## mews

Volume 95, Issue 2
Friday, May 28th, 2004

## 8 THINGS YOU CAN DO WITH MATHNEWS

GIVE TO A FRIEND


(2) USE IT AS TOILET PAPER
(3) MAKE A TENT 1 "OC)
(5) FEND OFF MUGGERS

(8) BREAK THE TEN COMMANDMENTS

(4) CUT OFF LIMB (S)
(6) REPLACE PET


I STOLE THIS MATHNEWS ON SUNDAY FROM MY PARENTS, STEPPING ON A FEW ANTS ON THE WAY, AND BLAMED MY ROOMMATE, AND CREATED A GOLDEN IDOL TO CELEBRATE MY DIVINITY.

WITH MY PANTS DOWN.

## lookAHEAD

| mathNEWS |  |
| :--- | :--- |
| June 7 | Issue \#3 production night |
| June 11 | (:30 pm, MathSoc Office (MC 3038) |
| Math Faculty | Issue is unleashed upon the world |
| May 31 | Final date for fee arrangements this term |
| June 7 | Fall enrolment begins |
| MathSoc |  |
| June 1 | Bowling Night |
| June 3 | Lemonade Day |
| June 9 |  |
| June 17 | Games Night: Manhunt |
| June 23 | Cotton Candy Day |
| Games Night 4 |  |

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A Student Chapter of the ACM

## CSC Flash

The CSC has voted in the executive for Spring 2004. The results are:
President: Dan Morton
Vice-Pres: Tim Loach
Secretary: Lesley Northam
Treasurer: Michael Biggs
Sys Admin: Chris Gagnon
The CSC is planning many fun events for this term. We even have Larry Smith giving a talk this past Wednesday. I'm sure that by now you know that it was a great success. Hopefully, the MathSoc budget meeting on Thursday was also a great success. I like successes. Especially ones that involve money.
We are also planning a programming competition, a casemodding workshop day, and many other great things. For more information, please come by our office ( $3^{\text {rd }}$ floor MC), and keep your eyes out for our posters! They have a big CSC logo on them. Yay logos!

Michael Biggs

## mastHEAD

Hear that? It's the winds of change...
So it seems that my rise to power is absolute and complete. Yes, that's right, Sheep Nine has been elevated to mastHEAD writer! Soon, my great article writing skills will be superceded by my even better editing skills! The template I'm filling out says to babble about something or the other that is on his or her mind. Hmmm, what's on my mind... well, there's the Godawful CS 246 assignment I just completed. Isn't it fun to implement an interface, when the interface defines the member variables of the implementing class? The correct answer is no. Oh, and the God-awful SE 240 assignment. Isn't it fun to sort 30 functions by their relative run-times? I don't actually know the correct answer to this, since I didn't actually do it. If you can show me an algorithm with $\mathrm{O}(\lg \lg \mathrm{n})$ run time, THEN I'll sort it in the grand scheme of things. Otherwise, I choose to use my time doing something more entertaining. Like sitting in front of my computer zoning out.
My first duty as pseudo-editor was to ask the production team... what takes forty licks to get to the center of?: Peter ( $A$ tootsie pop), Ian (An electrical socket), Symbolic Reference (Soluble pineapple pizza), Cass (Artsie revenge), The Flying Monkey (Pi), DanS (An ice cream cone with exactly forty licks worth of ice cream surrounding the center), Marshall (A sentence ending with a preposition), Jos (A gridWORD solution), Zack (The carpet in the comfy lounge (delicious...)), Dirty Flame Axle (Steak), Snuggles (me).

Krease $((0))(0(0)(0))))$
Sheep Nine (Everything yummy ;)
Beatlemaniac (A 12" kielbassa)

## Pres Says

## Drinking from gallon pails, I dine on moose.

Well, actually, I'll dine on most things from the BBQ this time of year; however, that has very little to do with matters of the Math Society.
This week just past has been fairly busy with MathSoc events; the Cove Night was Wednesday, and on Thursday the MathSoc Council met, mainly to pass the budget for the term. Unfortunately, as I write this article none of these things have actually happened yet, so I can't report on them. I can tell you though that if you stop by the MathSoc Exec office during one of my office hours (MWF 12:301:30) r'll be happy to tell you where your $\$ 10.50$ goes. (Note \$3 goes straight to mathNEWS.)
In the past week I've also met all of the other Student
 Society Presidents from around campus. If you have any questions about another society, please let me know, and I can let you know who to talk to.
In other news, a Federal Election was called for June $28^{\text {th }}$, so I encourage everyone to go out and vote.
To wrap it up for this issue of mathNEWS, I offer a chocolate bar to the first person who can identify the poem and author that I borrowed the title of my article from. I paraphrased slightly so it may be a little tough to find, but I'll give you a hint; I read the poem for my Canadian Lit. class.
Good Luck!
Catherine Moore

## You may have a new VPF

## Come by the Exec office!

As you may have noticed, there was an election held last week for the position of Vice President Financial. The ballot count was completed on Tuesday of this week and ratification is scheduled for Thursday's Mathematics Society meeting. If you attended this, you'll know if the process was approved or not, but a better idea is to drop by MC 3039 and figure out who your new VPF is.

Beatlemaniac

## VPAS Says

Hey all! It's everybody's favourite S04 VPAS writing in again, just to let you know on what's going on for the next few weeks.
First thing next week will actually be a MathSoc 5-pin bowling night, being held at Waterloo Bowl (near Princess Cinema). This event will be transpiring at 7pm on Tuesday, June $\mathbf{1}^{\text {tht }}$ you'll have to sign up in advance, but hopefully by now you'll see the booth in the $3^{\text {rd }}$ floor hallway catering to you.
We had a really great turn out last week at our quasi-bi-weekly Games Night. If you're interested in running around until you collapse from exhaustion, this is the event for you. If you weren't able to make it out to the first one, you're really missing out! We'll be meeting for our second Games Night on June $\mathbf{g}^{\text {th }}$ at 10 pm by the Comfy Lounge and aiming to play Manhunt, Virus Tag, and some more Capture the Flag.
Also next week is our first Lemonade Day of the Spring term. We'll be serving fresh lemonade for you
 on Thursday, June $3^{\text {rd }}$ for only 25 cents a cup. <plug type="shameless" $>$ Also, be sure to take advantage of the event by buying our novelty mugs!</plug>
If you're thinking of running an event sometime this term, don't be afraid to approach either myself or Elaine Wong (our friendly powerbook-loving social director). Either of us would be happy to help you out, whether you're looking for ideas or help when it comes to catering to your fellow math students.
That's all for now...
*incinerates*
Paul Ullrich

## Orientation 2004 Update

Thanks to all those who have applied to take part in Orientation 2004! If you've applied and haven't signed up for an interview yet, do it now - the signup is on the door of MC 3038 (the MathSoc Office). What are you waiting for?
The other thing to do is to sign up for your Orientation Leader Training, otherwise known as OLT, and formerly known as PACO. This training is mandatory for everyone helping out with Orientation Week. You can sign up for this at http:// www.olt. uwaterloo.ca
That's all for now - we'll be sure to keep you updated on what else you need to know. See you later!

Math Orientation 2004

## We Still Want You on OUR Team!!

## Come Join our Scunt Team!

The Havenger of Hearts is taking place today. That's right, today!! The opening ceremonies for the Scunt are today at noon, and following the opening ceremonies, we shall return to our base and start the quest.
For those of you that don't know what Scunt is: Scunt is a large Scavenger Hunt... or rather one part of it is, and there are other activities involved, and it's a whole hell of a lot of fun!

Oh ya, and it runs for 24 hours, but you don't have to stick around for it all.
If you want to be a part of the team, look out for a rather large sign in the Comfy this afternoon. It will be there, as will someone from the Scunt team.

So come and join our team, and be prepared to take part in some really crazy activities... it's going to be a lot of fun!

Math Scunt Team

## Internet User Licensing

Everybody who wants to drive a car, perform surgery, or practice law needs to have a license. This requirement is an important part of our society; it keeps most dangerous drivers on bicycles, forces deranged doctors to write obscure self-help books, and... umm... keeps corrupt lawyers off the bar

Assuming that the majority of mathNEWS readers are more computer literate than the average PC user, odds are that you know at least one person running Windows ME (or equivalent) who downloads everything they come across because they think it will make their computer faster and/or cooler. Now their system tray is brimming with adware, their registry is chock full of spyware, and Netsky.ab@MM! has got their computer running slower than your Grandma's Sunday afternoon jog. Or your Friday afternoon Calc tutorial. It calculates about as fast as an Artsie adding up textbook prices.
Now guess what? As their knowledgeable and somewhat nerdy friend, they request that you fix it. Because they have figured out that when you became an official 'geek' you learned the magic hotkey to access the secret menu. The one with the buttons labeled:

- Go Faster
- Fix Internet
- Don't Crash
- Restore All Accidentally Deleted Emails and Files
- Add Hard Drive Space
- Make Music Legal


## Shining Light on the Mysterious Act Sci Club

Hello Math Faculty. We're writing this as an introduction to the workings of the Act Sci Club. Yes, believe it or not, we do exist.
As the name suggests, we are a club made up of mainly Act Sci students, though if anyone else wishes to join, they are welcome to do so. The Club is the perfect place for any students in first year who haven't chosen a major to find out about the actuarial science program. For those that are already in actuarial science, joining the club costs only five dollars for the term and has many benefits, some of which are:

- access to all study materials for the dreaded SOA exams in November and May
- social events, like last Friday's Post Exam Pool Night, for people to meet others in the club, and
- a list of visiting employers on the bulletin board by the office.

Come out and meet some of the companies that hire actuarial co-op students. It's a great way to get to meet some of the companies that some of you might work for some day.
Come visit the Act Sci Club in MC 3030.
We've been closed because of exams over the past week, but come up to the office and see when we're open. Office hours should be posted now.
Hope to see you there!
Act Sci Club

Being the good-natured soul that you are, you work your magic for nothing but a slice of last night's cheesecake, if you're that lucky. But you can't help but wonder... Shouldn't something be done to prevent this from happening again? After all, this scene is repeated every hour of every day in well-to-do households around the world. Some might go so far as to call it a mass perversion of justice. A crisis of epic proportions.

Every potential internet user should have to take an 'I1' test, consisting of 10 simple questions. Then they can use the internet while accompanied by someone with a full 'I' license. Once they graduate to the 'I2' level, they may use the internet unassisted, with some restrictions on certain file types. Finally, following completion of the 'I' test, the user may own and operate their very own computer, as a responsible and educated internet user.
After all, most viruses simply work because users open files called "This is not a virus.txt.exe". Worms propagate because nobody patches until they become infected. Spam continues to be profitable, and therefore multiply, because people actually buy stuff from it. If people aren't going to exercise their common sense, then maybe it needs to be exercised for them.

The Flying Monkey

## Mad cow contracts asian bird flu

Funky chicken sightings quintupled
The last thing Western Canada needed just happened. Another epidemic. This time, it's a combination, or as we like to call it a bastard child, of Mad Cow disease and Asian bird flu. The cow affected by this rare and unfathomable disease first contracted the flu via infected chicken feed. Researchers are still trying to determine how the cow contracted mad cow, since it has been on a strict chicken brain diet ever since it stopped feeding on milk. Current speculation is that the chicken had been subject to mad cow infected feed (yes, this chicken didn't peck grains from the ground, as a normal chicken does) and somehow managed to contract mad cow disease.
Investigations into how this bizzare affair even occured have yielded interesting results. mathNEWS was allowed exclusive coverage of the inquiry into how this strange turn of events happened, and how it could have been prevented. As it turns out, when the mad cow chicken had its head cut off, it didn't proceed to run around for the standard 2-3 minute period. It instead continued squacking while its lower body dropped dead. Researchers said that this alone should have prompted a full investigation, as the typical chicken head cutting involves the headless body of a dead chicken running around.

Beatlemaniac

## studentQUOTES

Super Tree: [flipping through a Linear Algebra textbook] "Kernel, kernel, kernel ..."
Crazy Johnny: [confused] "Kernel? Like corn kernel?" Super Tree: "Yeah! Except that it involves math!" Crazy Johnny: [even more confused] "Corn... math?"

## Today in Economics

## Supply and demand for Asian males

This eternity in Today in Economics, we take a closer look at something we can all relate to: the vast amounts of Asian males in CS.
Basic economic theory tells us about the supply and demand curves for various goods. To recap, we plot these curves on a graph of price versus quantity. Conventional goods are discussed with respect to monetary prices, but here we'll make use of a much more abstract concept of "price". Supply is directly related to price, and the curve has a positive slope. Demand is inversely related to price, and thus this curve has a negative slope. As long as these two curves intersect, there is a viable market for the good. The point where the two curves intersect is the market equilibrium, the price at which quantity supplied balances quantity demanded.
Generally, when the supply of a good increases, the supply curve shifts to the right, and if the demand curve remains in place, the result is that the equilibrium quantity increases slightly while the equilibrium price decreases. It's important to note that the increase in equilibrium quantity is less than the increase in supply.
Now, unless you're as blind as a bat that I've taken the slow but delicious luxury of scratching the eyes out of with a coffee stirrer and subsequently filling the gap with vinegar and covering it with scotch tape and shaking it vigorously by the wings while twisting its neck in a C-clamp that's covered with eightyear old mayonnaise and pickle juice, you've noticed that we have a whackload of Asian males around. Unfortunately, the market here is not flexible, and the supply can't adjust based on price. Our supply curve is, therefore, a vertical line. And what happens when this curve shifts right? The equilibrium quantity keeps up, but the price goes into the crapper. All things being natural, Asian males become dirt cheap.
However, there is a force at work keeping the market from reaching equilibrium: basic human respect. This force acts as a price floor, keeping the market price from descending below a certain level. As a result, we end up with a surplus of Asian males. At the price level mandated, the quantity demanded is far too low to deal with the excess supply.
So how do we rectify this situation? We can implement policies that do one of two things: decrease supply, or increase demand. The former class of policies involves significant levels of deception, corruption, or flat out demolition. The latter class of policies requires building new inroads into Hollywood, mainstream media, and cosmetic surgery. Unfortunately, both these plans are at least a few years off in terms of public acceptability. In the meantime, however, you can probably find some sellers who are willing to settle for less.

## New Mach 4 Razor

## A herald of things to come?

For those of you that do not have a TV, or don't watch it, or don't shave, or have that thing like that guy from Memento where you can't remember anything for more than a minute, you should know that Gilette has recently come out with the Mach 4 Razor. The new wave in disposable razors, the Mach four features not one, not two, not three, not five, but FOUR incredibly sharp blades used to reave your face/leg/stomach/ shoulder/back/other hair.
"We're very proud of the Mach 4", says Gilette CEO James Kilts. "Back in what we here at Gilette now refer to as the dark ages of hair removal, the consumer had to shave himself. But now, with the Mach 4, uh, mimble murble..." He then trailed off.
Reactions by theorists are divided on this new, quad-sharpened follicle purger. Some rejoice in its new, fourth blade and in the way it's faster somehow apparently. Others cite Occam, saying that the Mach 3 was simpler, and thus, better.

The general public is unanimously excited about the new razor, however, particularily mathies. "This razor is awesome," says a mathie who chose to remain nameless. "I mean, did you see that commercial? That guy shaved himself, and all of a sudden he had a Ferrari and a hot girl! I can't wait to shave myself and get a hot girl too!" The student, sadly, was one of the January frosh, and has yet to actually grow any facial hair. Estimates on the effectiveness of his plan are thus fairly slim.
There was some concern over the razor during development regarding its use by klutzes. "The razor very dangerous, potentially fatal in their hands," says Kilts, "but in the end, we chose to market the razor despite this. After all, if you're going to cut yourself with a razor, you might as well slice your jugular up good and kill yourself rather than just nick yourself and be in pain for a while." He then pointed out a very painful nick on his neck from the old Mach 3 that "still hurts like hell."
Gilette was tight-lipped about future plans for the Mach line of disposable razors, but mathNEWS did manage to get a comment from one developer: "more blades is better blades. If I'm still in charge, there'll be a Mach 5, a Mach 8, a Mach 19! Kehehehehehehehe!" When asked, Kilts said "yeah, Steve is kinda messed in the head. I think we'll cap out the Mach line at eight blades. Then we'll go with something new. Like using fewer blades. We'll call it Mach Zero."

Consumer tests of the razor reveal that it "is pretty much like the old one" and "isn't all that much better." As well, three of the test subjects fatally cut themselves. Their funeral is tomorrow.

Sheep Nine

## Outbreak of New Disease!!!

Reports of a new disease breaking out across Canada are rampant. Symptoms are easily recognizable. Happiness, followed by extreme cases of laughing, and euphoria.
Yes, it is true, Glad Cow Disease is rampant. If you or anyone else you know sees a cow that looks like its on crack, please report to the CowBusters immediately ( 1800 DEAD COW). Do not attempt to take control of the situation yourself. Though they may appear to be just happy cows, all bovine specimens
experiencing Glad Cow Disease are extremely dangerous. If you see anyone experience symptoms of extreme happiness and laughing for no particular reason, they might be victim of Glad Cow Disease.

However, if you are in MC 3038 on a monday night, you are not experiencing Glad Cow Disease. You are simply at mathNEWS production night. Rock On Mathies!!!!

Commander Celery

## The mathNEWS E3 2004 Roundup

By the time you read this, the Electronic Entertainment Expo will have been over for a full two weeks. Now you readers out there may be asking "Why, oh Why is mathNEWS doing an E3 article when it was over at the time the last issue came out?" The answer to that is simple: the content must be done before Wednesday, we couldn't possibly get an article to you regarding the great content of the expo, not to mention I, DanS your mathNEWS E3 correspondant was in LA until the very end playing all those games way before you guys... I mean doing serious journalistic work, and was just unable to sit down and write an article. So here are the mathNEWS top E3 stories for all of you to hear:

- HALO 2 is by far one of the most anticipated games that is being worked on. The sequel to the game which is by and far the only reason anyone, anywhere bought an XBox has some big shoes to fill. Bungie, the developers of this game, had a playable multiplayer demo at the shoe and let me tell you this: It is going to be the biggest gaming disappointment of the year, possibly even of all time. The premise of the game is still the same, go around shooting aliens or your friends, but the actual execution of such a game went horribly horribly wrong. The graphics engine, although supposedly better, somewhere in the programming was seriously screwed up so now all the aliens look just like blocks. Vehicles in the orginal were really quite strong. In order to prevent that in the sequel, vehicles are prone to random explosions for simply just sitting in them. The controls are less responsive and, worst of all, the sound has been reduced to nothing more than annoying beeps, much like those you hear in an MC lab when there's people who are just learning how to use vi.
- The Phantom Console was also finally shown after much anticipation after its creators Infinium Labs kept much in-
formation to themselves causing media outlets such as Penny Arcade and even mathNEWS to doubt its true existence. Well, after this E3, let me tell you there is no doubt of its existence and it was most definitely the best piece of hardware shown at the show, making the Sony PSP and Nintendo DS seem like tiny insignificant devices in comparision. The games to go with the system are nothing short of amazing, however they required that we press not disclose any of them yet as they are not ready to announce them, just know that the other systems will have no chance beside this truely amazing piece of hardware. Be ready readers: the Phantom is coming, and it is going to totally blow you away.
- Starcraft 2 (not ghost, a full on sequel) the long awaited sequel to the most successful space RTS was quietly announced at the show in an exclusive mathNEWS interview. We don't have too much to report, although we can give you the following details. The Terran, Protoss and Zerg are making a return to the game, along with 3 new playable races with no details being given right now. The game is supposed to use an updated version of the Warcraft III engine, however we were told that you can expect there to be large scale battles in this game unlike Warcraft III's ability to only allow you to build about 5 guys before reaching your population cap. We're told you can expect the game Q4 this year or Q1 2005.

So that's the news from this year's E3, the annual trade show of an industry that gives an AO rating to games that have nudity in them, while giving lesser M ratings to games that show the most brutal decapitations you can imagine, as long as the parties involved are fully clothed. Goodbye

## an article by Michael Biggs

This mathNEWS production thingy is scary and full of explitives that are explicit. Today a guy named Lino gave me a dinosaur and I ate it but it tasted like plastic. I don't like to taste plastic unless it's candy. Starburst is candy that I like but today I went to the Comfy and I bought a starburst but I got two. So if you try and buy the next starburst from that machine, you lose!
Medabots is a great show, almost as great as Digimon, which is certainly better than anything else. Someone is playing a radio but it's not music. I have a cold. Someone is talking about prime numbers which are cool like prime functions but those are usually calculussed. In conclusion, calculus is/way/more fun the second time around. Just like deriving polynomials, which just get easier and easier until they disappear! It's just like eating starbursts.

If calculus goes war-driving, would it become war-deriving? So, make math not war! Make cows not beef, but don't make beef not cows!! I wish I had Glad Cow Disease. Happy beef!!!

When the radio says things people make monkey sounds. It sounds like hockey, but that's not math. $(-2)^{\wedge} \mathrm{pi}$ is complex, and it's a complex number too, if you believe the applied mathies; but why would you /ever/ apply a mathie?? Someone
is dancing like a monkey in slow motion. I like to eat pears.
I don't really read mathNEWS very thoroughly. Sometimes go by mathNEWS and say "Hi mathNEWS!" but now I'm typing a mathNEWS so I guess I'm almost a mathNEWS too. You should all write mathNEWSes and then we'll all be a mathNEWS and we can have candy and watch Medabots. Medabots don't need homework. They just battle and stuff. mathNEWSes are weird. Don't hit me with a slinkey!
I asked many people how round Pascal's Triangle is, but nobody could really answer me. Take each piece in the two-dimensional plot of the triangle, drawn as an equilateral parallelogram of course (hexagons make it too bubbly), and extrude each piece along the $z$-axis by the magnitude of the number in that spot. A rhombus is a special kind of kite, where a kite is a quadrilateral. The plural of rhombus is rhombii? That sounds like a dinosaur. A rhombisaurus of course!! I'm building a model of Pascal's Extruded Rhombisaurus Triangle and if you'd like to help out then please destroy the CS 240 assignment drop boxes so that assignments happily disappear. Thank you mathNEWSies!!!

## Spring is Alive in FedS Office

The FedS Office (did you know they have an office? It's in the SLC) is looking alot brighter today after the addition of a new skylight. The skylight, which is right above FedS president Becky Wroe's office, was made this weekend by a team of window washers.
You might think that window washers aren't exactly the ideal people to hire to put in skylights for you, and can you really trust an executive that would do such a silly thing? Well fear not, the FedS did not hire them to put in the skylight. In fact, they were hired to wash the windows.
So what happened? Well, it all started out when one of the workers was on lunch break messing around with some of the cleaning solution. He accidentally spilled it onto the roof, right above Becky's office. That, in and of itself was fine, but what he did next, well it's just unspeakable.
Thinking that the solution might make a mess, he decided that it would be a good idea to wash it off. Well, as any chemist will tell you, there are some things that go boom when mixed with water. This my friends happened to be one of them.
After being thrown back 8 feet from the explosion, the washer got up and noticed that there was no longer roof where there used to be roof. He decided that it would be a good idea to try and cover this up by placing a large sheet of white paper over it and painting a picture of the sky on it.
President Wroe, being the hard working president she is, was in the office late that day, and looked up around 19:00 and noticed a bright blue sky above her desk. She got somewhat suspicious and after a thorough investigation realized there was in fact a hole in the ceiling. She immediately called plant operations and asked them to install a skylight.
She was informed by plant ops that this would take 12-18 months to get completed, as they were really backed up. Becky informed them that if they got this done in the next week, they would never have to clean up vomit from the bomber bathrooms again.
The skylight was installed the next morning.

## Good Software

What is good software? I am told that, when designing software, I can choose at most two of the three qualities "Fast, cheap and stable", for my software. If the product is to be fast and stable, then it can't be produced on budget or on schedule. If it is to be cheap and fast, then it will crash if you move the cursor too quickly. If it must be cheap and stable, then it will take a minute and a half of hourglass time to calculate the scrollbar position. So, if there is software out there that is cheap, fast and stable, with no compromises, then I'll say that we've found a piece of truly good software.
A car is fast and reliable. So is good software a car that does not need expensive fuels or insurance? A car such as this will have to be covered in several metres of transparent foam padding. It must also weigh less than 4 kilograms, have a drag coefficient of less than $0.2 \mathrm{Ns}^{2} / \mathrm{m}^{2}$, and be lined with speed holes of the highest quality on every exposed surface. I would argue even the most skilled automobile craftsmen of fabled Detroit are currently unable to build a car such as this for even the wealthiest of the kings of Europe.
But we have strayed off topic. A white picket fence is cheap, stable, and fast beside the tidy lawn that it is used to protect. A white picket fence is held fast to the ground by the ineluctable soil of the lands under its care and by the inescapable force of gravity. It is built by unprosperous families around unremarkable homes. A proper white picket fence will weather the elements, withstand the test of time, and remain at its post long after the original family has sold the home and left. Is a white picket fence good software then? I'm not sure about you, but I'd have to say that a white picket fence is hardly software at all.
So what is good software? Is it Mac OS 8? No. Good software is a container of fresh macaroni salad from the Math Coffee and Donut shop. It is very inexpensive, it is quick to eat, fast to satisfy and it is not in the least bit explosive. Pay a visit to the Math $C \& D$ today and experience firsthand the taste of definitively good software.
$\sim$ pi
Symbolic Reference

## Wrath of God Countered

## U/W control players, theologians shocked

History was made yesterday in the Comfy as the Wrath of God, staple reset card in most Blue/White control decks, was countered by the sheer Force of Will of one of the Magic: the Gathering players playing. Religous theologians and control players alike are baffled by the play.
"I don't know how it could have happened", says Timmy McGamer, the caster of the impotent Wrath. "I mean, the guy was playing Goblin Bidding, and he was tapped out. I didn't even think he had ONE blue card in his hand, let alone TWO. Plus, summoning the Wrath of the almighty used up all MY mana as well, leaving me powerless to stop the counter."
Hardline Fundamentalists are similarily shocked. One of their leaders, the hardlinest of them all, says: "Just imagine the audacity! A mere mortal thinking that his will alone could prevent the Wrath! It's heretical! And so is D\&D! And Harry Potter! And rock music! And puppies! And everything that's not exactly what I do or say, because I alone perfectly interpret the will of God, who by my own definition is unknowable!"

The end result of the fizzling of the Wrath was the goblins, freshly bidden from their ever-so conveinent family plot, were free to swing next turn and smash Timmy for well over 30 damage. Onlookers described the play as 1337, tech, and beatdownish. "Timmy's one Exhalted Angel couldn't do much to stop that rush of goblins," remarked one eyewitness.
"Just look at what the denial of God's righteous smiting caused!" said the head Fundamentalist. "A wave of filth and corruption washed over the helpless champion of light like a plague! God could have prevented this plague, just like he caused the Black Plague!"
Attempts to explain to the Fundamentalist the logical fallacies in all his arguments were met with hostility and, ultimately, failure. Timmy says that "I won't let this one setback stop me. I'll play that guy again, and next time, I'll be ready with the Last Word for his little argument."

Sheep Nine

## profQUOTES

[students walk out of lecture] Prof: "She's smiling, but you look guilty," Student: "We have to start the project implementation." Prof: "See you at the test rewrite! MUAHAHAHA..."

Brown, CS 338
"Hey, on April 5th, I slaughtered 32 people! Not that I play Half-Life... much..."

Brown, CS 338
[Girls scream down the hal] "No fun allowed! This is a university! ... That's not going in profQUOTES either."

Brown, CS 338
"Yeah, I know. You want a break so you can run out and rescue the screaming girls."

Brown, CS 338
""I apologize for graph theory on behalf of... graph theory. This notation is terrible."

Haxell, CO 342
"This is gamma, capital gamma. I know it looks like the hangman thing. We're off to the gallows."

Haxell, CO 342
"An ATM says 'Okay, I can't give you the 20 bucks, but I'm going to take it off your account.' That is bad. I wouldn't put it past the banks... but that is BAD."

Brown, CS 338
"I've got enough caffeine in my system - I figure I'll never die. Even if my heart stops, I'll still be twitching."

Wang, MATH 213
"It's like saying $2=4-2 \ldots$ wait, let's not complicate things."
Kolkiewicz, STAT 230
"Turns out a guy came in and shot the monitor. He was unhappy with gas prices. It was Alberta, so it's not surprising."

Brown, CS 338
"Men make lousy databases. We're afraid of commitment."
Brown, CS 338
"I'm going to assume that at least one person in this room was in juvie. And I don't want anyone putting up their hand and saying, 'Yeah... I was in juvie... "'

Brown, CS 338
"Watch, I'm gonna give myself a shoulder injury patting myself on the back."

Cook, ECON 231
"For folks who don't like calculus... my condolences. It really is a lot of fun. [class laughs] What? It's a blast!"

Cook, ECON 231
"Anyone know who Anne Murray is? Anne Murray... snowbird... Canadian icon... been around since the Bronze Age?"

Brown, CS 338
"The ideal would be to go to the database and say, 'Muahaha... where does Brad Pitt live?' and get that information."

Brown, CS 338
"Assignment 1 is out. It looks scary."
Clarke, CS 350

## Whimbits

## Random observations for food, life, and skin rashes

Because my brain is wired stupid, I often take note of random things. Sometimes I want to write about them in mathNEWS but I'm the kind of person who only reads headlines and comics, and thus can't extend anything past a brief stutter or two. Suffice it to say, this is where I stutter.

- Ilove the doors on the side of the CECS building. You know, the ones that are battery-powered and love to brag about it. They're the only doors I know of that sound bitter and resentful while they're closing.
- We could probably make a boatload of money if we instituted a UW Dimensions poster tax. Dear god, those things are everywhere. Every time Dimensions decides to have a big party, three South American rainforests scream like a hyena being juiced on a curling iron. Think of all the revenue we're letting slip through our fingers! And we should pad that with a penalty for posters left up past due. There's posters out there that have been expired for months. What is this, a public library? With a small charge for each day past due dates, we could rake in amounts of money that you have to reference male genitals to describe.
- We've determined the cause of the fire alarm malfunction.

It appears that the fire alarm was misinterpreting people as fire. Based on our two experiments where the fire alarm sounded upon re-entry of the building, this conclusion is inescapable. After all, have you ever heard the fire alarm sound when you were nowhere near the building?

- I'd like to define a new kind of order notation for algorithms that really blow. Kind of like the one on the CS 240 assignment that recurred infinitely before they fixed it. I propose these algorithms be dubbed O (suck). By extension, suck should be a function, implying that anything that derives from it also has properties of suck.
- I've finally figured out the role of the Windows Installer on the Nexus systems. It's kind of like the bridgekeeper in Monty Python and the Quest for the Holy Grail. "Before you visit the website ye seek, ye must cancel me these dialogs three." Either that, or clicking the Cancel button is the equivalent of chopping a limb off the Black Knight.

Well, that exhausts the list of stuff I had on my Pocket PC. Perhaps I will transcribe some more randomeanderings in the future.

## HorrorScopes

## A balanced part of this complete breakfast.

ACC - Your ability to write with your feet will become invaluable next Tuesday when an unfortunate accident occurs involving a bottle of ink and a rather private activity.
Remember: Green ink is for auditors.
Your lucky number is a balance of $\$ 0$.
ACTSCI - When looking up figures in the life tables for your next assignment, try not to be too surprised when your picture appears halfway down the page.
Hint: It's not there because your S.O. was using it as a bookmark.
Your lucky number is 10 ... $9 \ldots 8$...
AMATH - Good news/bad news, AMATH. Good news: You will do well on all your midterms. Bad news: Your knees are going to be sore.
Get your mind out of the gutter! It's because you're going to discover that sitting on the floor while studying works better for you.
No, seriously!
Your lucky number is a $10 \%$ increase in TAV.
BBA/BMATH - The stars wish to remind you that your frequent trips to Laurier are excellent exercise. However, your frequent trips to the Bomber are not.
I don't know what's wrong with them. Maybe I'm reading this wrong...
Your lucky number is 32 oz .
C\&O - I'd tell you what the stars have in store for you, but I'd die of laughter first.
STAT is used to ridicule; seek support.
Your lucky number isn't going to help at all.
CS - Disappointed by rainy weather? You shouldn't be. It's given you a great opportunity to work on that nerd tan.
Look at it this way: It won't give you skin cancer.
Your lucky number is SPF45.
MATHBUS - Now is the time to get used to a life of cromulence. You'll need the experience.
I don't know what that means either, but it's not like I make these things up.
...Wait, yes I do.
Your lucky number is something I pulled out of thin air.
MATHSCI - Magic 8 -ball says: ASK AGAIN LATER.
Man, I gotta come up with a better way of doing these.
Oh, I'm sorry... almost out of space, so all I can write down is:
"salami". Do what you can.
Your lucky number is probably more than you deserve.
Operations Research - While the stars gave me a laundry list of things for you to avoid, at the top of it are Beef Enchiladas and your MATH135 prof.
Don't see the connection? You will. To mitigate the experience, pass on the extra jalapenos.
Your lucky number is 17 things I didn't tell you.
PMATH - Frisbee season should be reaching its height right about now, and it'll stay good right through to August. My advice is to avoid playing on Thursday, though. Your children thank you in advance.
Why yes, AMATH is out to get you.
Your lucky number is round, like the disc.

SOFTENG - I'd tell you that summer is the best time of the year to go outside and be active, but we both know that you'd rather stay indoors and work.
I'm glad you took my advice about the chicken, by the way. My warning about the Sheep still stands, though.
Oh, and whatever you do, I really urge you to put off the grocery shopping for a day or so.
Your lucky number is $41 / 2$.
STAT - Remember last time? I still don't have a place to live in the fall. Update your forecast with this new data.
This time, your calculations should give the answers to the STAT231 midterm. Sell them to hapless CS majors for big bucks.
Your lucky number hasn't changed much.
UNDECLARED - Hey frosh! Did you know that this group includes you? Now you do!
Oh yeah, and, um, you will meet a tall, dark stranger. Furthermore, you may already be a winner in the Publishers' Clearinghouse Sweepstakes!
What? You expected a fortune?
Your lucky number means nothing at all.
ARTS - You will be shocked to discover that not all ARTS courses can be passed with bird-like ease when your professor actually hands out an assignment. Try not to cry.
The rest of us have been doing these things for ages. All it means is that you'll have to stay home one night to do it.
Hey, at least you'll be home when you wake up, for a change. Your lucky number is two hours not drinking.
AHS - While you might think that you could make some extra money on the side coaching lazy CS majors into physical fitness, your plan is doomed before it begins.
Consider offering your services to ES instead. Mention casually that cash isn't then only way to pay for things.
Your lucky number is $\$ 25 /$ hour or equivalent.
ENG - I bet you already knew that this term's Havenger Scunt is going on right now! Go out and win it! Do it!
I predict victory for !math. This can only be good for you.
Your lucky number is a $1^{\text {tt }}$ place finish.
ES - Have you thought about growing an herb garden? No? If the green thumb of ES can't bring life out of the dirt in slum housing, no one can!
My point is doing this is a good idea, but you might want to hold off on the cash crop, if you know what I mean.
Your lucky number is 15-20-15.
SCI - After last time's fiasco, I did this one first to avoid spilling Coke on it. I have good news, too! Heather Fitzgerald forgives you.
You mean you couldn't tell that that would get you in trouble? Silly SCI... I tried to warn you.
Your lucky number is equivalent to a hearty handshake.
ink_13

## Offending People, 101

If rainfall is God having an orgasm, then this past weekend he must have met the best cousin ever.

## mathNEWS BYOB \#2

## Break Your Own Brain - Double Your Fun

So I guess you all want to know who who actually came up with answers to last issue's BYOB, and who among those has been declared the glorious winner... All in due time, dear reader. First I'll answer your other pressing question: What were the answers?!
Numbers

1. 123456789 - C'mon, this one was easy (number sequence)
2. $11235813 \mathbf{2 1 3 4 5 5 - T h e ~ F i b o n a c c i ~ s e q u e n c e ~}$
3. I'll break this one up into substrings so it's easier to see the pattern: 110111001011101111000100110101011 1100. I hope you can see it now (binary number sequence)
4. 142857142 - decimal expansion of $1 / 7$, although I do like one of the alternate answers submitted: 142857116235 $474\left(t_{0}=14, t_{n+1}=2 t_{n}-n\right): 28=2(14)-0,57=2(28)-1$, etc
5. 8549176320 -numbers in alphabetical order Graphs
6. The French Connection
7. Raiders of the Lost Ark
8. Sophie's Choice

## Odd Bodies

1. I have five hands, but you would pass me in the street without comment. Why? I am wearing a watch: left hand, right hand, minute hand, hour hand, second hand
2. I have three ears, and play a starship captain on TV. Who am I? Captain Kirk - he has a left ear, a right ear, and a final frontier (front ear). Groan now if you wish. (We would have accepted any captain from Star Trek.)

We had three submissions: Josh Li (9/10), Maggie Tam (9/10), and Bryce Moore ( $10 / 10$ ). Congratulations Bryce, drop by MC 3038 to pick up your C\&D gift certificate. I was hoping for more submissions, and was quite surprised to find out that the only misses on the received submissions were on the alphabetical order numbers, and Kirk's front ear.
Well, on with this issue's questions - c'mon, give them a try even if you don't get them all, you may get enough to win! Submit your answers before 6:00pm on Monday, June $7^{\text {th }}$ - we have the BLACK BOX between the C\&D and Comfy, as well as our omnipresent email address mathnews@student.math. uwaterloo.ca ready to accomodate your brains, or whatever it regurgitates after attempting these puzzles.

## Crime and Treason

Each pair of words below is a disguised rhyme of a familiar phrase. For example, the clue "white and gray" would lead to the answer "night and day", while the puzzle title would be "rhyme and reason". Doesn't sound that hard, right? One point each.

1. sleuth and trail
2. fork and greens
3. draw and border
4. ruts and jolts
5. jars and pipes
6. yak and gnu
7. pride and chic
8. stencil and scraper
9. jamb and pegs
10. spry and flighty
11. grow and swell
12. run and lames
13. bops and clobbers
14. swank and style
15. prong and lance
16. stein and brandy

## Digititis

Fill in the blanks with numbers so that the division is mathematically correct. It's just math - it should be simple for you. Worth up to 3 points each, depending on how many numbers you get right.


Well then, now that you've spent the better part of class staring at these things and trying to answer them, why not submit them for a chance at winning a C\&D gift certificate? BLACK BOX and email operators are standing by.

Chris 'Krease' Harasemchuk

## Geese Raid The President's Office

May 24 - It was a quiet night in Needless Hell when a squad of drunken elite spy geese broke into the President's Office and stole his eighteen year old Scotch. The President's Office was in total disarray as Campus Police came onto the scene. "We knew they were coming, but there was nothing we could do. The geese were too quick for us", remarked one officer.
Luckily for President Johnston, his precious bottle of scotch was returned to his office the next day. However to his dismay, and to the amusement of mathNEWS reporters, it was empty.

## mathNEWSquiz \# 2

Hello everybody, this is the second squiz of the term. Unfortunately, I don't have any themes this week, so you'll have to deal with randomness this week. But first, here are the anwsers to last issue's squiz. Mothers' Day 1)Grafton, West Virginia, Philadelphia, Pennsylvania, May 10, 1908; 2) Mrs. Anna Reese Jarvis; 3) Carnations; 4) Woodrow Wilson, May 8th, 1914. Victoria Day 1) 2010, 1997; 2) Legislature of the Province of Canada in 1845 ; 3) The Monday preceding May 25,1952 ; 4) Monarch's birthday. Cinco de Mayo (Day) 1) Fifth of May; 2) Victory over the French in the battle of Puebla in 1862; 3) General Ignacio Zaragoza Seguin; 4) France. Stockwell or Doris Day 1)6000 years old on Canada AM; 2) I screwed up so there was no anwser; 3) von Kappelhoff; 4) Chuck Strahl and Deborah Grey.
The only submissions were from Peter and e with 7 and 2, respectively. So Peter can pick up his prize, you know when and where [Head to MC 3038 to get serviced - KreasEd].

## Stanley Cup Finals

1. Which original six team has spent the longest time without being in the cup finals?
2. Which coach has won the most Stanley Cups while in the NHL?
3. What CBC commentator has won three Stanley Cups as a coach?
4. What is the lowest career GAA a goalie has ever had in the finals?
5. How many different Canadian franchises have won the cup?

## Alice In Wonderland

1. Who wrote Alice In Wonderland?
2. What is the sequel to Alice In Wonderland?
3. What's the earliest and lastest video renditions of Alice In Wonderland?

## Star Trek Enterprise Renewed For Fourth Season

Paramount Pictures Inc., owners of Paramount Canada's Wonderland have announced this week that they will be continuing with Star Trek Enterprise for another year, at least. In a recent interview, Rick Berman, executive producer of the show, revealed some details about the upcoming season.
"We want to try and appeal to a much broader range of the market. We need to get the hip, youthy feel back to Star Trek." One of Rick's ideas for the upcoming season included replacing Scot Bakula with Mr. T. - I pity the foo' who mess with my ship.
In what is thought to be a clear publicity stunt, and an attempt to grab a share of the ever-important youth market, Paramount announced that Sponge Bob Square Pants will be making an appearance in a few episodes of the show. "Kids love him, they'll watch any show with him in it. He's more popular than even Santa Claus!"
What's in store for the crew of the enterprise? Will SBSP be able to save the day? Who knows? Who cares? Certainly not me!
4. When was Alice In Wonderland published?
5. What colour are the pills Alice has an option of taking? Monkeys

1. What letter Scrabble tiles did Marcel eat?
2. How many Curious George books are there?
3. How tall was King Kong?
4. What does the kid in Outbreak name the disease carrying monkey?
5. How many games with Donkey Kong as a character are there?
Good luck everybody, and please submit more!!!
Dirty Flame Axle

## 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:

- Chinese
- Japanese
- Liechtensteinian
- Freedonian
- Torontonian

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

- Christian
- Muslim
- Jewish
- Atheist
- Satanist
- Jedi

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

- Students' Association
- Fellowship
- Debating Club
- Political Action Group
- Swing Dancing Club
- Aggressive Recruiting Association (wait, scratch that one...)
- 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 "Torontonian 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!

## gridCOMMENTS

*stares out at the totally abandoned plain that is MC* HELLO!!!! Is anyone out there? The biweekly trip to the BLACK BOX yielded no gridWORD solutions! Where is everyone?

So, since no one did a gridWORD solution at all this past issue, no prizes are awarded. I didn't realize how difficult it was to take a sheet of paper, fill in random letters and put it in the BLACK BOX[We even have email... - KreasEd]. I'm not kidding! If someone had filled in random letters, they would have won! *sigh*
Well, here's another gridWORD... with the hopes that someone will be bored in class. I'm hoping that someone out there is awake enough to do it! They're not hard! Have fun with it!
For those of you who don't know what the gridQUESTION is, it's a question you answer as creatively as possible and submit with your gridWord solution. It acts as a tie-breaker. And the gridQUESTION for this week is: "How much wood could a woodchuck chuck if a woodchuck could chuck wood? (with proof)"
Remember to submit this week! BLACK BOX by the stairwell between the C\&D and the comfy! (Or email to mathnews@student.math.uwaterloo.ca
[Thanks to our grid designers, Jos and Marshall - KreasEd] ConMaster

## Cryptic Clues

## Across

1. Early education (after brats gain nothing) is forced. (7)
2. Digital image taken by cop. (11)
3. Father's anger follows mode of stress. (4)
4. "Ordinance" sounds like "ordnance". (5)
5. Wings are hidden by warm sun. (4)
6. Shake up horse's pace audibly at eight! (7)
7. Crumbled tart contains pie ingredients and salt, making it more delicious. (7)
8. Alarming physical education trend is imaginary. (7)
9. Bacon tortilla contains twist. (7)
10. Fourth and fifth letters to editor cause action. (4)
11. Doubles matches. (5)
12. Disturb others, concealing the two. (4)
13. Dominance of your empty spirit is unnatural. (11)
14. Crazy lion-man exists only in name. (7)

## Down

1. Money missing from billions of charged things. (4)
2. Practice paper crumpled with little regard. (7)
3. Dine atop harbour platform. (7)
4. Speaker's platform is said poorly. (4)
5. Frog is seven jumps from exoneration. (11)
6. Liberal to ignore my bad language. (11)
7. Bogged down! (7)
8. Imperfection found in disc ratchet. (7)
9. Consumed by great enjoyment! (5)
10. Employing unusual strategies in nighttime game, at first. (5)
11. Abdominal muscle loses base strength, shifting initial gastric layout. (7)
12. Animation of milk container takes nothing. (7)
13. Reel from bites from below. (4)
14. Pie holder is ridiculous for the most part. (4)

## Conventional Clues

Across
1 nighttime bandit
5 magic words
7 dull person
8 dark's counterpart
9 wildebeasts
13 move apart
14 flowering evergreen
15 mathematical labels
17 taunted repetitively
18 women's draped garment worn in Middle East
19 got up
20 and others (abbr)
23 burned
24 show
Down
1 unique
2 street drug
3 aged ruler
4 pen tips
5 ciao
6 completely destroyed
7 pals
10 dessert pastry
11 mealtime prayer
12 H 2 O
16 loose skirt worn in Pacific
17 facial hole
21 get an A
22 remain


