

For the past decade, the University of Waterloo has held a Canada Day bash for the Kitchener - Waterloo area. MathSoc is a major contributor to this event, and traditionally organises the children's activity world. We need volunteers to help set up and run the different events.

If spending a fantastic day in the sun, having tons of fun running cool events isn't enough to encourage you to help out, maybe all the free stuff you get for being a Canada Day volunteer is - not to mention the volunteer party at the end of the night sponsored by the Engineering Society!

So if you are going to be around July $1^{\text {tt, }}$, and feel like volunteering or helping out with the MathSoc events, sign up on the MathSoc office door (MC 3038), or get in touch with your MathSoc social directors: Jon Savoie (jsavoie), or Tammy Duff(tlduff@undergrad)

Jon (the rude relative) Sovole


## Next Friday:

ARE HISTORICAL ALIEN SIGHTINGS MERELY SIGHTINGS OF EXHAUSTED CS MAJORS, OR ARE THEY THE UNSUSPECTING SUBJECTS OF ALIEN GENETIC EXPERIEMENTS CONDUCTED BY THE CSC? FIND OUT IN AN ALL-NEW EPISODE OF THE ... UNIX-FILES TME TRUTMM IS OUT TMEREE

| mathNEWS |  |
| :--- | :--- |
| June 24 | Issue \#4 production night |
| June 28 | 6:00pm, mathNEWS office (MC 3041) |
| July 1 | Deadline for Frosh Issue articles |
| MEF |  |
| June 21 | Deadline for Winter proposal <br> submissions |

## MGC '97

Things are heating up...

## Summer's here!

But that doesn't mean you have to spend your time melting in the heat dehydrating while providing mosquito feed. If you haven't heard already, the C\&D (Right Angle Café) now sells ice cream (in a cup or a waffle cone, no less)! And it's cheaper than Scoops!

If indulging in frozen dairy products doesn't appeal to you, then there's the ...

## Softball/BBQ

$\ldots$ to be held on Thursday, June $20^{\text {th }}$ at $4: 30 \mathrm{pm}$. This time, the weather will cooperate! The game will be at one of the Columbia diamonds (details to be announced soon) and will last until people get tired. Then come join us (even if you weren't at the game) for your choice of grilled processed meat and non-meat products beside the entrance to MC closest to the blue piece of twisted metal.

If that doesn't strike your fancy, then you could be on your way to ...

## Canada's Wonderland!

The joint MathSoc/MGC effort is tentatively scheduled for Friday, July $12^{\text {th }}$. Buses will leave in the morning and return at night. Just think ... You get to skip off class for a day, and if you were going to Toronto for the weekend, then you've already got a ride! Keep your eyes open (okay, blinking is permitted) for posters.

One final note ... don't forget that Wednesdays are MGC Pizza Days! You can find your favourite slices on the third floor of MC, outside the C\&D from 11:00 to 1:00, or until the pizza runs out.

And if you happen to have an abundance of energy and want to help out (heck, even if you're lethargic and want to help out) just drop by the office (MC 3029) or send some email (mgc@undergrad.math).
That's all for now. See you at the Softball/BBQ!
André Chang \& Debra Richardson
(your MGC '97 chairbeings)

A Student Chapter of the ACM

## CSC Flash

My loyal servant, the CSC Flasher, greeted the advent of dawn on Monday morning with some trepidation. The CSC office was horribly closed, meaning the flasher would not have access to the CSC office calendar, and so a vital function of the CSC Flash, reporting on upcoming talks, could not be performed. However, Nikita Borisov unit, of alt.fan.nikita-borisov fame, opened the office and all was well.

## Upcoming Events

UW grad Crispin Cowan will be holding a talk on the $20^{t h}$. As of press time, we're not sure what this talk will be about. In any case, we're all real proud and will be cheering him on from the cheap seats.

## CSC Theme Days

It is a longstanding CSC tradition, ever since last term, to hold special CSC theme days. Normally, these would not be worth a mention in the CSC Flash, but there is a very special CSC Theme Day we think all mathNEWS readers should be aware of: Call Mike a Bastard Day. We think if all mathNEWS readers could call all Mikes they know a bastard, the tradition could be upheld in a truly sterling way. So remember: June $21^{s t}$ is Call Mike a Bastard Day.
[What an absolutely fascinating idea! Good to see the CSC members are hard at work. Aren't you glad you heard about this?-CrakkEd-A-Bit-of-Sarcasm]

## Other News

35 new members have been inducted (abducted?) into the CSC since our last report, bringing our total to 534 members. Seven of these members are new cyborg-clones, grown fresh from our vats in our relentless drive to increase our membership. Remember... only cool cyborg-clones join the CSC.

Calum T. "534 members and I can't sign my name" Dalek

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The Frazzled Editor: Mala "Crakko" Krishnan

## ACTSCI Club Happenings

We've started midterms now, and we're all pretty busy, so this is just a notice to inform everyone of the latest ACTSCI Club happenings.
First of all, we'd like to point out the excellent newsletter W.A.V.E. (Waterloo Actuarial Voice of Education) created by Shawna Stephens which was distributed last week, and which can be picked up at the ACTSCI Club office anytime.
As well, the ACTSCI Club is having three guest speakers this term. Neville Henderson (President of the CIA) on July 10 at 4:30 will be the first, followed by Mo Chambers and Professor Bennett. The dates of these two speakers have yet to be determined, but you can stay posted by checking out the ACTSCI Club's bulletin board posted on the club's office door.

Also, we are planning to have a term-ending BBQ bash in the Co-op Residence on July $19^{\text {th }}$ so we're expecting everyone to turn out.
Finally, just a reminder that the ACTSCI Club has posted a Buy/Sell Actex chart on the club's office door for anyone interested in selling or purchasing any Actex materials.
So good luck to everyone in your upcoming midterms and stay tuned for more ACTSCI news.

Ian Koh

## Class of '96 Sets New Record!

And they said we couldn't do it!

As a Class of ' 96 graduate, I have to publish the good news!
In case you haven't heard or seen, through Pink Tie Pledge director Marco Koechli's and other generous pledgers' help, the final tally of the Class of ' 96 PTP campaign is $\$ 41,746$.
That beats all previous years' pledges and we raised more money per graduate than Engineering!

Mala "Crakko" Krishnan

## Cover Up Artist

I've had a bunch of questions concerning the first mathNEWS cover. Not surprising, since I'm the one who drew it, and I haven't taken an art class since Grade 8. The main problem, however, seemed to be understanding my puns. (I fear that puns are an integral part of my life; it probably derives from childhood.)
The idea was an inverse function contest - in "verse" ... singing ... get it? (Yeah, my humour is more warped than the Enterprise.) That's why they were singing functions, in the key of "e ${ }^{x}$ ", and the "score" was one-to-one. The course notes were an added touch.
I'm currently drawing up ideas for other covers (inspired by the Mac Lab - why is it you can't print something out when there's free computers but "it's not time for your class?"). So unless we get cover art submissions, you may end up with another cover drawn by me! (And if that's not incentive, what is, right?) Of course, in truth, I draw them for the popularity it gives me. :)
Oh, right, one more thing. . . despite some comments I've had, the girl on the front of the first cover was not intended to be Ami Mizuno from Sailor Moon. (Now I can't be sued, right?)

Greg "Tired Guy" Taylor

## mastHEAD

Hey all! It's $1: 50 \mathrm{pm}$ on Monday and yes, this is early. I'm starting the mastHEAD early. That way, when this evening comes around and I find that the staff only consists of two people, I'll be happy that something is partly done.
You see, it's 1B midterm time. Since there are a number of 1B mathNEWS-ers, it would appear, that most of my staff won't be here.
But hey, I won't fret. I'm just going to be calm. Just because layout probably won't start until 3 am , why should I worry? It's not as if I haven't been deprived of sleep before. Sheesh! I'm a CS major!
Well, just to update you people, it's now 8:07 and thankfully people did show up. And just so you know how wonderful these people are, we managed to get production done by $8: 10 \mathrm{pm}!$ ! Whoa!!! I think we set a record!
This issue's mastHEAD question is: If you didn't have midterms this week and were forced to come up with a 3 -digit emergency number, what would it be and why?
Here's our gang with their answer: Warren "The Milkman" Hagey (123, because it brings back fond memories of Sesame Street), Carolyn $M^{a c}$ Leod ( 666 , less false alarms due to superstition), Andrew Archibald ( 230 , as in C\&O), Stephen "Pepper" Johnston ( 511 , give wrong numbers to people who misdial information), Mike "Hammer" Hammond (711, for those occasions when you just gotta have a Slurpee ${ }^{T M}$ ), and Paul Rechsteiner ( 757 [PJR], for me, me, me!!)
Thanks go to Domino's Pizza for their wonderful pizza and to Marion at Graphic Services and to Thomas Edison, for without the lightbulb, it would be really dark in here!

Mala "Crakko" Krishnan ( 688 [OUT]: I've been in university too long. I'm sick of it and I want to get OUT!)


## PMC News

This Week-Exec vs. Kampus Kops

This may be hard to believe, but you, yes, you, can still get your very own PMC membership for only $\$ 2$ ! Drop by the Pure Math Club in MC 3033 for friends, fun, and freezies. Yes, you heard it here. Now, in addition to pop and juice, the PMC is selling freezies to beat that summer heat.
But selling great drinks and snacks isn't all the PMC does. We've also had some great talks, with more to come. Just yesterday, Prof. Campbell told us all about Dynamical Systems, and other talks on the way include:

- June 20 - Prof. Baker - Functional Equations
- ??? - Prof. Ming Li - ???
- ??? - Karen Meagher - ???

Watch for posters around MC for the exact day, time, and room number.

As far as the PMC soccer team goes, the second game of the season was a hard fought $2-1$ win. With no games the past two weeks, the team is all rested up for games on Monday and Wednesday next week. But don't think that soccer is all fun and games. 13 days ago, what started as an innocent practice resulted in one current and one previous exec (complete with bloodied eye) leave via Kampus Kops ${ }^{T M}$ (Way to go, RS!). Ask around the PMC if you want to hear the whole story.

That's it for now. And remember, if Peter McLub can't do it, no one can.

> Warren "The Milkman" Hagey
> PMC guru

## Now Playing

Movies don't mix very well with CS assignments and midterms, but I somehow managed to sneak one in. Here's my review.

## The Rock

Guy wants something. Government won't give it to him. Guy threatens to kill many people. That's the basic premise of The Rock. Ed Harris plays the bad guy, who wants the government to pay out benefits to the families of soldiers killed in covert operations. You can definitely empathize with his cause, though probably not with his methods. He teams up with other disgruntled soldiers, capturing Alcatraz, holding hostages, and threatening to shower San Fransisco with biochemical rockets unless the government agrees to his demand. Along come Dr. Stan Goodspeed (Nicolas Cage), a biochemical expert for the FBI, and John Mason (Sean Connery), a British intelligence agent and the only man to ever escape from Alcatraz, to the rescue. Connery's performance was marvellous, while Cage's was wonderful in some scenes and a complete disaster in others. Explosions and gunfire abound in this movie, but the thing that really caught my attention was the music, which was outstanding. Overall, a good movie, but not worth missing a midterm for.

## At SAC, we ACT!

## Social Events and SAC: Tons of Fun for Everyone!!

As every co-op student knows, every four months means a change in scenery, change in living accommodations, change in friends and a change in lifestyle. Although these changes aren't that devastating, and we all get through the four (and sometimes eight) month changes, there are many ways to make your co-op and school terms more enjoyable. SAC is here to not only keep an eye out for problems arising from the co-op system, but also to make life a little more fun.
WatPubs and "Let's Go Co-op" are projects that are currently being reviewed and improvements, in terms of advertising and organization, are being made. WatPubs are social gatherings to get Waterloo students together while on work term. SAC is working to provide answering machines and coordinators in each of these cities to promote WatPub activities.
"Let's Go Co-op" is another social stimulant in terms of providing students with information about entertainment and activities in the city that they will be living in for the duration of their work term. The flier has information about where to eat, who to call in emergencies, public transportation, background of the city and other tips to make the adjustment smoother.

WatPubs and "Let's Go Co-op" will be on the home page at: http://www.undergrad.math.uwaterloo.ca/~sac.

Last but not least, SAC has organized an informal BBQ for co-op students and co-ordinators for June $27^{\text {th }}$ - the day that acceptance forms are signed - from 12:30 to $2: 30 \mathrm{pm}$ at Fed Hall. A potential volleyball match (co-ordinators vs. students) and free hamburger/hot dog and drink are all part of the deal. So, come out and mingle and get to know more about SAC.

If you want more information about any of these social events or would like to comment on anything that SAC is involved in, you can email us at: sac or post your views to the newsgroup at: uw. coop. sac or come out to our next meeting on June 18 at 5:30 p.m. in Needles Hall Room 1029.

Amanda Woo

## MEF Update

Hey all! Here's a quick update of happenings going on at MEF. First, there are still plenty of seats available on the Funding Council. In total, we have three vacant $1^{\text {st }}$ year, three vacant $2^{\text {nd }}$ year, one vacant $3^{\text {rd }}$ year, and three vacant $4^{\text {th }}$ year seats. If you would like a seat please email mef com and I'll give you all the details. Second, the deadline for submissions for funding is June 21. Consider yourself reminded! Lastly, we are still looking for a CRO to handle the director elections for next winter. the position requires little time and little work. If you think you might be interested send email to mef com.

## Quick notes

- $69 \%$ of students contributed to MEF this term;
- We have around $\$ 6,000$ available to spend;
- The Fund capital now stands at approx. $\$ 280,000$.


## Where's My Article?

## Submission Guidelines for mathNEWS

So, you've written articles for mathNEWS or submitted profQUOTES and you can't find them?? You've seen little pictures instead?
Here's a (serious) list of potential reasons why:

1. If an article is submitted as a funny article and it isn't, it gets tossed aside.
2. If an article is submitted and is not relevant or interesting to the majority of Math students or people in general, it just doesn't go in!
3. If the article is exceptionally disgusting, rude and/or promotes extreme forms of hatred, it immediately gets deleted! Use common sense!
4. prof QUOTES can be funny, but often they lose humour when taken out of context... You can laugh all you want at them, but if they aren't funny when I read them on the scrap pieces of paper I get them on, you won't see them in the issue. Furthermore, except in extreme circumstances, prof QUOTES are restricted to a page.
5. If the articles/profQUOTES aren't in on time, I won't even see them!
6. If there's not enough room and the article is quite good, it'll probably get delayed to a following issue.

This term, my strategy towards an article is simple: If I like it, it goes in. If I don't, it doesn't.

What you'll see instead, in the latter case, are little comical "filler" pictures created by our own mathNEWS staffers.
If you don't like what you see in mathNEWS, then write something worthwhile yourself! We do have writers who work hard, despite whatever course/midterm/assignment schedule they're battling. I think they do a great job!

> Mala "All CrakkEd Up" Krishnan
> mathnewsQundergrad.math.uwaterloo.ca

## Support mathNEWS!

mathNEWS is looking for your support. There are lots of things to do if you want to help out. We can always use more people to type in articles, proofread articles, format articles using $\mathrm{IA}_{\mathrm{E}} \mathrm{X}$, and distribute new issues. We meet at 6:00 pm in MathSoc the Monday before each issue comes out for production nights, and at 8:00 am in the mathNEWS office on the Friday mornings that a new issue comes out for distribution.

Even if you don't want to be directly involved, you can still support mathNEWS by buying burgers and pop at the mathNEWS BBQs, every Thursday from 11:30-1:00 in front of MC. You can get a hamburger for a buck, a veggie burger for $\$ 1.25$, and pop for a mere 50 pennies (although we'd prefer 2 quarters).

So do your part and support mathNEWS. After all, it's meant for you, and it'll only be as good as you make it.

Warren "The Milkman" Hagey proud mathNEWS supporter

## Frosh Issue Needs Your Help!

## The Year of the Facelift

Remember that bright pink issue of mathNEWS you received (or hopefully received) before/during your Frosh Week??

Well, it's time for the production of yet another one of those pink beasts.

Yes, it's time for the "Frosh 1996 mathNEWS Issue" to be created. And the best thing is that you can be part of it!! Students, staff, faculty. I don't care who you are (seriously). I just know that in order for this issue to come out just perfect, I need everyone's help!

This issue, I hope, will be different from the rest. In case you didn't know (and why would you?), the Frosh 1995 issue has an incredible resemblance to the Frosh 1994 issue, which is quite like the Frosh 1993 issue, and so on. It's time for a change!!

I don't mean to sound like a politician, but really, folks, the Frosh issue does need a facelift.

So, please submit new and exciting articles for the Frosh issue to the BLACK BOX (clearly state that it's for the Frosh issue) or e-mail to mathnewseundergrad.math. uwaterloo.ca.

What kind of articles am I looking for?

- anecdotes of your stay at $\mathrm{U}(\mathrm{W})$ (funny is nice, but serious is fine, too);
- your impressions of the program(s) that you are in (remember that some of these Frosh will not have declared a major - try to convince them to join yours);
- relevant artwork (I don't want to see sketches of the farm back home);
- previous mathNEWS articles that you think were just so funny that the new Frosh will just want to read mathNEWS over and over again;
- anything else you think will dazzle these young, inexperienced, budding mathematicians.

As well, some of the articles from previous Frosh issues need some re-writing.

I'm going to have details available on the mathNEWS homepage on the undergrad.math system under mathnews so please take a look and help with what you can.

The homepage URL is located in the ISSN of each issue.
Deadline? All submissions are due on Monday, July 1, 1996. I realize this is a holiday, but I'm going to be out from June $27^{\text {th }}$ until July $1^{s t}$, so consider it an extension from the $28^{\text {th }}$.

Any questions, suggestions? E-mail to mathnews or leave a message for me at X6355 or in MC 3041.

## Apology

## Contrary to popular belief, editors do make mistakes!

Last issue, the article titled, "Proof Filler" was credited as Carolyn's and Andrew's. Turns out, the author was Chadwick Severn. I cannot exactly explain what went wrong, but I think I'd have to blame it on poor vision during early morning layout.

I want to apologize to Chadwick and to all the "CAS Fans" out there!

## W.H.A.T.?!?

Transit and All That Jazz

So, first of all, I imagine you're wondering what W.H.A.T. is. Being the nice fella that I am, I'll tell ya. It stands for the Warren Hagey Analysis of Transit.

Now, before you skip right over this article, you should know that it's not some boring report, but mostly interesting things that have happened to me on public transit. Since starting university, I've travelled by public transit quite a bit, both in Kitchener-Waterloo and Toronto.

First of all, there are some differences between public transit in KW and in Toronto. In Toronto, I've seen a man kicked off the bus (literally) and drunks swearing. The best of all was a guy who just missed the streetcar and hurled a bag of garbage from the sidewalk at one of the windows. Of course, the garbage just bounced off and we continued on our way. I've been in a stalled streetcar which was pushed by a truck, and in a subway carrying Canada's NORAD system (well, maybe not the real thing, but definitely something similar). Recently in Kitchener, I was on a bus that slammed to a stop, causing a man's dentures to fly across the bus. How's that for excitement?!?

There are definite similarities though, especially in the schedules: neither the TTC nor Kitchener Transit follow them. In Toronto, I've waited 45 minutes for a bus that's supposed to come by every 20 minutes, and goodness knows the Kitchener Transit buses are no better. The only way to figure out exactly when one will come is as follows: if I get to the stop a minute early, the bus will have arrived two or three minutes earlier, and if I get to the stop five or ten minutes early, the bus will always be five or ten minutes late. I have had some good experiences when I've missed a bus though, meeting some nice people in the same predicament.

Anyway, as much as I complain, I really do like taking public transit. After all, I'd just waste more time if I didn't take the bus since I get about an hour of reading done each day while coming to and from school. And if the bus is late, then, hey, even more reading time.

Warren "The Transit Milkman" Hagey, President, W.H.A.T.

## Very Important Proofs

Starting with this issue, mathNEWS will have a semi-regular feature called Very Important Proofs. Feel free to submit your own in the BLACK BOX and we may print it in mathNEWS if it's creative, original, and funny.

## Proof that $\pi$ is really cake

- $\pi$ is irrational
- Irrational people can also be called politicians
- Politicians never achieve their goals
- Goals are not a strong point of the Leafs
- The Leafs play at Maple Leaf Gardens
- Gardens usually have at least one flower
- Flour is used to make cake
- Therefore, pi is really cake.


## Women in Mathematics

The First Computer Programmer: The Countess of Lovelace

One name that frequently appears in a discussion of women in mathematics is Ada Byron Lovelace. Her work with Charles Babbage resulted in her crowning as the first computer programmer.

Born in 1815, her early life was shadowed by her father's scandalous love affair with his half sister. He died shortly after and she was raised primarily by her mother, Annabella Milbanke. She was a sickly child and this weakness would plague her throughout her life.

Her first interest was geography, but by the time she was 18 she took to mathematics and actively sought mathematicians for correspondence. She was fond of Mary Fairfax Sommerville, and they would attend public lectures together. She was not allowed to attend university nor join the scientific societies on account of her gender, but this did little to discourage her mathematical enthusiasm which her mother had encouraged in her youth. Her interests took root after meeting Charles Babbage at a party, and learning of his Difference Engine.

The Difference Engine was a machine that performed mathematical computations such as number storage and simple arithmetic. Ada was so intrigued by this loom-based construction that she translated works from French that discussed the machine. The Difference Engine was only a stepping stone to the greater Analytical Engine, which was never actually built due to lack of adequate funding. Charles Babbage had great difficulty in trying to explain exactly what it was, how it was different from the Difference Engine, and its significance. Ada made a great contribution by properly explaining this machine. She published "Observations on Mr. Babbage's Analytical Engine" in 1843. This paper explained that the machine used "Operation Cards" to perform arithmetic on numerical data and respond to symbols representing data. She emphasized the ability to program the machine. It is for this emphasis and development that she is labelled the inventor of programming.

Sadly, soon after these developments her sickness began to consume her. In addition, a compulsion for horse betting led to massive debts and the sale of many of her family's jewels. She died of cancer at the young age of 36 in 1852.

Ada's accomplishments have been recognized by both her contemporaries, such as Michael Faraday and Charles Wheatstone, and modern computer scientists. In fact, the United States military developed a computer language that is named in her honor. ADA is an object-oriented programming language that is popular in Europe for communication purposes.

Though she was denied much of the formal training and foundation that a university might offer, her enthusiasm, in combination with the support of those closest to her, led her to great achievement. Mathematics was a very natural part of her life. The results of her insight led to an essential aspect to computing technologies.

Marni Mishna
mjmishnaCundergrad.math.uwaterloo.ca
Mala's Law of T.T.C. Subways

## prof QUOTES

"You have to restrict my access to your private parts."

$$
\text { R. Bartels, CS } 446
$$

"If anyone asks whether I told you this, I shall categorically deny it: All Hairy Gorillas Have Big Feet Good For Climbing."
L. Dickey, PMATH 360
"For two million dollars, is there anything in the null space besides constants? Really! I could be rich; I could be just doing this for fun."

Astels, MATH 136
"Ok, I'm letting you go early today. Please remember this when it comes to prof evaluations..."

Astels, MATH 136
"Isn't this fun? You know, you guys work your butts off in high school, so you can get into a university like this one and hear lectures like this one from the likes of me..."

Willard, MATH 136
"If you'll let me do that - and I'm sure you will because I'm the instructor, I give you your final grade."

Willard, MATH 136
"I'm being paid a salary to do something; I'm sure I can picture the null space..."

Willard, MATH 136
"Umm, yeah. Does anyone ever remotely remember claiming something like this on Wednesday? ... That's what I was afraid of."

Willard, MATH 136
"I'm an idiot. What can I say?"
Willard, MATH 136
"Did you hear they plan to cut my salary by $2 \%$ again? I'm going to end this lecture $2 \%$ early."

Willard, MATH 136
Prof: "When you're stuck on an integral, what's the one thing you can always try?"

Student: "Maple."
B. Marshman, MATH 138
"I'm sure if you're not asleep you'll appreciate it [the new concept]. I'll give you a minute to soak it in."

Murty, C\&O 350
"I think with this additional comment we've beaten linear programming to death."

Murty C\&O 350
"Please don't slip anonymous letter bombs under my door."
Buss CS 340

## mathNEWSquiz \#3

Hello, it seems the topics for the last squiz did not go over too well ... I guess I should try something more mathies will know about ... How about mathematicians?

Well, the answers (I got a measly two entries) are Sailor Mercury: 1) math 2) Mercury Ice Bubbles Freeze 3) Mercury Ice Rhapsody 4) Tuxedo Unmasked 5) Sailor Uranus Sliders: 1) Rembrandt Brown 2) Schrödinger 3) Post Traumatic Slide Syndrome Quebec Premiers: 1)Parizeau/Levesque 2) Bouchard 3) Robert Bourassa 4) Taschereau

Answers came from the Order of the Flying Dagger (11) and Live From Missisauga . . HAMMER (10) The winner of a Right Angle Café voucher is the Order of the Flying Dagger.

## Where Did This Name Come From?

1. Who is the Ada language named after? (in full)
2. Why is L'Hôpital's rule called that?
3. Name as many well-known Bernoullis as you can, with what each is known for.

## Who thought up this?

1. L'Hôpital's Rule
2. Pascal's Triangle
3. Calculus
4. Fubini's Theorem

## What happened to who?

1. Which Alexandrian mathematician was killed on the orders of Saint Cyril?
2. Which mathematician was banned from gambling parlours?
3. What did Ramanujan find special about the number 1729 ?
4. Who brought it up? (In the above question)

Good luck to everyone, and get the submissions in to the BLACK BOX or to chmacleo or to gbtaylor

Carolyn

## Thinking About Grad School?

The Faculty of Mathematics is holding an Information Meeting on graduate work in the mathematical sciences:

Tuesday, June 25, 1996

$$
\text { 3:30 p.m. - MC } 5158
$$

- Why undertake a graduate program?
- How do you know if you are suited for graduate work?
- Where can you obtain information on programs?
- What financial assistance is available?

Departmental representatives from Applied Mathematics, Combinatorics \& Optimization, Computer Science, Pure Mathematics, and Statistics \& Actuarial Science will be available with specific information about their programs.

All students are welcome and refreshments will be available.

## vapidFIRE

## A Catch-All Catch-Up of Eye-Catching Events Caught in the Past Four Weeks

Québec chief electoral officer Pierre-F. Côté released a report in mid-May detailing the results of a probe into referendum spending by the Yes (pro-separation) and No (anti-separation) committees. According to the report, charges will be laid against eighteen companies and individuals - nine from outside Québec - for violating referendum spending laws by helping Canadians get to the pro-unity rally in Montréal last October. "These offenses are serious and they must be punished," Côté says in the report. "In Québec, we could never permit the law to be held up to ridicule in this way with impunity." Côté's report also states that another thirty-one people - all appointed by the Yes committee - will be prosecuted for "fraudulently" rejecting ballots in four ridings that voted solidly to stay in Canada. Nonetheless, Côté described the rejection of votes as "isolated incidents" that were less serious violations than the campaign to subsidize Canadians who travelled to Montréal for the rally. With statements like that and like, "The unity rally undermined democracy in Québec as a whole during the referendum,". appearing in the report, it is fortunate that Côté said nothing about never permitting himself "to be held up to ridicule."

A coffee bean roasting company has been forced to move from its downtown Toronto location due to the emission of dense smoke and the foul odour of green coffee beans being roasted during a five-month period of last year. The odour irritated artists working in warehouse loft studios and prevented children from a nearby day-care centre from playing outside. The company is moving to an industrial location in Mississauga upwind from Pearson International Airport. A spokesperson for the company is reported to have followed that revelation with, "And if the Mississauga location doesn't work out, we'll probably move to Québec City; with the stink caused by Pierre-F. Côté's report, nobody will be able to smell us at all!"

Defense Minister David Collenette has given his blessing to the military's decision to lay charges against a soldier, Corporal Michel Purnelle, who left his post without permission to give evidence to the Somalia inquiry in Ottawa. Mr. Justice Gilles Létourneau, the judge heading the Somalia inquiry, blasted the military over the charges, and counters the military's claim that Purnelle left before his commanding officer had authorized the trip by maintaining that the inquiry had summoned Purnelle to Ottawa. "There is no incompatibility with coming forward, giving evidence to the commission and also obeying the rules and regulations of the Canadian Armed Forces," Collenette told the House of Commons. "Unless, of course, it's going to make the military look as bad as the Somalia incident does. Hey, is this microphone still on? Oops!"

In other Somalia inquiry news: Lieutenant-Commander Michael Considine, a senior military official linked by military police to the alteration, withholding, and destruction of Somalia documents given to the CBC, has told the Somalia inquiry that there was nothing wrong with deleting parts of documents given to the media under access-to-information law. "I didn't think it changed the sense of what (the document) was," said Consi-
dine, and later added that the CBC reporter, Michael McAuliffe, showed "poor etiquette" in formally requesting the documents. Considine has since been approached by the Parti Québecois with an offer of a position as vote-counter for the next referendum.

Kansas Senator Bob Dole, the 70-odd-year-old Republican U.S. presidential candidate currently trailing incumbent Bill Clinton by 20 points in most public opinion polls, has resigned as majority leader of the U.S. Senate and has given up the Senate seat that he held for 27 years in order to pursue full-time his candidacy for president. When asked whom had led him to decide to resign his seat in order to firm up his leadership bid, he is reported to have replied, "Why, Sheila Copps, and her deceased father."

The discovery of a new dinosaur species at the edge of the Sahara Desert in Morocco has been announced by Paul Soreno, a University of Chicago researcher. He has named the new species Deltadromeus agilis, or "agile delta runner", because the bones show it was "the most slender and agile large predator that we know of." In stark contrast to this sits the U.S.'s most recent dinosaur discovery, Dolepresidendromeus nonagilis, or "lame presidential runner."

Australian scientists say they have discovered how to use brain waves to switch on a light. By putting two electrodes on the skull and connecting them to an amplifier and transmitter, a person can use the minute voltage in their brain waves to control electric devices, say the scientists. "What we have done is to identify signals within the brain. . . and devised some novel technology to pick up and analyze these signals," said health science professor Ashley Craig at Sydney's University of Technology. "Unfortunately, we believe Pierre-F. Côté will have to continue to turn the lights on manually."

In another twist to the recently-completed legal proceedings in Québec City launched by former separatist lawyer Guy Bertrand, who wants a court injunction against future referenda on sovereignty, the lawyers representing the Québec government claim that the Canadian Constitution is "invalid and inoperative" because it has not been translated and adopted in French. This yields the interesting legal position that, because it appears in both French and English, a box of Frosted Flakes ${ }^{T M}$ is more valid in Québec City than the Canadian Constitution. However, this isn't necessarily a bad thing, given the sheer number of flakes that seem to be appearing in that Québec City courtroom.

Marc Garneau, Canada's first astronaut, returned to space last month on the space shuttle Endeavour. Among experiments to create ultra-pure semiconductor material and to study the skeletal and gastrointestinal development of starfish and mussels, Garneau manned the Canadarm to deploy and later recapture a satellite called SPARTAN. The satellite tested a new type of antenna that could revolutionize the tricky and costly deployment
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of satellites in space - an inflatable antenna. Strangely enough, while Garneau, a Canadian in space from Québec City, inflated an antenna, Lucien Bouchard, a spaced-out Canadian in Québec City, was full of hot air.

Armed troops herded Kashmiris to the polls for the Indian state of Jammu \& Kashmir's first elections in seven years, forcing them to pick representatives to an Indian government they reject, the Toronto Star reports. Combatting a boycott called by separatist leaders, soldiers roused townspeople from their homes soon after dawn and escorted them to polling stations to elect members to the parliament in New Delhi. Isn't it nice to see the world's largest democracy in action?

A fledgling youth church in Portland, Oregon, called The Church of Kurt Cobain has been founded by Jim Dillon with the hope to find meaning in the musician's life, which ended with his suicide in April, 1994. Church members reportedly expect to search a long time, however, and even longer if they consider Cobain's widow, Courtney Love.

Former Nova Scotia premier Don Cameron, when taking the stand at a provincial inquiry into the Westray mine disaster, blamed miners, politics, and federal bureaucrats for the disaster. "My concern with this issue," Cameron told Justice Peter Richard, the inquiry commissioner, "is that we don't want to look at the truth." He added, "it's much more fun blaming someone else," as he avoided looking at the truth and blamed someone else.

The Toronto Star, under the headline "TTC premiums double in wake of subway crash," revealed that the TTC's insurance premiums, now at $\$ 1.6$ million, increased by $\$ 567,000$, or about $54 \%$, rather than the $100 \%$ implied by the headline. When notified of the error, transportation writer Bruce Campion-Smith, the writer of the offending article, is reported to have said, "So what do you want? The Star isn't mathNEWS, you know!" So true, Bruce, so true.

Mike "This Hammer Has 22 Minutes" Hammond

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## gridCOMMENTS

## Icky, icky crosswords...

The gridWord for Issue \#2 of the Spring 96 term was admittedly a bit icky. There were several non-words, and a couple really obscure ones. Did you know what a KIANG is? The day after mathNEWS went to press, I realized I could have used KEANU instead of KIANG, and this would make the mystery acronym YOUR instead of YOGR. I would have then made the new non-word AMUS the mystery acronym, and it just would have been probably a much better crossword. Ah well.

For those interested, the seven movies that made up the foundation of last issue's gridWord are The Birdcage, Spy Hard, A Time To Kill, The Cable Guy, KingPin, Twister, and The Rock. I used the Summer Movie Preview issue of Premiere to find all 11 - and 7 -letter movie names, and to my surprise, three of the 11-letter movies locked together nicely, with IMPRINTNEWS connecting them all up. The four 7-letter movies also fell into the grid nicely as well. For this issue's gridWord, I tried to find 12 -letter Simpsons names and phrases, but unfortunately, I wasn't able to fit in KRUSTYBURGER, RANCHORELAXO, WHOSHOTBURNS, or THREEEYEFISH.

We received nine submissions for last issue's gridWord, and four of them actually managed to look exactly like my solution. The ones that are incorrect usually had a different word for KIANG or DOOMTOO, which affected what the Mystery Acronym is. Three people thought of DOOMTOY, which is not bad, actually.

The winner is Mike Elmhurst, who had the best acronym for YOGR out of the correct solutions. His phrase was "Yoko Ono: Grammy Recepient?". Other correct submissions were handed in by (along with their acronym, if they submitted one) "Eeeny, Meeny and Miney", "Order of the Flying Dagger" (You Only Get Richer), and Chris Wooff (Year Of Graduate Research).

Other submissions were handed in by (along with their acronyms) Chris Ingram \& Wendy Wright (Yodelling Yields Good Results), Andrew Martinez (You Never Understand, Really), Reza Shahidi, Mike Swart, and "Live From Waterloo...HAMMER!!" (Yttrium Occasionally Gets Rusty).

The gridWord for this issue is not very pretty...all right, it's darn right ugly, but I'm proud to say that there are only one or two non-words, one of which is the Mystery Acronym. When you submit your entry, be sure to think of a title or phrase that would fit the Mystery Acronym, and include it with your submission. In the event of a tie, the winner will be the person or group who submits the most creative, funny, or original acronym. Be sure to submit your entry by Monday, June 14, 1996, by 3 pm in the BLACK BOX or to my email account csevern@undergrad.math.

e-mail mathnews@undergrad.math



## Grid Clues

## Across

1. IBM PC -- (286 designation)
2. Sleeping furniture
3. Quimby's title
4. "-- and behold!"
5. Chopped
6. Signal to wake up
7. Popular musical
8. Internet language
9. Part
10. Formative material
11. ST:TNG episode: "Ensign _-"
12. Designer jeans label
13. Movie: " $\qquad$ Crime"
14. "-- what?"
15. Star Trek V villian
16. You can own these in monopoly
17. Roseanne's last name at one time
18. Pro-gun lobbyists (Abbr.)
19. Almost all
20. Says "Shhhhh!"
21. Way to cook eggs
22. Are
23. Simpsons' character ( 2 wds )
24. Lump of ice cream
25. Word repeated three times before "Voom!"
26. $12: 00$ 's?
27. Internet address
28. Four of the five vowels (in order)
29. Animals in tunnel in Indy III
30. Painting used in movies
31. Road abbreviation
32. Trademark (Abbr.)
33. Seat
34. Caught a glimpse of
35. High school (Abbr.)

Down

1. Nickname
2. Midsection
3. "-h humbug!"
4. Entertainment show
5. Displaying with assistance (Adverb)
6. Anagram of a drug
7. Simpsons' character ( 2 wds )
8. Talking openly
9. Compared to Harvard
10. Rocks
11. Room (Abbr.)
12. Halifax Police Dept. (Abbr.)
13. Song: "Prince _-"
14. Simpsons' character ( 2 wds )
15. Monopoly square
16. Simpsons' charatcer
17. Mystery acronym!
18. 1995 best film nominee
19. Hockey player Bobby -
20. Prefix for single
21. First name of 90210 actor
22. Also
23. And so on
24. Contraction for I am
25. Slogan
26. Not too bright
27. Compass direction
28. Wanders
29. One of the provinces (Abbr.)
30. Letter before tee
31. Talk
32. Simpsons' character
33. All-American Prez
34. Weird
35. Female title


Articles may be dropped of in the BlackBox outside the comfy lounge, or email text to mathnews with subject of article

