares were so magical that they were non-unique (although in the first $3 \times 3$ case this is due to a trivial rotation). To be perfectly honest the original answers were lost along with my hard-drive in an unfortunate smelting accident (gold, gold... alright, so it wasn't a smelting accident, but it might have well been; no worries, I am ungelded as of yet) so really we just checked to see if your solutions worked, so here are some of my favourites. (And yes, I know I messed up the example $3 \times 3 \ldots$ I apologize to anyone who was offended by the concept of $1+2+3=4$ and offer this consolation, I have a BMath already).

## Mmmmmagic Squares

a) For the 3 X 3 s you must use each digit (1-9) exactly once

| 4 | 8 | 2 | 14 |
| :---: | :---: | :---: | :---: |
| 6 | 1 | 9 | 16 |
| 5 | 7 | 3 | 15 |
| 15 | 16 | 14 | 8 |


| 6 | 5 | 3 | 14 |
| :---: | :---: | :---: | :---: |
| 2 | 8 | 4 | 14 |
| 7 | 1 | 9 | 17 |
| 15 | 14 | 16 | 23 |

b) Now we get a little tougher, a $4 \times 4$, but you've been given some information. And you no longer have to use each number exactly once, you are free to use any digit between 1 and 9 that you like, as often as you like, as long as it all adds up.

| 6 | 6 | 9 | 1 | 22 |
| :---: | :---: | :---: | :---: | :---: |
| 4 | 5 | 1 | 9 | 19 |
| 8 | 4 | 6 | 4 | 22 |
| 8 | 1 | 4 | 3 | 16 |
| 26 | 16 | 20 | 17 | 20 |


| 7 | 3 | 7 | 3 | 20 |
| :---: | :---: | :---: | :---: | :---: |
| 7 | 3 | 7 | 3 | 20 |
| 3 | 7 | 3 | 7 | 20 |
| 3 | 7 | 3 | 7 | 20 |
| 20 | 20 | 20 | 20 | 20 |

c) Time to get downright wacky with a 5 X 5

28

| 5 | 6 | 1 | 9 | 7 | 28 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 2 | 9 | 8 | 1 | 22 |
| 7 | 2 | 1 | 7 | 1 | 18 |
| 5 | 9 | 4 | 4 | 8 | 30 |
| 3 | 2 | 5 | 3 | 8 | 21 |
| 22 | 21 | 20 | 31 | 25 | 20 |

## Taztacular

As every submitter solved, it was a simple case of 7 triangles that can have the Pythagorean Theorem applied with 15 cm height and 20 cm base once the straw is unrolled. $25=$ Square $\operatorname{Root}\left(15^{*} 15+20^{*} 20\right)$, we then multiply that by the 7 times the
string is wrapped around and get our result of 175 cm .
Four submissions this time, and I'm happy to note that you all tried the tiebreaker. This means we don't have to think up new puzzles since we can just use some of yours. Woohoo, the not-so-secret plan works! On to the scores... we had three perfect scores and one not as perfect score. So sorry Peter, despite your interesting tiebreaker you only got 10/14 due to neglecting to properly sum your diagonals. So we have a three way tie between Dan Lynch, Frogg, and Kathryn (an AHS'er who said "Yes that's right mathies, mathNEWS has corrupted and ASHer!" That's amazing, I didn't know we had a faculty of Applied Secret Hedonism... just kidding, great to see that we can count non-mathies amongst our regular readers), all of whom got 14/ 14. And so, we turn to the tiebreakers to pick a winner. And the result is... I like fives. Frogg's problem intrigued me, as I'm sure it will all of you. So congrats Frogg, come on down to MC3038 (The MathSoc World Domination Launching HQ) to pick up your C\&D gift certificate.

Tiebreaker Tiebreaker, roly poly tiebreaker, tiebreaker tiebreaker, solve them up, yum. Ya, so due to the overwhelming success of the tiebreaker concept from last issue, we're repeating the concept. So once again, give us a riddle/puzzle/brain teaser along with full solution, and if there is a tie (which let's face it, there often is, almost like we're offering short problems to the best students in the world), our favourite will win. And new this week, a new offer ( $25 \%$ more free!), if you don't want to submit, but for some bizarre reason you're still reading this paragraph you can submit a riddle/puzzle/brain teaser for no other reason then to offer a problem to entertain, amuse and confuse your fellow mathNEWS readers. So submit your solutions, and submit your tiebreaker... or, just submit a tiebreaker, cause we hereby declare that that makes sense.

So, using our wonderful submissions, here are your problems for this week. You will submit, you will do this because I'm telling you to, and you have already submitted to my will, now submit to mathNEWS. Er... please? Answers must be in by $6: 30 \mathrm{pm}$ on Monday, July 5th. You can drop them in the BLACK BOX between the C\&D and Comfy (no one knows what magical mystery occupies the inside of the BLACK BOX, but we do know that unless you regularly submit to BYOB, Squiz and gridWORD it gets angry, and you wouldn't like it when it's angry, it's either submitting solutions, articles, profQuotes, skittles, pretzels, and chocolate, or a decision between your first born and the finest virgin in the land). If you're not the type to slip your precious solutions into a mysterious slot on the third floor, you can email us at mathnews@student.math.uwaterloo.ca.

## Peters Picked Pickled Problem

The number below is intended to be a 28 digit number. The blanks are to be filled in with the digits 0-9 (using each digit exactly once). What is the probability that the resulting 28 digit number will be divisible by 396 ?
(Don't forget to prove it)

[^0]
## More mathNEWS BYOB \#4

## Frogg Flabbergastingly Fabulous Fives

You must "five-construct" each of the first 10 natural numbers (1 through 10), giving two unique "five-constructions" for each. To five-construct a number, combine exactly 5 instances of the number 5 , using some or all of the 5 simple arithmetic operations ( $+,-,{ }^{*}, /, \wedge$ ) and parentheses, such that the result is the number you are constructing. Here is an example of what we would want for the number 0 :

$$
0=(5-5) *\left(5-5^{*} 5\right)=5 / 5-5^{\wedge}(5-5)
$$

Juxtaposition is not allowed (you may not use 55 directly), and unary minus is not allowed, just substraction.

## Kathryn Kreated Katatonic Kreations

Fill in the empty (and unshaded) squares in the grid below with each number 1-n (where $n$ is the number of empty squares) using each number exactly once.

Ensure all the equations are satisfied. Oh, and actual recognition goes to Erich Friedman who developed these problems, sorry Kathryn, but on occasion we satisfy copyright recognition issues.
a)

b)

n)


So that's this week's problems. Don't forget to submit your solutions or we'll never get our last Dominatrix Scout Badge. The BLACK BOX eagerly awaits your deposit, our vast diskquota craves your bloated submission. Submit today, tomorrow get all your friends to submit! The next day? The world!

Brain Master Snuggles
Can I borrow your brain? I already broke mine

## mathNEWSquiz \#4

You will be submitting to this Squiz, you will be doing this because it's the right thing to do, you will be doing this because if you don't, we'll start killing kittens. That's right, cute cuddly kittens are going to be slaughtered unless we receive several submissions. You've left us no choice, we're going to cover the kittens in our radioactive ooze and see what happens, best case scenario, Baby Mutant Ninja Kittens, worst case, the Office Manager is going to find a glowing mess in the corner to clean up. So be sure to email us at mathnews@student.math.uwaterloo.ca or drop your submission of in person at the BLACK BOX. Last issue we only had one submission, so Dan Lynch wins with a score of 24. Come on by the MathSoc Liberation Office at MC3038 to pick up your $\$ 5$ gift certificate for the C\&D. To the ones and ones of people interested in the answers, here they are.

ME: 1- Flin Flon, Manitoba 2- Bobby Clarke 3- Turku, Finland 4- Ottawa Senators (initially the Edmonton Oilers). I switched loyalties due to liking Ottawa's style more (late 90's) 5- Tom Clancy's Red Storm Rising
Beatles: 1- Richard Starkey 2-Paul McCartney's sheepdog 3Eric Clapton and his love of chocolate truffles 4- Oldest: Ringo, Youngest: Harrison 5-Released:Let It Be, Produced: Abbey Road

D-Day: 1- Allied assault on occupied French beaches. Took place on June $6^{\text {th }} 1944$ 2- Great Britain, Canada, USA, Australia, Belgium, Czechoslovakia, France, Greece, Netherlands, New Zealand, Norway and Poland 3-UTAH, OMAHA, GOLD, JUNO, SWORD, OVERLORD, MULBERRY, NEPTUNE 4-Beatlemaniac $=>$ Grandfather was in the artillery 5-5 to 7 years

And now onto this week's exciting challenge, can you write answers down and send them to us, what's a matter, do you hate kittens? You bastard. [To be fair to DFA, I decided we needed an intro, he's not a kitten killer, don't make me one, submit now - SnugglyEd]

## Teenage Mutant Ninja Turtles

1. Which actor from the 1st movie was born on June 29, 1968 ?
2. How many of the actors who played turtles in the original movie were not in the second movie?
3. What is Shredder's real name?
4. Who were the people in the flying cars?
5. What other Superhero was also affected by ooze?

## Renaissance Painters

1. What are the full names of the artists Leonardo, Donatello, Michaelangelo, and Raphael
2. Who described Leonardo's life?
3. Which of Jesus' acquaintances did Donatello sculpt?
4. Which of the artists listed above died and was born on the same day of different years?
5. What campaign did Michaelangelo during the Counter Reformation?

## The Election

1. Who is the prime minister right now?
2. How seats does the offical opposition have?
3. What $\%$ of possible voters did the winning party get?
4. How many official elections happened on June 28th?(hint: it's not 1)
5. Who won their riding by the biggest blowout?

## gridCOMMENTS

Hello again! So, the CryptMaster is absent, once again, and the ConMaster has been very sick...so we have a nice, hastily done gridWORD for you this issue! But fear not, we stuck with the theme...Teenage Mutant Ninja Turtles! Keep in mind, not all clues will have to do with this theme, since it's very difficult to do theme crosswords.
Unfortunately, there is no cryptic this issue. We apologize profusely...but have some fun with the conventional! Don't forget to submit that completed (or incomplete!) gridWORD and possibly win a prize. Submissions go into the BLACK BOX between the C\&D and the Comfy. Last issue's winners were: The SE Sheep for the conventional and Mike Huang for the cryptic. Props go out to Dan Lynch for submitting both a conventional and a cryptic solution AGAIN this week. Keep up the good work!
And this week's gridQUESTION is: "What would you do for a Klondike Bar?"
Happy Solving!
ConMaster

## ACROSS

1 one turtle's artwork?
10 group of four
11 cowabunga!
12 shredder's side
13 the female reporter
14 chauffeur-driven car
17 lead astray
18 rooftop piece
19 very obvious
22 donatello's drive
24 finger property
25 sweet Italian love
26 ajar
29 continue support
30 Care Bear villain
31 the turtles' sustenance

## DOWN

2 calligraphy
3 bye bye
4 sleuth's tool
5 Splinter's teeth
6 anachronistic hairstyle
7 resulting
8 weak stomach
9 fought logic
15 the turtles' dwelling
16 a pie
20 Raphael's colour
21 Roy from Saskatchewan
22 parsley relative
23 $\qquad$ del sol
27 chopped fried potato
28 quick and intelligent person
Go Green Machine!

## Abridged CS 240 Midterm

1. Do you know all the math in the world, ever?


WHERE YOU CAN SMOKE, DRINK, GAMBLE, FILIIT, SXATEEOARA AND READ ARCHIE



[^0]:    5_383_8_2_936_5_8_203_9_3_76

