

math

NEWS

Volume 105, Issue 2

Friday, October 5th, 2007

If and Only If



Angelo



lookAHEAD

mathNEWS

Oct 5	Issue #2 makes an exciting entrance
Oct 17	Production Night #3, on a Wednesday!
Oct 23	Issue #3 does a backflip

Math Faculty

Oct 9	Winter 2008 Enrolment opens
Oct 22	Open Enrolment begins

Math Soc

Oct 31	π^2 Day and Halloween Costume contest
Thursdays	Movie Nights!
Oct	Interviews on-going

CECS

Oct 17-18	Professional and Post-Degree Days
Oct 26	First round employer interviews end and rankings open

Student Awards & Financial Aid

Oct 15	Last day to submit Undergraduate Bursary Applications
Oct 19	OSAP application deadline
Oct 25	Deadline for OSAP Reviews

Miscellaneous

Oct 5	Vanuatu's Constitution Day, 1979
Oct 10	Provincial Referendum on Electoral Reform
Oct 10	Provincial Elections
Oct 14	Thanksgiving
Oct 20	Sweetest Day
Oct 31	Halloween

mastHEAD

Hee ho, as in Hogwart's, dark forces were at work to keep our productioneers away from us. First there was a slew of midterms, and also there was Google tempting them with free food and swag. However, *mathNEWS* stood strong and overcame its obstacles. Then it made like all other students. No, it didn't write a work term report, it sat back and relaxed with a keg of beer.

With the manifestation of *mathNEWS* getting plastered, our production staff became hungry and had to answer "What is your favourite flavour of orphan?" After the poll, the results were: The Rage "Extra crispy", Richard "Montreal style", Matt "Salt and vinegar", Kaitlyn 'Half-pint' "You people disgust me", MJB "Flambéd in a nice white wine sauce", 42 "Extra sad with a glimmer of hope", Megaton Panda "The ones who all come from the same orphanage!", π "They all taste like chicken", Edgar "Doesn't matter as long as they're fresh"; Insider "Any one that doesn't cry constantly", DanS "Strawberry".

Naturally, there are things in the world to thank, one of which is Graphics (they are the ones who put the caramel in the Caramilk bars). Thanks also goes to thermonuclear explosions for getting rid of the evidence, everyone who gave me a restraining order, and delusions of granduer for making me feel important. "Til next time!

Michaelangelo 'Angelo' Finistauri "I sprinkle on kitten flakes to accent their flavour"

Peter 'mossED' Simonyi "They always come out tasting like gruel, and I don't know why"

VPA Says

Of course things are always in the last place you look; who would keep looking?

There are a few announcements from the various academic councils I sit on. Firstly, starting this term is pre-enrolment. What this means is that you can look ahead in your academic career and pick the courses you want a few terms in advance. This will help guarantee that you get the classes you want, in a schedule that actually makes sense.

Secondly, for those of you in co-op, you start your WatPD credits. The sooner you start, the sooner you are done. I think it would be awesome if we can get the completion rate up to 100%.

Just a few other reminders. Now that midterms are starting, don't forget to make sure that you have a faculty-approved calculator. Just come by and see me, or any of the other execs in MC 3039 to make sure you have the right calculator. Also on the subject of midterms, you can go check out the MathSoc exam bank at <http://www.mathsoc.uwaterloo.ca/exambank>. We have lots of past midterms and finals that help you determine what to expect.

Good luck as the midterm season gets underway.

Heather Perry
Vice-President Academic, F07 MathSoc

Prez Says

Hello again. After last issue's epic *Prez Says*, I promise to keep this one brief. I will use this space to say that if you have any questions, desires, or needs related to the Math Faculty or university life in general, I'm your guy. If I don't know the answer to your question I usually know who does.

Keep your eyes out for some exciting events ahead. There will be a π^2 Day this term, which ought to be a lot of fun. Also very exciting is the upcoming MathSoc Charity Ball, this year in support of the Heart and Stroke Foundation. It will be taking place on Saturday, November 17 at Federation Hall. It should be a blast, so look out for advertisements for more details.

That's it for now; time for me to get back to my assignments!

Andrew Fransen
President, F07 MathSoc

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Mr. Bumble: Peter Simonyi

Production night changes

Midterms got the better of mathNEWS

In an effort to let first-years come to Production Nights, we're shifting them away from Midterm Mondays. Want to write for *mathNEWS*? (It's bloody easy.) Email your articles to mathnews@student.math.uwaterloo.ca or come to a Production Night.

Our next production night is **Wednesday, October 17** — that means *not Monday*.

mossEd

Interesting Math

Okay, I'm going to try to pull away from number theory, as interesting as it is. Imagine we have an infinite chess board (or checkerboard, if you prefer) where each cell is either black or white. Start at some arbitrary cell and imagine you are an ant. You're going to map out a pattern in this celled plane, using a very simple set of rules:

1. Flip the colour of the cell you are on. If the square is black, change it to white and if it is white, change it to black.
2. Advance forward by 1 square.
3. If the new cell you are on is black, turn right 90 degrees. If it is white, turn left 90 degrees.
4. Repeat.

Although the rules are straightforward, the behaviour of the ant is surprisingly complex. Go ahead and try this out for some initial condition of the plane. Better yet, program it and make it display a pretty picture of what's happening in real time! When every square in the grid is initially the same colour, for example, a recurrent pattern of 104 steps emerges. A sort of highway is created, and the ant's behaviour seems to settle into the path of the highway. It's been shown that regardless of the starting configuration, the ant's trajectory is unbounded — but try showing (or disproving) that any initial condition will eventually lead to similar repetitive patterns, i.e. that an attractor always exists.

But wait, there's more! We can generalize this phenomenon by considering n ants and n colours. We make a few simple modifications to the rules. Index each colour by a number in $\{1, \dots, n\}$. For each ant,

1. Change the colour of the cell to one greater than its current number modulo n .
2. Advance forward by 1 square.
3. If the new cell you are on is [colour] turn [direction] 90 degrees. If the new cell you are on is [colour] turn [direction] 90 degrees ...
4. Repeat.

Using this construction, are there ants that produce symmetric patterns after some point in time? Moreover, how is the pattern affected by the initial condition of the board and positions of the ants? Again, if you have any interesting insights, feel free to let me know! You can drop your comments in the **BLACK BOX**, too.

Vince Chan

Halo 3 Review

Halo 3 is still Halo.

You either already own it or you hate it.

MJB

A rhythm game for classical music

A source, who may or may not be a CS co-op student that is friends of a *mathNEWS* writer, from inside Harmonix Music Systems, makers of *Guitar Hero* one and two, and the soon to be released *Rock Band*, disregarding his NDA, leaked some information to us here at *mathNEWS* about their next game. What follows is the email from this anonymous source:

*Rock Band has managed to collect a lot of hype on the internet, especially from the guys at Penny Arcade, and the game is ramping up to be quite the success despite the fact that it is going to have a fairly steep cost. There is however a very good amount of material out there that we have not tapped into yet. Fans of music other than Rock aren't coming to our games, and quite frankly we at Harmonix are getting kind of bored of it too. Because of this we're working on a new game **Symphony Orchestra** to tap into fans more of classical music. The cool thing about this game is that all the music is public domain so we can get all we want, and it doesn't even cost us any money.*

On to the cool thing. Rock Band is going to be special because of all the peripherals that it comes with, the guitar, drums and microphone. Well Symphony Orchestra is going to top that in epic proportions. We plan to ship the game with a flute, oboe, clarinet, french horn, trumpet, trombone, tuba, timpani, viola, double bass, and two violins. For special music fans we even plan a cannon peripheral for the 1812 overture if you feel like shelling out the extra cash. The game is going to be released first for the PS3, and you may note that even though they need so few buttons compared to how many they could have we've tricked the system into considering the french horn, trumpet, tuba and timpani as only one controller we still have more than 7 controllers. That means in order to play our game to the fullest extent you will need to have at least two consoles, and they must be far enough away from each other so as not to cause interference. However, when you and your 12 closest friends get together to play, it is quite the arrangement.

We at *mathNEWS* would like to thank our contact in Harmonix, and hope he doesn't get canned too quickly. Best looks are that this game will be out Spring '09, at a suspected cost of \$750, and there will likely be a special bundle of it with the consoles to play it for the low price of \$1500.

DanS

VPF Says

One quick reminder: if you have an athletics team and you are expecting to be reimbursed by MathSoc for some of your registration fees, you have until October 15th to contact me and let me know about it. Otherwise, you will not get any reimbursement. Thanks.

Michaelangelo Finistauri
Vice-President Finances, F07 MathSoc

It's time to give thanks

Although ancestrally I'm not Canadian, I would like to give thanks to the pioneers that came to this great land and then slaughtered and raped the natives. If not for their bloody conquest, I could not live in the luxury I enjoy today. Thanks!

Angelo

Bridge

It's like euchre, only better!

Lots of people I know play euchre. It's a really simple game. So simple, in fact, that they use it as a project for a CS class. I can play euchre in my sleep and win half the games I play. If I actually pay attention, I can win two thirds of the games I play against average people. There's not much strategy involved in the game, so once you know the little bits, you're set. It's mind-numbingly boring.

As a mathie, you probably have a mental capacity much greater than that of an African gazelle. You could use this to play a much better game than euchre, namely bridge. Bridge is like euchre with the following improvements:

- You use all 52 cards instead of just 24
- Instead of taking three tricks, you decide how many of them you have to take
- You can play without a trump suit
- Jacks are always just jacks
- When you call a trump suit, no card of another suit is trump

So, now that you're excited about bridge, what can you do about it? I'm glad you asked. You can do lots of things:

- **Start a bridge club:** Feds used to have a bridge club, but it died a few years ago. Start it back up!
- **Go to a bridge club:** The KW Bridge studio has games Wednesday and Friday nights and Monday afternoons. Google it for the address. They also offer lessons.
- **Play bridge on-line:** Bridge Base Online has a great client and has lessons for new players.
- **Just start playing:** Get some friends together, get a copy of the rules, and *go!*

What are you waiting for? Stop reading this now and go play. I'm probably playing right now. Unless it's 10:30 - 11:30 Friday morning, because then I'm in class.

Why must vacuums suck?

By definition!

If you want to understand this better, you should consider switching into applied math.

Making political statements no longer requires any thought

Over the past couple of weeks I have noticed some fairly odd displays being thrown about the campus. I welcome social and political statements, but some of them have been so thoroughly lacking in thought that they may as well have not made any statements at all.

The first one that comes to mind was the large waste disposal bin placed outside of an entrance to the SLC. The bin boldly proclaimed that the SLC generates 25 times that amount of garbage. Interestingly enough, the bin was almost empty. 25 times almost nothing isn't terribly impressive. I heard that one of the bins was filled towards the end of the week and smelled worse than that one guy I lived with. That's definitely more effective than an almost empty garbage receptacle.

Now, seemingly for no reason, a long stretch of paper was taped down in the rock garden with "Is drawing a noun or a

Dating Advice from the Single Guy

Another week, another letter:

Dear The Single Guy,

I met this really hot guy at the Bomber a few weeks ago, and we've been on a few dates since. Unfortunately, he doesn't want to see me any more, and he admitted it was because of my physical appearance. At first when he said this I thought he was really shallow and a jerk, but then he went on to explain that his previous three girlfriends were all blonds, and they all dumped him for somebody else. I've always had beautiful long blond hair, and he doesn't want to get too serious with me because he thinks history will repeat itself. I really like him, and he said maybe if I dyed my hair we could keep dating. My blond hair is really gorgeous and it's my favourite thing about myself, but this guy is just so hot, I'm torn.

Jenny

Well, Jenny, this sounds like quite the predicament. The first thing I would suggest is that you need to find a way to give this guy a serious lesson on the fallacy of induction (before you start writing your letters, mathematical induction is deductive, not inductive; pay more attention in your logic classes, people). Since this is a dating advice article, I'm not going to write about logic, but I can point out that the Wikipedia article on inductive reasoning can give you at least the basics. Various math or philosophy courses can also help you. If he won't take in some fairly basic logic, and still wants you to change to be with him then I suggest that you should instead walk away from this relationship, and go find someone better. You can create a logical loop: he thinks you'll leave him for someone better, and that becomes the reason you leave him for someone better. Then try to explain this to him — that the only reason you're walking away is because he thinks you will, and you wouldn't if he thought otherwise. Since we've already determined that he fails at logic it should be fun to see his brain explode when you do this.

Anyway, that's all for this week. Remember, if you have questions to ask me you can send them to mathnews@student.math.uwaterloo.ca. Just try to put "Single Guy" in the headline.

The Single Guy

verb?" written on it. First of all, if you're not sure, find a dictionary and look up the word. It will tell you in there. Next, you may not necessarily want to broadcast to the school that you're an idiot. The only motive I could fathom for its existence was that it could be an artistic statement — in which case, defecating on your hand and throwing it at a wall would send the same message as the paper on the ground.

I believe that we need to be challenged on some level by social, artistic, and political statements. That means that the statements need to be smart on some level. At this point, I may as well be throwing toilet paper with writing on it into trees, or looking to the poetry on the inside of the stalls in the MC lavatories. Come on: give me a challenge.

Angelo

profQUOTES

This is so easy I could do it without my glasses on and a beer in my hand.

Vasiga, CS135

[While having computer problems] As you can see, I am very learned in the way of the compooter [class giggles] shut up.

Balka, STAT206

A common convention used is ASCII, which stands for American something something I forget.

Becker, CS241

[While discussing character sets] If you hail from Greece or from a math faculty...

Becker, CS241

[After vacation screensaver went up] You weren't supposed to see that. Don't worry, you won't see any nudes up there.

Becker, CS241

Flush after you've done your business.

Becker, CS241

Who needs 2 million terabytes of data? How much porn do you have?!

Goldberg, CS 489

You are allowed to die before and after my class. Not during [because] I don't know how to save you. It's much safer for you to die before class.

Griggio, ITAL101

You're the only male in the world. It's your greatest fantasy.

Griggio, ITAL101

Remember: I'm not your teacher, I'm a witch.

Griggio, ITAL101

I'm not god yet. I'm working on it.

Griggio, ITAL101

You're learning the right way. You will no longer be rapers... of my language.

Griggio, ITAL101

One minus d , divided by one minus the same crap.

Saunders, ACTSC371

Sadly, I remember [this long equation]. That can't be a good sign.

Saunders, ACTSC371

It's worth 25 thousand dollars in dollars.

Saunders, ACTSC371

See! She's spaced out, she's spaced out but it's so easy she still got the answer!

Hewitt, MATH235

Just turn off gravity and the solution is obvious.

Epp, PHYS121

The only people more foolish than those who think one is prime are those who think it matters.

McKinnon, PMATH345

Did I make a mistake? I know you're panicking, so am I.

Zorzitto, MATH245

You're not going to learn a lot; you're going to write a lot. So I'll use $k=1$ to be more humane.

Zorzitto, MATH245

If this is not invertible I'll eat my shit, but I'm taking a chance here.

Zorzitto, MATH245

... and the middle finger, also known as the finger you use when someone cuts you off the road.

Zorzitto, MATH245

If you were an engineer, proof by one example: zero.

Metzger, STAT231

I suck at drawing. I almost failed kindergarten; that's how bad I am.

Metzger, STAT231

[Of the movie *Titanic*] Hence the reason Leonardo DiCaprio had to die.

Metzger, STAT231

I didn't use a calculator when I went to school. As a result, I can do weird things.

Vanderburgh, MATH135

One solution to this problem is to ignore the problem. This works for any problem.

Vanderburgh, MATH135

If you are not in this class, I realize there are 1... 2... 35 of you...

Vanderburgh, MATH135

[Lights go out. They come back on shortly.] Well, the light switches are a bit sensitive in this room. That or someone plugged in a toaster upstairs.

Vanderburgh, MATH135

*Has your prof said something quotable? Type it up and send it to mathnews@student.math.uwaterloo.ca, or write it down and drop it in the **BLACK BOX** (located on the MC 3rd floor, between the Comfy and the C&D).*

Don't Study!*A portable systems party*

Hey, UW Gamers Dude here! If you're looking for a break from midterms, come on out to our *Don't Study* event on Wednesday, October 10th.

The feature of this event is portable gaming. Bring out your DS or PSP for some mad Wi-Fi play!

If you don't have a DS or PSP, there will always be people sharing! There will also be a projector with console gaming going on, and an appearance of Pop'n'Music, a game whose controller nearly puts Hyper Bishie Bashie Champ to shame!

Wednesday, October 10th, at 5:00pm in the Great Hall of the SLC.

UW Gamers Dude

Elections!!!

VOTE!!!

For those who are not aware, there will be an election and a referendum in the province of Ontario on the 10th of October, 2007. As a *mathNEWS* writer who has, in the past, had quite an influence on his readers (since when?), I feel obligated to encourage you to vote.

There are 5 candidates in this riding. Listed alphabetically, they are: Louise Ervin (Liberal), Catherine Fife (NDP), Judy Greenwood-Speers (Green), Lou Reitzel (Family Coalition), and Elizabeth Witmer (PC, incumbent). You can find out more about them on their respective websites.

As well, there is a referendum on electoral reform. Two systems are on the table: First Past The Post (107 ridings, 107 MPPs, you win or you're out) and Mixed Member Proportional (90 ridings, 90 local MPPs, 39 list members chosen based on popular vote). Since it takes too long for me to explain these in greater detail, I will direct you to <http://www.yourbigdecision.ca>.

For more information on the election, please visit Elections Ontario's website: <http://www.elections.on.ca>.

InsideR

Halo 3 review

This time with content!

Halo 3 is still Halo. If you loved Halo 2, then Halo 3 does nothing to break what you loved. In fact, now it looks even better, and there are a bunch of new toys to play with. Bubble Shields, Gravity Hammers, Spartan Lasers, and a whole lot of new maps to try these things out on. Really, there is no way to go wrong picking it up.

However, Halo 3 is still Halo. If you didn't like Halo 2, then Halo 3 does nothing to really shake things up significantly. The combat is still based around 5 second skirmishes, mostly featuring the 1-2-3 combination of nade-shoot-punch. If you are a PC gamer, then you will still hate the lack of mouse and keyboard. This is no UT-to-UT2K4 kind of revolution that changes things up so much that you simply must try it.

Personally, as a new Halo owner, if not yet a convert, I can attest that Halo 3 has potential as a fun game. It's not that Halo 2 didn't, it's more so that I simply refused to play it, and now I'm re-evaluating that decision. Getting in on a new game seems to be a good way to introduce myself to it.

For now, I need to play more Rocket Race.

(P.S. If you want to play Rocket Race, friend me plz. Gamertag Markster3000)

MJB

Why articles about things that suck suck

- First of all, no one cares.
- Stating the obvious isn't funny.
[Is this supposed to be funny? — mossEd]
[No — Angelo]
- They are cliched and contrived.
- It's more thought-provoking to run head-first into a car.

Angelo

Vote Cthulhu

Why vote for a lesser evil?

This election, don't vote for some feeble mortals who will undoubtedly fail to keep their promises. Instead, vote for Cthulhu! Cthulhu will help lower unemployment rates by driving the unemployed insane and making them his loyal cultists. Then he will eat them. The same will be done for transients.

He will improve health care by implementing effective techniques to help open spaces in hospitals by eating the sick. Education will be given another revamping when Cthulhu works first-hand with teachers to eat the dumbest students.

Where Cthulhu's platform really stands out is his stance on the environment. If you think the water in the Tri-City area is undrinkable now, just wait until Cthulhu turns our area into a charred wasteland adorned with the mutilated bodies of the elder gods. He'll also eat endangered animals to keep them off of the endangered species list.

Cthulhu will lower taxes to draw in more people so he can drive them insane and eat them. His policies on law and order are tough, but fair: people who have committed crimes will be eaten; people who have not committed crimes will be eaten. He will also work on closing the gap between the rich and the poor by eating them both.

So this provincial election, vote for Cthulhu! Vote for no more years!

Angelo

Candidates debate education and the environment

Heaven forbid that mathNEWS contain actual NEWS

Four of the five election candidates running in Kitchener-Waterloo came to the SLC on Tuesday to talk to students. Louise Ervin of the Liberals, Judy Greenwood-Speers of the Greens, Catherine Fife of the NDP, and Elizabeth Witmer of the PCs debated such issues as the environment, health care, and post-secondary education.

On the topic of health care, there was a significant debate on public funds for private clinics. Witmer mentioned that if people are able to use their OHIP cards to pay for these services, then that is what matters. Fife, however, argued that it would lead to less scrutinization of the money spent on health care, as most of these clinics would be open mainly for profit.

When asked if lowering the price of electricity would be good for the economy, Greenwood-Speers said that the cost of electricity should be skyrocketed to force companies to conserve. Witmer, on the other hand, mentioned that tax incentives for investing in energy efficient equipment would strike a balance between the environment and the economy.

When it comes to postsecondary funding, Greenwood-Speers said that her party will reduce university tuition to \$3000 per year with a \$500 million injection into the systems. Ervin said that in order to roll back tuition as the other candidates are proposing, a greater investment would have to be made to cover operating costs. Her plan is to freeze tuition rates, which Fife reminded us was a promise made four years ago.

Don't forget that Election Day is **this Wednesday**.

Joe C

Thor's Thoughts

Exploring famous thought experiments

Under some theories on reality, the Universe has been around forever. These theories speculate that the Big Bang / Big Crunch cycle has been going on forever. If this is the case, then a few startling other things become possible, including time travel. Consider: if the Universe will be here, even if we assume that it's slightly different every time, an exact copy of our current universe will have to occur again some day, right down to the atomic level — since we already know that it's possible for our current universe to exist. This is monkeys-with-typewriters territory.

Given that, and given the premise of television shows like *Futurama* that the human body can be put into suspended animation indefinitely, it seems relatively simple to design a time-travel device. Simply freeze yourself until the time period that you want to visit comes around again. You might need a fairly advanced computer to wake you up on time, but that's pretty easy to do. Of course, once you're awake, there's no guarantee that things will go the same way this time, but since the universe you are in is as similar as possible to ours, things should proceed roughly the same way. For that matter, this method could be used to visit virtually any reality whose existence is physically possible.

Thor

Graphics uses Gmail

I guess the university is stingy with disk space to everyone.

Why must voting suck?

It's simple. Parties suck: in a system where we have to vote for which individual best serves our needs, parties mean you're no longer voting for that individual. Instead, you're voting for the party, in a system that just isn't designed for that.

So, what's the solution? I can come up with two:

- Get rid of parties
- Switch to a system that can better handle parties

For the first solution, it's going to take quite a bit of work: if you can band together with enough people, all of whom get elected with less than 43% of the vote, a large enough group can still garner 61% control, which is enough to do almost anything. Want an example? Look at Quebec's 1998 election, which is particularly notable because another party, with even more than 43%, was in opposition to the remaining 39%.

It's not as if you could just outlaw these things; such rules would be difficult to enforce. Parties won't disappear, because that increased control, so many of them see, continues to exist, and can't be prevented in our current system.

Next Wednesday, you'll have the opportunity to answer, via referendum, if the second solution should be carried out for provincial elections. That is, by going to the polls, you will be asked if we should switch to Mixed Member Proportional (MMP, or direct representation with extra seats to ensure each party doesn't exceed its fair share). I'd say, if you want a system that fixes the problem, this is your chance.

Of course, if you don't want to take it, that's your decision. I won't complain; I'm already over my quota.

Richard

If you're reading this...

...You've probably missed 2 days of Oktoberfest

KW Region's Oktoberfest started Wednesday, which means beer, traditional German food, and beer. This *mathNEWS* writer could tell you about all of the various offerings of Oktoberfest, or he could be lazy and just link you to the official website: www.oktoberfest.ca.

...But wait, there's more! The already-free buses will be more free this weekend, not even requiring the possession of a valid WatCard to ride. So, even though you already pay nothing per bus ride, you will now not even have to expend the energy to transport your many-kilogram stone tablet WatCard around. This is, of course, irrelevant if you've upgraded to the hip, new plastic model.

ebering

Automatic show casting

Totally not used by FASS

It occurred to me after many milliseconds of thought that with a form reader, a database, and a not terribly difficult bit of code, you can automate the process of casting plays and stuff. Let's hypothetically apply this to FASS. Now this simplifies thing a little because if you audition for FASS you will get a part! We don't need to include things like somehow arbitrarily deciding who of two equal actors/dancers/singers/techies gets cut.

First we need to set up the database. Nothing too fancy, you just need a table for the people auditioning, one for the respective talents, and so on. Also, you'd need to have a table populated with the roles and parts you want to fill, rated with what talents or thresholds are needed to fill the role. Some criteria would be the size of the role, how much singing is involved, stage combat experience, willingness to wear a dress, being double jointed, ability to act, how many friends you have, ability to evaluate triple integrals, willingness to sleep with the director or producer, dancing ability, and many other highly relevant criteria.

Once that's all set up, you just need to create the forms and the associated form reader. Now we're ready for auditions! Wasn't that easy?

You have your wonderful volunteers fill out an identity card, and you give them each an ID number that they give to the various directors. Your directors then rate each applicant on the criteria. Once you have all the data and wonderful aspiring actors, singers, dancers, and techies that you want, you can hit a previously-set-up Magic Red Button to do all the casting for you!

The button runs a script that goes through each applicant and position using some (probably) very nifty algorithms that make use of all the data you collected. When it's got the optimal solution to the casting problem, it can print it all out, and the previously lengthy casting meeting can then become a sexy party for anyone involved, while the computers do all the grunt-work.

Of course such a system is entirely impersonal, and removes the human element to casting, but at least you get to have a part you're suited for (e.g. extra, tree, or even tree-in-wind), and can't blame anyone but yourself. On second thought, maybe it's better that people don't use computers for casting. I know FASS doesn't!

42, shamelessly shilling for FASS

Your Surrogate Mother

Nagging away from home

Week 2: A double whammy: lectures and midterms

Hello again and welcome to a special double column. I realized on the walk here that, at least for first-year students, by the time you read this you will be past (and hopefully have passed) one of your midterms, and it's really late for a "go to your lectures" speech. But here's a better-late-than-never version which can help you draw on your first experience.

Midterm studying

Since chances are you will have to work several times harder to do nearly as well as you did at high school, you should take your first experience and use it as a guide to your next bunch of midterms:

Case 1: Your midterm went badly. This means you should alter your study habits: study better **and** harder.

Case 2: Your midterm went well. Stick to your current study habits. *Do not* relax. You did not do well because you are that smart or the stuff was easy — you did well because you studied well! Now go and study well again, and even harder, for the next one.

No, I can't be more specific than that. Everyone has different ways they learn — the best thing you can do is learn from your own performance. Seek help if you don't know what "study smarter" means. Check with the Math Undergrad Office on the fourth floor for what consultations are available.

Lectures

There is no good reason to stop going to lectures. Period. Here are the common excuses, debunked:

- **We don't have to go.** Lectures are not mandatory. So what? This only means that it's your responsibility. It doesn't make the material not mandatory — it means that you don't have

Midnight Capture the Flag was quite fun.

It is important to clarify before I start that Midnight Capture the Flag was, in fact, **not** quite fun, because it didn't happen. Midnight Capture the Flag never happens. It certainly doesn't happen every three or four Sundays at midnight. And so there's no reason for anyone to track me down and arrest me for writing this subversive article about such an activity.

Anyway (hypothetically speaking), we all gathered at MC for my first Midnight CTF at midnight on Sunday. Why Sunday, you ask? Because the campus facilities staff is around on every other night, and CTF isn't exactly the sort of thing that is widely supported by the administration (see above for disclaimer). The rules were explained to us. The flags are pink ties, and one is hidden on each team's floor.

It was lots of fun. We hung out. We ran around. I met lots of cool mathies. I even somehow got inducted into the Computer Science Club and am currently trying, with no success, to make my website work on their server. Frankly, MCTF is more important than class. Consider the professional networking possibilities! That's what I tell myself, anyway.

We may even have sung Bohemian Rhapsody at one point, which is the fundamental purpose of human existence on Earth. That alone is reason enough to go.

to get your mommy to write you a note if you're too sick or you slept in or your car wouldn't start.

- **I know this stuff.** Good for you. Do you know your prof's idiosyncrasies so you can mimic them for full marks? Do you have someone passing along any important announcements? And if you don't go to lectures, how will you know when to start going when the material changes?
- **It's in the text.** What's in the text? Examples spelled out for you to mimic on assignments? A spoon-fed explanation someone is paying big bucks for? Are you even sure you're not studying too much or too little of the material? Few courses go through the text cover to cover.
- **The prof sucks.** More than what? More than learning the stuff yourself? Find another section to sit in on, but make sure you *also* go to yours so that you're still on track for your section's announcements. Alternatively, go to tutorial centre hours to get explanations.
- **Employers don't see your marks anyway.** (*If you heard this from someone old like me, you shouldn't even believe it since apparently it's no longer [typically] true.*) I don't actually believe this has been used as an excuse but the production team claims it has. Guess what? Your mom will probably see your marks. [CECS says: "Beginning with the fall 2006 co-op job postings, the option to withhold marks from being included with your application package has been discontinued." — mossEd]
- **[Personal and/or emo reasons]** Life will get harder if you fall behind. Bury your sorrows in your schoolwork. Higher grades should cheer you up!

For real help with studying, see the Math counselling services page (Math webpage > current students > counselling services) (that was shorter than the URL).

Half-pint
who should take her own advice

Theorem: I am an ass

Proof:

Known facts:

1. The number of people is finite.
2. Each person has at most one ass.

The mass contained in an ass can be objectively measured by a real number; therefore, ass-mass can be compared and ordered. (By definition, people without asses have an ass-mass of zero.) Now suppose we reordered all people in non-decreasing order with respect to ass-mass. Since there are finitely many people, then there must exist a person, say Paul, who has the largest ass.

Now that we know Paul has the largest ass, we can now objectify Paul by his greatest asset. We say "Paul is the largest ass". It would logically follow that $(\text{Paul} - 1) = \text{Pau} =$ "the second largest ass", and so on for all people. Therefore, any person can be expressed as the n th largest ass, for some positive integer n .

Since I am a person, I can be expressed as the k th largest ass for some positive integer k ; therefore, I am an ass.

Corollary: You are an ass.

Proof: You are a person; therefore, you are an ass.

Previewing the Canadian NHL Teams

The NHL season is upon us! To celebrate this glorious occasion, here's a preview of the Canadian teams (In alphabetical order!)

Calgary Flames

The Flames are looking at a marked improved this year. With the introduction of the new jerseys, they can finally dump the dresses that they wore away from home and play some hockey, or something. Behind their high-powered top line with Iginla, Langkow, and Tanguay, they're supported by the veteran leadership of people like Owen Nolan and Wayne Primeau (Hey, remember when Boston traded him for Thornton?) who should help them go all the way...? Nah. But they should make a good push at the playoffs, it's not like Vancouver did anything.

Prediction: Overshadowed by Colorado and other teams of quality, they will fight for 7th–9th in the West.

Edmonton Oilers

The Oilers are hoping to put last year's great season behind them, and decided that their defense needed a downgrade. Trading away their defensemen Jason Smith and M-A Bergeron, they replaced them with such Forwards-in-disguise such as Joni Pitkanen and Sheldon Souray. If Roloson had trouble with the defense last year, watch out this year! Their forwards should have a bounceback year with Hemsy being almost a lock for 65+ points if he stays healthy. For those counting, that's 68 assists and -3 goals, and you can take that to the bank.

Prediction: The Oilers will have a grand time this season, being one of the frontrunners for Stamkos. 13th place finish FTW!

Montreal Canadiens

The Habs had a rich tradition of winning. Emphasis on **had**. The Habs have both their goalie of the future (Price) and their stopgap (Huet) on their rosters now, so they're definitely set in goal. However, who's going to score the goals? Souray, who single-handedly was involved in over 60 of their goals from the year before, is now in Edmonton playing "defense", and they decided to shell out over five million big ones for Hamrlik. Yes, Hamrlik. Up front, they have possibly the deepest prospects pool in the league, but who's going to be able to step up this year? Koivu, Kovalev, Higgins, and Ryder are their big four, but is that going to be enough? I don't think so, not in a division as tough as the Northeast.

Prediction: Fighting for 8th and failing, they'll end up in the 10th position.

Ottawa Senators

The Sens made the finals last year before deciding to give the series to the Ducks in the finals. Coming into this season, they got rid of some of their depth players, such as Comrie (who is now the first line centre for Long Island), Schaefer, and Preissing. Replacing them are Shean Donovan, Luke Richardson, and some of their prospects. This might very well be the year for the Sens, who have Spezza up for RFA and Heatley for UFA. (Supposedly Heatley wants 8.5 while the Sens are offering 7), so if they fail to win this year the core might be disassembled. Wade Redden should have a bounceback season and there is every reason to believe they will still be playing in June. Hopefully this year they will shake off that choking stigma!

Prediction: First in the East, and cup winners as long as they don't play the Leafs in the playoffs!

Toronto Maple Leafs

loleafs. Now that we have that out of the way, the Leafs made a few significant changes in the offseason. Signing Blake means they bought at least 30 goals, and maybe even more playing with Sundin. Toskala should at least push Raycroft, so there's no way their goaltending is as bad as last year. And if it is, I'll eat your shorts. Toronto, who was 1 point out of 8th and 3 out of 6th last year, has improved enough to at least snag a playoff spot. If Steen and Stajan continue their development while Wellwood sits in the IR with Antropov and Colaiacovo (You know it's going to happen!), the Leafs should at least be contending with the rest of the lead in repeating for the most goals scored.

Prediction: Fighting for 5th, the Leafs should end up settling for 7th and make playoffs for the first time since the lockout.

Vancouver Canucks

Last season of Vancouver can be summed up this way:

*Sedin skates up the ice! Passes to Sedin! He shoots, he scores!
... Vancouver wins the game, 1-0!*

With Luongo in net, the Canucks can contend even if they have an AHL team up front—oh wait. The Swedish twins should continue their fine play, while Naslund should come back with a 70 point bounceback season. But outside of those three, who do they have? They don't even have all-star candidate Rory Fitzpatrick anymore! Behind the supreme leadership of Trevor Linden (**Oh Yeah!**), they should still make the playoffs, but with every other team choosing to improve in the offseason instead of staying pretty, it might not be the first place that they had last year.

Prediction: This might be the year for Colorado to take the division on the strength of offense, so I say the Canucks will end up with 5th or 6th spot in the West. Unless they learn to score, they'll just end up like last year.

By the time this issue is published, the puck will be dropped and the season underway. Here's to a good season!

Megaton Panda

Rejected

Excuses not to go to your lectures

Here we have the not-going-to-lecture excuses Half-pint refused to dignify by mentioning them in her column.

- I'm busy reading *mathNEWS*
- I had to retake the class but I remember it from the first time
- I'm sleeping with the prof
- My dog ate my lecturer
- I have the answers to the final
- It's at 8:30 in the morning
- IT'S OVER 9000!!!
- I'm sleeping with the Dean

Come join in on the fun! Write for *mathNEWS* every second Xday (the Xday immediately preceding an issue) (where X is yet to be determined for the rest of the term) [*See the LookAhead — mossEd*] and bring up the quality. We pay in pizza and have a pseudo-cash reward for the best article written.

The Production Team

Grampus' Top Ten Lists

Drivers and Cyclists and Pedestrians, Oh My!

To be fair, I rank as a driver, pedestrian and cyclist... but lately I've most often been a driver. Having been struck dumb by the sheer idiocy that has descended upon the students of UW this Fall and their flagrant disobedience of traffic laws (not to mention common sense), I have devised these lists. They could be longer, but then we'd be here forever. I also have to admit that these things have irritated me for a long time now, but nothing rings home the need to put it down on paper better than seeing the end result of some of these in one giant accident. Now, without further ado, I present...

Pedestrians that Drivers and Cyclists Love to Hate

10. Amber Rambler — The one who races across the crosswalk on an amber light directly in front of left-turning cars.
9. Mellow Yellow — The one who stops mid-jaywalk on the yellow line as if it's a 10 foot median.
8. Hurry Scurry — The one who starts to cross on an advance green "because it's safe" up to halfway across. Confuses drivers turning left and gets in the way of right hand turners.
7. Red Rebels — The pedestrians who cross on the red, either in a scurry or a nonchalant amble, because there's no through-traffic. If only they noticed the turners.
6. Destiny Walkers — The pedestrians who cross as if traffic didn't exist and they could walk on water. The force is not in you and you cannot stop cars with your mind. These are the ones who signal a car to stop with their hand because they think they have the power. They don't.
5. Stupidity Leaders — The ones who manage to convince otherwise intelligent people to jaywalk or block traffic. Usually occurs with large groups.
4. Denial Child — The person who gets *caught* jaywalking by the police and insists they don't deserve a ticket because they're just doing what everyone else does.
3. Meandering Crosser — The pedestrian who meanders diagonally on a cross hoping to cut their journey shorter (while hopefully still living).
2. Physics Ignorants — The pedestrians who forget that looking both ways is essential because the law of mass tonnage says the car wins in a physical fight.
1. Music Lovers — Finally, this is the yahoo with the mp3 player or cell phone attached to their ears who can't hear horns honking or other traffic sounds and so misses essential cues that keep them safe. Heard of defensive driving? Prepare for defensive walking! At least lose the earbuds when crossing the street, for your own safety!

Drivers that Pedestrians and Cyclists Love to Hate

10. Impatient Lefty — The left-hand turners who block the intersection mid-turn because they can't wait for pedestrians to cross
9. Tailgating Right — The right-hand turner who turns, leaving you feeling the heat of the car's exhaust on your heels.
8. Non-yielders — The drivers who forget that yield lanes with pedestrian crosswalks mean pedestrians have the right of way.

7. Crazy Taxi — Drivers who speed so fast that you *think* you have time to cross, but it turns out you didn't. [Of course, if this is an issue, you're probably a Red Rebel or Mellow Yellow.]
6. Asleep at the Wheel — Drivers who are so tired that when they get to a red light, they figure shutting their eyes for 2 seconds can't hurt. This is just as dangerous as driving drunk.
5. Cell Tell — Drivers whose cell phones are permanently attached to their heads. Often look down while driving, causing them to hit curbs, sidewalks or meander into other lanes. Is it really that important?
4. Joyriders — These are people out with their buddies, potentially not drunk (but often are), and their pals are sticking arms out the windows, flicking cigarette ash at other cars, and screaming at the top of their lungs at 3 am.
3. Close Shaves — The drivers who decide to squeeze past the a cyclist/pedestrian/vehicle with about 2 millimetres to spare.
2. Wide Passers — The drivers who pass a cyclist, pedestrian, or vehicle by moving to the far side of the oncoming traffic lane.
1. Red Hurler — The driver who sees the light turning red and guns their vehicle to cross the intersection while still 20 metres away.

Cyclists that Pedestrians and Drivers Love to Hate

10. Biker = Driver — The cyclist who thinks he/she is driving a car and neglects the bike lane, sticking to regular traffic lanes and blocking traffic in the process.
9. Cyclist, Driver or Pedestrian? — The cyclist who uses sidewalks, roads, or crosswalks... whichever is most efficient and fastest. They are on the road one minute and on the sidewalk as soon as they hit a red light (or they ignore the red light altogether).
8. Non-signaller — Yes, cyclists. You have to signal your turns and lane changes on a bike.
7. Speedster — This cyclist likes to mow down pedestrians on the sidewalk. Hello... it's illegal to ride your bike on the sidewalk in Waterloo.
6. Dare Devil — This cyclist protects his bike's handlebars with his bike helmet in case of an accident.
5. Law Ignorants — These cyclists do whatever they feel like because they don't realize traffic laws apply to bicycles (which are "vehicles"... just without "motors").
4. Child Caregivers — The ones with kids on their bikes having them ride across intersections when they're still shaky on their training wheels. (They are capable of walking faster...)
3. Wrong Way Wonders — Cyclists who bike into on-coming traffic but in the bike lane. "It's so we can see traffic!"
2. Rich, Untrained Cyclist — Cyclists who are decked out in the best gear and have a top speed bike when they can't pedal themselves uphill and waver back and forth in the car lanes.
1. Let's face it. I can't think of a tenth. Cyclists aren't anywhere near as bad as pedestrians and drivers, right? *wink*

Why must AJAX suck?

Problem the first

Some people fail to understand that the first A in AJAX stands for “asynchronous”. This is particularly annoying because to use it any other way you have to say so when you open the interface. Of course, not being the normal interface, it’s full of bugs. When you perform SJAX, the browser freezes once the request is sent, and only returns to normal once it gets a response.

Now, for some people, with really fast, 100% reliable connections, this wouldn’t pose a problem. Of course, as noted in the last issue, I really don’t have one. It’s not just wireless, though. Every other network I’ve been on occasionally drops packets. Of course, this means the site breaks my computer.

Problem the second

The annoying thing is, when I see AJAX abuse, I can’t get around it. Most websites require you to suffer through it to use the page. I hate pages that require Javascript. You see, I disable these things unless I’m given a good reason to trust the site I’m on — so Gmail can, but random other sites can’t. Same with cookies.

I mean, in most cases it doesn’t seem to serve any purpose other than loading a new page, at which point, you shouldn’t even need AJAX: the browser does this for you. So, what’s the point? *[Often, it’s exit-tracking, but they should use onclick or event handlers instead. — mossEd]*

Solution the third

It’s simple really: make a webpage that doesn’t use AJAX. If you want it, then write a script that checks to see if you have it, and use said script to redo the links to use AJAX the way it should be. Is it really that hard?

Richard

Next time on *Heroes*...

Forty minutes of drama followed by five minutes of anti-climatic action. Then “To be dragged out...”

Justifiable Homicide

People who should die and why

This may become a fortnightly column; we’ll have to see how many people piss me off every week. For now, I’ll tackle the bane of every university student’s existence: people in hallways.

Number 1. Straight up, don’t make massive groups right in the centre of the hall. This should be common sense. How are people supposed to get by? No one, your buddies included, really cares about how you solved that tough calculus problem last night. Shut up and get off to the side. No, leaving room for one person at a time to pass through is not enough. Two way street, people. Think about it. Why the hell are you there, anyway? **Leave!** Oh, and one last thing, don’t give me, or other people, dirty looks when we have to shove past you to get where we’re going. Suck it up, princess!

Number 2. What’s the hurry? Must you get into class right at 20 after? Can’t wait until the room empties? Relax! Slow down! The lecture isn’t going to start early. Getting in the front row will *not* improve your mark. Profs secretly hate everyone in the front row anyway. You ask too many questions and never know what’s going on. Get to class on time, not early. Sit in the back. Don’t be a douche. Oh, and when you actually do wait until the room empties, don’t clump around the damned door! (If in doubt about clumping, see #1.) Get out of the way! People need to get out!

Number 3. (And hopefully last.) Just a short one: keep to the right! If there are two doors, take the right one. Too many times I see someone shoving or ducking passed people to get in the left door when they could simply *push* the right-hand one open. Look up. Notice what’s in front of you. *Think!* And I can’t stress that last one enough.

All right, that’s all I’ve got. For now. In the mean time: people pissing you off? Tell me about it! Drop your letters, notes, or ravings in the **BLACK BOX**.

And always remember kids: righteous anger is not a sin. Just look at the crusades!

The Rage

Some problems with reality

Please take notes

- Some people still put pineapple on their pizza. These people will be the first up against the wall when the revolution comes.
- Linear Algebra has stolen all of my symbols for multiplication. What’s the deal with that? I can’t use ‘×’ and I can’t use ‘•’. Sometimes a man just needs to have shorthand for multiplication that doesn’t involve brackets.
- Combinatorics people apparently still haven’t checked a thesaurus, or else they’d have noticed by now that “Pick” and “Choose” are synonyms. Choose/Pick better mnemonics, people.
- Apparently these days you can just stick “calculus” on the end of anything and it becomes a cool formal system. Calculus is about integrals and whatnot. Join calculus? Predicate calculus? Lambda calculus? Umbral calculus? These are all sham forms of calculus! Be more creative in naming your math system.
- Some programming languages use <> for “not equal”. I realize that this is probably how you are actually implementing this comparison, but it does a bad job of communicating what’s going on. It’s okay to hide functionality.
- Computational linguistics isn’t a real field of study. Fuck computational linguistics.
- After about two hundred years, you’d think we wouldn’t still have two different symbols for $\sqrt{-1}$. Is it *i* or *j*? Can’t someone look into this?
- People always pick Australia in *Risk*. Branch out, guys. There’re other continents that are cool too.
- Murder, war, famine, plague, hatred, assault, etc. Deal with those too.

Thor

I have an idea:

let’s use more ink!

Study reveals best place to stop

A recent study revealed that the best place on campus to stop and talk to friends is in front of an entrance to a building or classroom. It seems that, despite the traffic and sheer stupidity of standing in the middle of a flow of students moving from classroom to classroom, it is the best place to talk to friends. Researchers believe that this is because these areas act as accumulation points. Critics think that these people are dead weight like an elderly person driving on the highway. Others just say, "Get out of the fucking way!"

The Hee Ho

The Math C&D

The best prices on campus!

Want food for less? Sick of paying for food for a ridiculous mark-up from Food Services? Then eat at the Right Angle Cafe (i.e. the C&D)! Located on the third floor of the MC building, the C&D is the perfect place to settle a grumbling stomach as well as cater your event! See you there!

mathHELP

Because I can

Dear InsideR – I have come to the realization that university assignments are impossible. I spent the entirety of last night working on this assignment for algebra, and barely half-finished. Can you tell these profs to make them easier? – Assignment Crammer

Dear Crammer – Being a tutor for the course in question, I can attest to the reasonability of the assignments. Besides, how many times have you been told that you can't do these assignments the night before anymore? Next time, if you need assistance, come and find me (or another tutor) before the due date.

InsideR

Dear InsideR – I have recently heard about this election that's happening, and I'm feeling pressured to vote. However, I can't see myself supporting any of the three parties. Who would you vote for? – Undecided Vote

Dear Undecided – Well, if you can't support any of the three main parties, what about the other two here in KW? I mention elsewhere in the issue who's running. If you can't support any of the candidates; though, that is the *only* excuse that you have for not voting. *[If you care to, you can make a "protest vote". It's supposed to make the parties think if lots of people do it. You can also vote in the referendum without voting in the election, or vice versa. — mossEd]*

InsideR

Dear InsideR – You may recall my request for dating advice from *mathNEWS* 103.2. I completely understand now why The Single Guy is so named, and hence must ask: are you still available? – STILL Single in the 'Lo

Dear Single – You know, there exist very few people on this earth who are handsome, intelligent, and single. Unfortunately, I am not one of these people. Nonetheless, I wish you success on your search. (And TSG, she said it, not me.)

InsideR

mathNEWS_Insider@hotmail.com for all of you advice-seekers

What if life were more like Resident Evil?

- All doors are locked. The key can be easily found in any other room.
- Anything that shines is useful and can be picked up.
- Smoking up will heal anything. This includes zombie bites, mace hits to the face, and stabs wounds.
- Things aren't as big as they appear. A shotgun is the same size as a pistol, which is also the same size as an herb.
- The moment you touch a door, anything chasing after you will instantaneously give up and let you walk through it.
- Once you have walked through said door, they will not bother chasing you down.
- Everywhere you go, there will be a crate that must be pushed. Pushing this crate will give you access to places that you couldn't have reached otherwise.
- Any window you pass by will have something jump out at you. Especially if the window is on the ceiling.
- The conversations that you have with people will be fragmented and not make sense.
- Everybody can use any gun. Furthermore, everyone will have a working knowledge of how to operate elevator terminals and trains.
- Passwords for anything can be found written in a memo nearby. In fact, it's surprising that there are passwords on these things at all given that their codes are just left lying about in plain sight.
- No matter how many people were slaughtered by the swarms of zombies and other baddies, one person can easily manage to destroy every baddie that comes their way.
- Regardless of how terrible things get and despite the advantages of sticking together, any other person you find will walk away from you instead of working with you.
- Whenever you are locked inside a room with something trying to kill you, the exit only appears after you've killed the aggressor.
- People can withstand multiple gunshots to the face.

Angelo

Free time?

Answer your spam!

Need a new way to kill time and help waste the time of other people? Now you can, using web forgery! Whenever you get those annoying e-mails from people claiming to be your bank asking for your personal information, what you can do is go to those links and fill in erroneous data. For example, for "What is your personal question?" you could answer "Who was the first person I got herpes from?" and then put in an amusing answer such as "Your mom". Don't think it's fun? Give it a shot.

The Hee Ho

Eau d'Ass

Want to smell like the university to impress teh ladies/gentlemen? Love the smell of manure and cow feces? Then go to your local department store and pick up Eau d'Ass, the newest fragrance available for both men and women! Now you too can make people gag with your olfactory presence. Eau d'Ass: it's not just the smell of crap, it's the smell of Waterloo.

Angelo

mathJOKES

Win something, maybe

When the editor is away, the production team will play

So here's the plan: you write in your best math-themed jokes, I print the three funniest ones, and the bestest best joke submitter gets a \$5 gift certificate to the Math Coffee and Doughnut Shop (C&D).

Please send them in the same way you'd submit a puzzle solution. Be sure to include your **name**, **email**, and **program**, and submit to the **BLACK BOX** next to the C&D on the third floor or through email to mathnews@student.math.

To start things off, here are a few in the tone I'm looking for. I don't want page-long setups, I don't want bad pickup lines, I don't want single puns — I want classic setup and punchlines or knock-knock jokes.

Q: What's an anagram of Banach-Tarski?

A: Banach-Tarski Banach-Tarski.

Q: Why do mathematicians always get Halloween and Christmas mixed up?

Because $\text{OCT } 31 = \text{DEC } 25$

And finally, this is the longest length allowed:

Don'tcha?

(Chorus):

Don'tcha wish some people would just shut up?

Don'tcha ever tell some people, "that's enough!"?

Don'tcha? (x2)

Don'tcha wish some people would get off your ear?

Don'tcha wish some people would disappear?

Don'tcha? (x2)

I know it's annoying

When all that you hear

Is stupid, boorish idiots

Going on for about a year

You try to get them to stop

Or possibly leave

But they just ignore you and

You'd do anything for a reprieve

(Chorus)

Fight the feeling

Leave it alone

'Cause these idiots

Are even more lowly than a kidney stone

Don't waste one minute

Or precious energy

'Cause giving them

the time of the day will make it worse, you see

(Chorus)

I know you're going crazy

There's not much you can do

'Cause many of these bores

Are so oblivious they have no clue

One day it will find them

All their stupidity

Will haunt them

Forever like some berserk banshee

(Chorus)

snippet

Two mathematicians were having dinner. One was complaining, "The average person is a mathematical idiot. People cannot do arithmetic properly, cannot balance a chequebook, cannot figure tips, cannot do percents..." The other mathematician disagreed: "You're exaggerating. People know all the math they need to know."

Later in the dinner, the complainer went to the men's room. The other mathematician beckoned to the waitress and said, "The next time you come past our table, I am going to stop you and ask you a question. No matter what I say, I want you to answer by saying 'x-squared'."

When the other mathematician returned, his companion said, "I am tired of your complaining. I am going to stop the next person who comes by our table and ask him or her an elementary calculus question, and I bet the person can solve it." Soon the waitress came by and he asked, "Excuse me, Miss, but can you tell me what the integral of $2x$ with respect to x is?" The waitress replied, "x-squared." The mathematician said, "See!" His friend said, "Oh, I guess you're right." And the waitress said, "Plus a constant."

Half-pint

There's nothing wrong with wearing an adult diaper

Unless you're caught wearing an adult diaper.

ElseWhen

25 years ago in mathNEWS

Welcome to this edition of ElseWhen, where we look back to when the *mathNEWS* logo changed every issue because it was done by hand. This issue, we re-read Volume 30 Issue 2, originally published on Friday, October 15, 1982.

Peter 'mossEd' Simonyi

MathSoc Regime Change — Almost two pages are filled with a questionnaire for mathies on what the new MathSoc should focus on. It seems improving the student lounges was a concern 25 years ago, too. Steve Wolfe introduces the questionnaire in four paragraphs. Apparently, he wasn't happy with the previous MathSoc executives.

The questionnaire focusses on five improvement ideas: a quality of education fund, a formal student-faculty award dinner, renovation of the lounges, lectures by professional people, and improving the coffee and doughnut stand.

In other news:

- "Confused" wants to know if a 6th degree polynomial is a "hectic". The editors don't answer.
- A "mere engineer" got 6 calls, but none of them were by women, though "Scooter!" clearly asked ladies to call.
- Dave can't fill a small blank on the front page, because someone wrote "Dave, don't forget to put something here!!" in that very spot. The nerve of that guy!
- The student villages are holding their annual charity raffle. The first prize: a free return trip, anywhere Air Canada flies.

gridCOMMENTS

First of the term!

Well, there isn't much to say in the first *gridCOMMENTS* of the term. No one's submitted a correct solution (or maybe everyone has) because there wasn't a *gridWORD* last issue. Also, the *gridWORD* this issue isn't pretty and symmetrical, because I started it without *grep*'s help, and there isn't a cryptic version either, probably for the same reason.

There were quite a few people who solved the Sudoku. The SudokuQuestion was, "How do you cheat the system?". Congratulations to Richard Mandelzys for the only really original answer, "with bribes of food and threats of blood".

Now that there is a *gridWORD*, you can solve it and put it in the **BLACK BOX** outside the C&D and answer this issue's *gridQUESTION* ("What is your kind of calculus?") for a chance to win a fabulous prize!

Anyway, here are the clues:

dy/dx

1. Inedible weiner
2. Has 6 faces
3. A colour
5. A kind of breath
7. Insane
8. Also hash, pound, octothorpe
11. Animals
13. A mound of sand
15. $2^{10} \times 2^{10} \times 8$ bits
17. A Nobel laureate
21. Neither face nor number
22. ___ of butter
24. Dwelling
26. Seller
29. A republic, but not a country
30. A mussel
31. Satellite
32. Typical, standard

dx/dy

1. Red herring
4. When you can't tack
6. Servant (feudalism)
9. A swan
10. Nothing goes faster than this
12. Useful
14. Captain commanding a fleet
18. To remove this
19. Fish or weapon
20. Arm-bone
23. Canvas on a mast
25. Soft cap
27. Nikola
28. Famous last words
31. Small fish

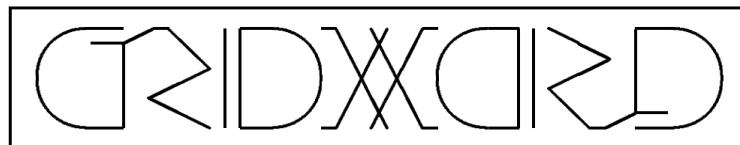
Solution to Last Issue's Puzzle

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

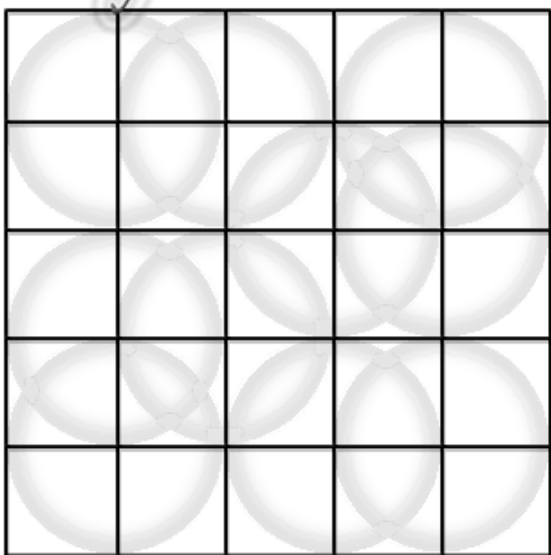
Sudoku

This Issue's Puzzle

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



1		2		3		4		5		6		7
									8			
9				10		11				12		13
				14		15		16				17
						18				19		
20			21						22			
											23	24
						25						
		26								27		
			28					29				
30										31		32
33												
								34				
35												



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

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



Leftover Space

Here we are with some blank space on the side of a puzzle. Since it's the last page, do you think anyone will notice? Maybe I could put the euri.ca logo here. Oh, it's already over there. I'll just tell you about the puzzle, then:

This Umbrellas puzzle is #10,502 from euri.ca/puzzles.