

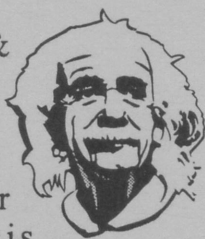
math NEWS

Volume 71, Issue 4

Friday, June 28, 1996

Revealed!

How the Math & Computer (MC) building was inspirational to Einstein for developing his famous theory of general relativity: $e=mc^2$!



page 3.141

Long Range Forecast

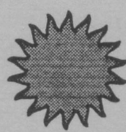
Saturday



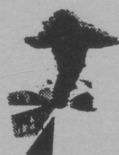
Sunday



Monday



Tuesday



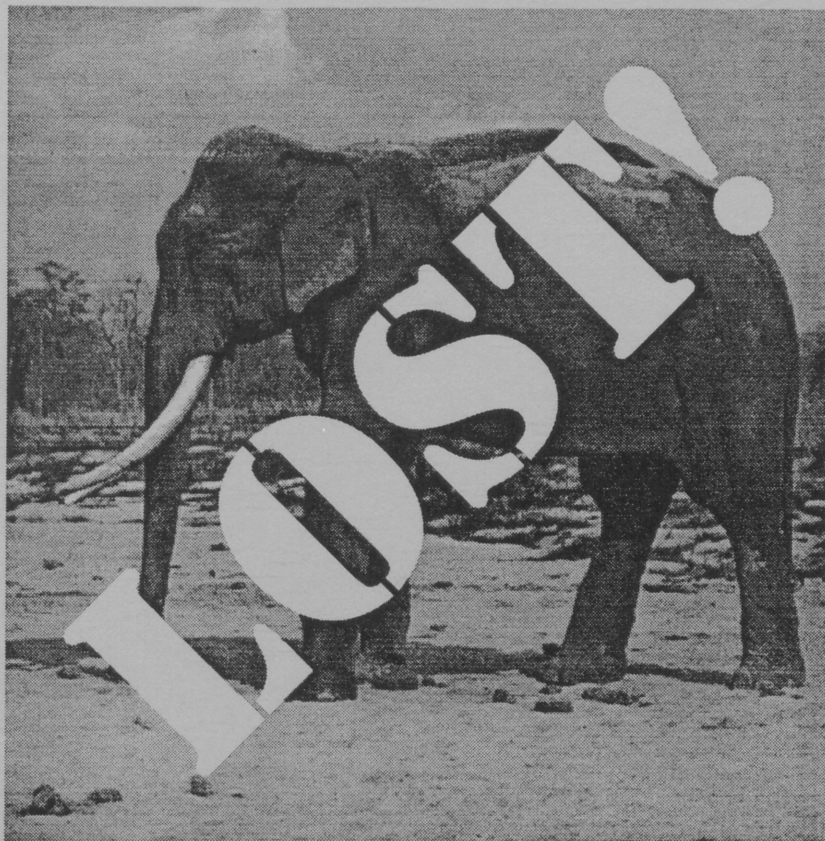
Wednesday



Thursday

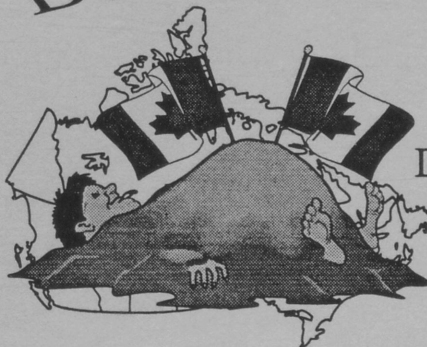


Friday



One Indian Bull Elephant, answers to the name "Martha." Last seen on 6th floor of MC on Thursday, June 27th. If you have information on here whereabouts, please call 1-800-285-7667. Reward offered!! The number again: 1-800-B U L - P O O P

Buried with Work?



Don't forget to celebrate
Canada Day!

This forecast is provided on an "as is" basis, without any warranties, express or implied, including, but not limited to, the unlikely chance that the forecast is completely out to lunch and you go golfing on a forecast sunny day and get struck by lightning and die.

Trials and Tribulations of a *mathNEWS* Groupie

OK, I'll confess. I'm a *mathNEWS* groupie, and have been one for a while. I was in "layout" in the Fall of '94, editor last summer, and "groupie without portfolio" this term. So what does it mean to be a *mathNEWS* groupie? Well, it's not quite as exciting as working at "The Daily Planet," but, hey, we get free pizza. Here's a rundown of production night.

At all starts on Monday nights at around 6:00. A bunch of us groupies get together, cross our fingers, pray to the gods of literacy, and hope that someone sent in some articles for us to put in the issue. Usually we are rewarded, but the quality and quantity of articles are like the flood of the Nile for the ancient Egyptians. You take what you get, and hope that the next issue will be better.

The first step is type and proofread articles. A fairly simple task, but we use a modified version of `vi` on the UNIX machines, and `vi` is evil. Show me somebody who knows all the commands in `vi`, and I'll show you someone who spends far too much time in the CSC office. Call me simple, but I like the way Microsoft Word underlines my spelling mistakes. But then, occasionally I try to exit Word by typing "Esc-colon-wq-enter". I have been corrupted; `vi` is evil.

Once the article is proofread, the editor reads the articles and judges them based on criteria of humour, quality, appropriateness, and whether there are enough articles to fill an issue. The last criterion is sometimes the most important.

Next is \LaTeX -ing, where \LaTeX codes get inserted into the text. As our wonderful editor Mala says, "you can't just highlight and click **bold**." \LaTeX is designed to make the development of structured documents easy, without worrying about formatting. The problem is that we are trying to create an unstructured document and we care about formatting. In case you didn't notice, there is a bit of a conflict here. \LaTeX -ing is definitely not WYSIWY(supposed to)G: \LaTeX is also evil.

The pizza comes about 9 pm. This is the time when we stand around, thinking about all the courses that have assignments due tomorrow that haven't been started yet, and watch Mala keep the vegetarian pizza to herself as the rest of us carnivores devour the pepperoni and sausage 'za. For most of the staff, this is the end of the night.

For layout and production, *mathNEWS* uses a custom environment called `pLATmN`, developed by Ian Goldberg and Shannon Mann. `pLATmN` places all articles in a series of windows, and allows *mathNEWS* staff to work together as a group. Overall, it's a pretty good system.

Unfortunately, `pLATmN` has its flaws. Quite often it "locks" and doesn't allow anyone to enter the system. Other times, it forgets who is logged in. It is written almost entirely in Perl, and no one knows how it works. For instance, we're not sure what the command "hey, asshole" is for, but most of the *mathNEWS* shell scripts call it at some point. It's not just a case of "if it ain't broke don't fix it," it's a case of "if it's mostly broke but still usable, don't touch anything."

`pLATmN` is at its worst during layout. I don't think this is Ian or Shannon's fault; a system based on evil is inherently evil in itself.

Layout starts with a file called `artlist`, which contains a list of all the articles that can be used in the issue. There's no

point-and-click, dragging frames filled with text, as you'd find in a conventional desk-top publisher. Its all text based here. Articles have lengths calculated in both pseudo-columns and "Goldbergs." One would expect that 1 pseudo-column would equate to one column on the page, but its not: its 1.09. Well, actually, depending on the number of articles in a column, column height ranges between 1.07 and 1.15, but its usually 1.09. Strange. "Goldbergs" seem to hold no relation to the physical length of the article, although there are about 3400 "Goldbergs" in a column.

For multi-column articles, we choose where the column breaks by telling the system the last line of text in the leftmost column. To confuse things, we have to use the last line of text, ignoring all non-alphanumeric characters. A column break at a `profQUOTE` by U.S.R. Murty requires the command "`profQ - USRMurtyC0350`", unless the `prof` has more than one quote, in which case we have to include the previous line as well. And if the line contains a word with two f's or an 'ae' together, then you can't cut the column at that line, since \LaTeX seems to convert these into non-alphanumeric characters. Remember, \LaTeX is evil.

The biggest problem is now lining the two columns up. For large articles, we normally centre the title over both columns. By default, \LaTeX wants to place the second column on top of the title. Since this doesn't look very professional, we have to move it down. Here are where the "Goldbergs" come in. By using a `skip`, the column should, in theory, start where we want. But, of course, the system spreads multiple articles evenly down the column. If you've got just one article you can skip so many "Goldbergs" and everything will be fine. But once you put another article in the column you have to guess at the number of "Goldbergs" required. Thus `pLATmN` is evil. Do I sense a recurring theme here, or is it just me? This whole process eventually results in a PostScript file which can usually be viewed in Ghostview, but sometimes Ghostscript is required instead. Why? I don't know. Just shut up and be glad that it (mostly) works.

And what do we get for all our trouble?

Well, we asphyxiate ourselves at the weekly BBQ, work all hours every other Monday, and put up with some component of `undergrad.math` going down on Production night. Seriously, though, it *is* satisfying to work on something that people look forward to. Enjoy the rest of the issue!

Stephen "Pepper" Johnston
ISSN 0705-0410

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The Sick-of-Ian-Goldberg's-Dreadful-Layout-System Editor: Mala "Crakko" Krishnan

lookAHEAD

mathNEWS	
July 1	FROSH ISSUE SUBMISSIONS DUE
July 8	Issue #5 production night 6:00pm, mathNEWS Office (MC 3041) Articles due at 3 pm
July 12	Issue #5 falls to the stands
July 22	Issue #6 production night 6:00pm, mathNEWS (MC 3041) Articles due at 3 pm
July 26	Issue #6 creeps up to the stands
MathSoc	
July 4	Bathing Suit Blitz at Conics
July 5	Math Pub Night at the Bomber—80's Theme

We're Winners!

Just thought we'd pass the good news to you!

In the past couple of weeks, the mathNEWS website has been awarded as the "eyeSITE of the DAY", "eyeSITE of the WEEK" and "MDLink's BEST Of CAMPUS" from colleges and universities world-wide. We're also part of Nick Welke's Top Ten List on undergrad.math too many times to mention.

You will also find a link to our coveted paper on many Search engines and on the homepages of many of our own staffers on undergrad.math.

Check it out!

<http://www.undergrad.math.uwaterloo.ca/~mathnews>

Get Help With the mathNEWS Template!

For those of you who didn't know, the mathNEWS system has an on-line template for your articles!

And it's so simple to get and use! So use it!!

Here's how:

1. At your prompt, type: `mail mathnews -s template or mail mathnews -s request;`
2. Hit Return and CTRL-D

That's it! Check your mail seconds later and ... voilà! Your template has arrived!

Some of the main L^AT_EX commands will already be there to fill in, so fill them in, type in your article and mail it off to mathNEWS before the deadline!

Additional L^AT_EX commands will be mentioned at the top to help you.

If there are any troubles, mail to mathnews@undergrad.math.

Mala "CrakkEd" Krishnan

PMC Madness

or How to Miss Two Weeks of Class Because of Interviews Right Before Midterms

Since last issue, the PMC has seen more suits coming in and going out than a sale at Tip Top TailorsTM. Yes, it was interview time, which happily enough coincided very nicely with the wonderful midterms that professors just love to pile upon their students. That's all over now though, except for those poor, unfortunate souls that have to go through continuous phase (been there, done that).

The PMC had a couple of talks which weren't as well attended as those earlier in the term (studying for midterms ... what a lame excuse). There are still a few more talks coming this term, so watch for posters around MC and join us to find out what all the excitement's about.

In some other news, the PMC soccer team gave a good effort in its last outing (of course we'll have played our final two games by the time this gets published), but lost 3-2 after scoring a goal on itself and giving up a penalty kick. With any luck we'll be on our way to glory in the playoffs, so come on out and cheer the team on.

Anyway, that's all for now. See ya later, and remember, the PMC isn't just for math geeks.

Warren "The Milkman" Hagey
not 'co-op'ing this term, and loving it



745-2222

Fischer Hallman & University



MEAL DEALS		605
MEDIUM 3 TOPPING PIZZA WITH TWISTY BREAD AND TWO CANS OF COKE	LARGE 3 TOPPING PIZZA WITH TWISTY BREAD AND FOUR CANS OF COKE	
ONLY \$13 ⁹⁹ _{+TAX}	ONLY \$16 ⁹⁹ _{+TAX}	
<small>Please mention coupon when ordering and redeem to driver. No substitutions, additional toppings extra. Not valid with any other coupon or offer. Limited delivery area. Drivers carry less than \$20.00. Offer subject to expire September 30, 1996.</small>		

Canadian Patriotism: Beavers or Beer?

Canada Day, eh? It's not just your ordinary holiday. Well, at least it shouldn't be. Granted that Canada Day has to compete with an inexorably growing number of so-called holidays ranging from such inane ideas as "Elvis Sightings Day" and "Hair-Loss Awareness Day," Canada Day still ranks among Canadians as one of the most celebrated, enjoyed, and significant holidays on the calendar. Perhaps that's just because Canada Day is a statutory holiday—meaning that we can all sleep in a little longer, cram for midterm exams a little bit more, or just plain waste the extra time the government has given us. But perhaps it's more than that. Believe it or not, while there are undoubtedly varying opinions among individuals, most Canadians consider themselves patriotic citizens. Why, you ask? The answers are as varied as the tossed-salad society in which we live. But I suggest to you that the reason is not historical education or even government propaganda, but rather something much simpler, that all Canadians can identify with: Beer Commercials.

How ironic it is, that despite the significance of such symbols as the maple leaf and the beaver, beer commercials reign supreme among Canada's youth as the most visible sign of our country's uniqueness. I mean, as one proud Canadian commented on his feelings of "sharing a beer with half the planet,": *cool*. Cool indeed, as Molson breweries of Canada is undoubtedly raking in the bucks in the name of patriotism. This is not necessarily a bad thing, since maybe what our country needs to save it from Quebec separation is an average Canadian Joe, drinking the average Canadian beer, in the average Canadian bar, reminding us how special it is to be Canadian.

Sound facetious? Maybe. Consider for a moment, the recent Labatt breweries campaign featuring the two intrepid Canadian explorers, Jacques and William. While we are suspicious of their prescient abilities, we are nevertheless impressed by their insightful observations of the numerous outstanding achievements of Canadians over the course of our country's history. Added to the commercial's success are the sly jabs at our complacent neighbors to the south, the Americans. And although the goal is undoubtedly to fatten the pocketbook of the beer-brewing giant, the familiar choice of advertising strategy, that of appealing to one's sense of patriotism, is no coincidence.

It's interesting that these two companies have decided to duke it out not on the merits of their product, but rather which company can appeal more to the sense of patriotism of their consumers. These commercials seem to give us all the mistaken impression that somehow, by consuming a particular brand of alcoholic beverage, that we are in fact, making our country a better place to live. And even the more astute among us, who realize that this conclusion is completely ridiculous, will experience an unexplainable *frisson* of delight as they sense a momentary, deep, almost spiritual closeness with their fellow ale-drinking countrymen. So bring on the beer, I say, since that will strengthen the fabric of our nation, and bring back the patriotism that was once so ubiquitous, yet now so hidden in our daily lives. And if someone scoffs at you for doing one too many brews this Canada day, just tell them you're doing it for the good of our country... after all, you say, "I am... *Canadian*."

Alan Shi
3B Computer Engineering

Cyberwocky

With Apologies to Lewis Carroll

'Twas e-mail, and the ftp
Did route and telnet to the node:
All rlogin to Xterms free
To let gopher download.

"Beware the Internet, my son!
The posts that spam, the speech that's free!
Beware the Netscape cache, and shun
The AOL mail id!"

He took his HP mouse in hand:
Long time a higher bandwidth sought —
And wished had he for his old PC
A faster modem bought.

And, as that wistful thought he gripped,
The Internet, with bait of flame,
Ran applets through the Javascript,
And mailbombed as it came!

The war he'd wage! As on each page
The HP mouse he double-clicked!
And 'twas absurd, the hype he'd heard
'Bout sites that he had picked.

"And, hast thou surfed the Internet?
Come link my page, my newbie bud!
O Lycos night! Yahoo! Excite!"
He messaged on his MUD.

'Twas e-mail, and the ftp
Did route and telnet to the node:
All rlogin to Xterms free
To let gopher download.

Mike "Hammerwocky" Hammond

ActSci Club News

Hey dudes/dudettes! How are midterms going? Are you excited about SoA Exams results coming out soon?

The month of July will be full of events so keep looking out on the ActSci Club door! On July 3rd, Mo Chambers (past CIA president) will come to talk to us about Discipline and NAFTA (4:30 pm, MC 4040). Then, on July 10th, the current CIA President, Neville Henderson, will give a talk at 4:30 pm, MC 4040. The next mathNEWS will announce further activities.

Shawna Stephens has published her 2nd great issue of W.A.V.E. so catch a copy at the ActSci Club!

Canadian Institute of Actuaries (CIA) Meeting, Quebec City, June 20-21, 1996

In case you haven't heard already, our very own Harry Panjer has taken over as CIA President-Elect! Congrats Harry!

While I was there, I met lots of people, heard lots of stuff, learned lots too and came home to write more midterms! All in all, an unforgettable experience!

Chantal Bray

vapidFIRE

Looking at the News with a Junediced Eye

As he repeatedly promised, Lucien Bouchard left the First Ministers' conference conducted this month. When the issue of the amending formula in the Canadian Constitution was raised by Saskatchewan Premier Roy Romanow. Bouchard was quoted as saying, "As soon as he (Romanow) began to pronounce the first sentence, I stood up. I politely left the room." Bouchard retired to the washroom during the discussion until retrieved a short time later by Manitoba Premier Gary Filmon. While in the washroom, Bouchard is rumoured to have made a bold non-verbal statement about his feelings on Québec participating in a renewed federalism and on his full bladder.

In other First Ministers' conference news, recently-elected B.C. Premier Glen Clark called the conference "a complete failure" because Ottawa has not moved on his request that the province assume management of the B.C. salmon fishery. Jean Chrétien, when told of these comments, said, "Of course the conference was not a complete failure; Lucien Bouchard got to go to the washroom, didn't he?"

Like yesterday's special in the Village 1 cafeteria, Sheila Copps has clawed her way back up. Freshly re-elected in her Hamilton East riding, she has been re-appointed by Jean Chrétien as Canada's deputy prime minister and heritage minister. This marks her complete return to power following her resignation at the beginning of May over her promise to quit if the Liberal government failed to scrap the GST. In her thank-you speech to Liberals who supported her, Copps was quoted as saying, "It's kind of hard when you're being hit on all sides." Now she knows how the average Canadian feels about the GST.

Nearly 200 staff of the Ontario Public Service Employees Union (OPSEU) voted 97.3 percent to go on strike. OPSEU rang up a debt of between \$13 and \$19 million, mainly in loans from other unions, during OPSEU's walkout earlier this year, and has decided to cut 43 staff and make many benefit cuts to make up the shortfall; these cuts are what prompted the OPSEU employees to strike. Hmm... the staff of a union are themselves unionized, and are going out on strike indirectly because of money lost when the first union went out on strike. Don't you just love Ontario organized labour?

Bob Thirsk, a Calgary biomedical engineer aboard the space shuttle *Columbia* as Canada's newest astronaut, conducted and participated in experiments to understand motion sickness and find preventative measures. Tests included wearing special goggles to test their eye movements, using special NautilusTM-like machines to test muscle strength and co-ordination, and repeated viewings of *Moll Flanders* to test their gag reflexes.

The Canadian Football League, which has recently kicked off its season, has returned to its pre-expansion state with a new Alouette team in Montréal and no American teams. Though it is unclear why the CFL has abandoned its American franchises, sources suggest that impending civil prosecution of the League was the cause: the very name of the CFL resulted in a CRTC Canadian content violation in Canada and a Truth In Advertising Act violation in the U.S.

A Metropolitan Toronto couple who were really Russian spies have been deported back to Russia. Yelena Olshevskaya and Dmitriy Olshevsky, who went by the names Laurie and Ian Lambert while in Toronto, were suspected by CSIS of planning espionage activities during their six years in Metro. Among Canadian secrets CSIS feared that the spies would return to their masters in Russia were Tim Horton's new bagel recipes, the name of Don Cherry's wardrobe, and the *real* reason why we kicked out all the American teams from the CFL.

Russian grandmaster Anatoly Karpov, as of June 23rd, leads his young challenger, Gata Kamsky, 6½-2½ in their 20-game chess world championship match. Karpov needs four more points to successfully keep his title. In a related story, Russian taskmaster Boris Yeltsin, as of June 23rd, leads his Communist challenger, Gennady Zyuganov, 36%-33% in their 2-election Russian leadership match. Yeltsin needs 14% more of the popular vote to successfully keep his title. (All this political chess coming from the former U.S.S.R., trying to find Russia's king and chock-full of pawns getting rooked day and knight, is leaving me just a little board.)

A mentally unbalanced 14-year-old boy, Sandy Charles of Saskatoon, Saskatchewan, killed and skinned a 7-year-old male playmate, then cut strips of flesh and fat from the body and cooked it on a stove. Charles supposedly got the idea from the horror movie *Warlock*, which suggested that cutting the fat off a virgin unbaptized child, then boiling it down and drinking it, would give the power to fly. Given the taste, texture, and overall quality of Village "food," one has to wonder if Mark Murdoch, head of "Food" Services, has also seen this movie.

Ontario Transport Minister and used-car salesman Al Palladini has called the TTC "the worst transit system across the country" and "one of the least effective agencies across the continent." He then decided to improve the TTC by cutting \$117 million in funding from the financially troubled Sheppard subway project, potentially killing the subway line. No wonder he sells used cars; with his government's "cost-cutting" measures, nobody will be able to afford a new one.

And finally, a special three-judge U.S. court has issued a preliminary injunction barring enforcement of portions of the Communications Decency Act, a bill signed into law in early February by U.S. president Bill Clinton. The Communications Decency Act prohibits the distribution of "indecent" or "patently offensive" materials via computer, but fails to define those terms, allowing prosecution based on personal interpretation. Sources claim that there is no truth to the rumour that the U.S. government was about to be indicted under this law because the Act itself is "patently offensive" to the U.S. Constitution's First Amendment.

Mike "This Hammer Has 22 Minutes" Hammond

**Frosh Issue Articles
Due Monday!**

Conics

Bathing Suit Blitz

Yes, it's here. No more hiking over to the overpriced Scoops. We now have our own ice cream booth inside the Right Angle Café (the C&D)!

The name of the ice cream booth is Conics, which comes from "cones", but the Mathie name for cones is conics... get it?... funny Mathie joke, eh? Anyway, Conics is a great ice cream place with some great flavours, such as chocolate fudge (Mmm... chocolate) and chocolate chip cookie dough (X-man). We're cheaper than Scoops and all of our cones are waffle cones!

Some pertinent info about Conics:

- Opened on May 27, 1996 by Dean Kalbfleisch (see picture)
- Hours 12:30-4:00 pm, Monday to Friday
- Prices: \$1.50 small, \$1.75 medium, \$2.10 large



And if all of this isn't great enough, Conics will be hosting the Bathing Suit Blitz on Thursday July 4th. Picture Laura and Terry, serving you at the Bathing Suit Blitz... and yes, both in their bathing suits! We would have included a photo in here, but it was censored by the Board of Ethical Behaviour & Human Rights... or something. Other than the chance to see some Mathie skin, how does this benefit you, you ask? The deal is this: if you show up between 12:30 and 4:00 in your bathing suit (no SpeedosTM or thongs PLEASE!), you get a free small ice cream cone! MathSoc will be matching this up to 200 cones, the money to be donated to Canada Day festivities this weekend.

Rachel, Xavier and myself will be there and hopefully we'll see a lot of you at the Bathing Suit Blitz at Conics on Thursday July 4th (Qualifier: You must be wearing a real bathing suit; shorts don't count).

Later...

Kim "check out Naj's home page" Jack

mastHEAD

Hiddley-ho, Mathies!

I'm not going to jinx myself this time and tell you how excited I will be if production night finishes early.

Last time, I did that, expecting to wrap the issue up, the latest, by midnight. But no-o-o-o-o! I was done at 4 am! So much for finishing early! Needless to say, I wasn't very awake in my Tuesday class.

Anyway, for some reason, we've started Production a little early today. So, thanks to John, Stephen, Greg and Chadwick (and anyone I missed) for helping a bit early.

Here's everybody who selflessly ate all the pizza so that I wouldn't have to carry it home and stick it in my fridge, along with the name of the political party they would form, should they ever decide to run for the office of Prime Minister: (Just remember, I have the negatives!)

John Swan (The Statisticians' Alliance Party (SAP)), Andrew Archibald (The Natural Law Party), Carolyn MacLeod (Politicians Against Politics), Stephen Johnston (Students Against Midterms, Univeristy Regulations, Assignments and Insanity (SAMURAI)), Warren "The Milkman" Hagey (Warren Hagey Against Turnips And Green Umbrellas, Yeah! (WHATAGUY!)), and Chris Calzonetti (The Queezy Cubic-Zirconium Loving Xenophobic Jumping People Party (QCZLXJPP))

Thanks goes to Domino's Pizza for their wonderful pizza and to Marion at Graphic Services and my uncontrollable curses go to Charles Babbage, whose difference engine paved the way for the nasty, unpredictable, evil beings called "computers".

Mala "Crakko" Krishnan (Humans Against Repudiating Rats Increasing Students Of Universities' Tuition — HARRISOUT)

Now Playing

I hope that it isn't too late to warn you about this one.

Cable Guy

First of all, I have to tell you that I really didn't want to see this movie at all (a very justified feeling as it turned out), but my brother had some free passes, and it was the only thing playing at the time. Jim Carrey stars as the rude, obnoxious, obsessive cable guy... yeah, that's a real departure from previous roles. Matthew Broderick is the unfortunate victim of Carrey's attention, and gets thrown in jail among other things. Carrey is a real flop in this flick, and it's a good thing his price tag (\$20 million) is high enough that he doesn't get cast in more movies — I'd go insane. The ending was okay, but not good enough to save *Cable Guy* from getting the distinction of being one of the five worst movies I've ever seen (and I've seen a lot of movies).

*

Warren "The Movie, Milkman" Hagey

Happy Canada Day!

Don't forget to stay home on Monday!

profQUOTES

"Any questions regarding the midterm? It's 2 hours long, it's got some questions on it, a few proofs. No more than two thirds of the questions are proofs... I'm teasing you."

Wagner, MATH 135

"...and so $(a'd' + b'c') = bd$, and so... that's it. That's the proof... Cool... It was much worse last semester."

Wagner, MATH 135

"Duh! How long have you been sitting there laughing at me? Wagner can't do fractions!"

Wagner, MATH 135

"I guess I have another chance to get it together on Friday. I seem to have gone completely clueless."

Wagner, MATH 135

"Here we use the product rule or something like that."

Richmond, C&O 230

"Any questions here before we turn off the lights and slip out for a beer?"

Bennett, STAT 231

"Very good, very good... you are not always asleep."

Murty, C&O 350

"The average case may not occur; programs are never average."

Buss, CS 340

"I hide it very well, but I'm smart."

Buss, CS 340

"Intuitively, we want to be as irrational as we can get."

Buss, CS 340

"1913, that's a good year... I think..."

Baker, PMC talk

"This came as somewhat of a shock... well, to mathematicians at least. I'm sure that physicists and artists didn't give a damn."

Baker, PMC talk

"Lastly... how many times have I said 'lastly' this lecture?"

Willard, MATH 136

"I'll try not too speak to loudly if you want to go to sleep."

Willard, MATH 136

"This was very easy to row reduce ... using MAPLE."

Willard, MATH 136

"How many of you are not completely lost?"

Willard, MATH 136

"Notice that in all cases... this is really sexy..."

Kunze, AM 353

"Watch out for those questions that are worth π marks."

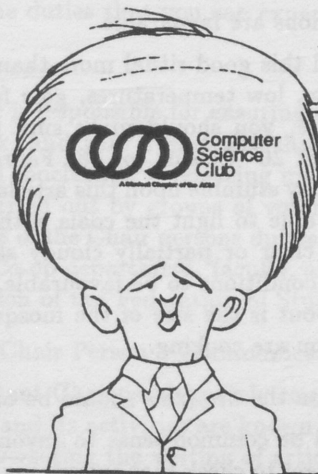
Talvila, AM 351

"Is this really true? My struggling with this proves that as you get older, you don't get any smarter."

Panjer, ACTSC 431

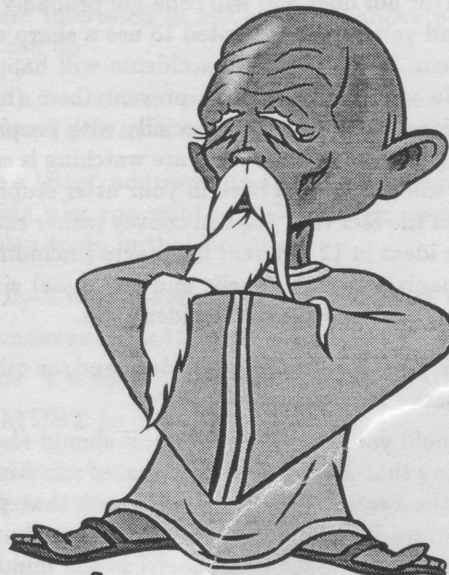
"Some of you will come to my office hours, and you'll say 'verticie' and I'll feel like slapping you."

Wagner, C&O 230



**Calum T. Dalek's head
explodes, destroying this
issue's CSC Flash!**

Confucius Say



**Write for mathNEWS
and have interesting life!**

Tips From A Pseudo-Expert For a Good Summer

Part I: The Barbeque

It is a well known fact that as we are finally into Summer, Mathies are eager to go through a Summer ritual known as 'The Barbeque'. Having gained valuable experience from the *mathNEWS* barbecues, I am able to convey the lessons that I have learned to other Math students on how to have a good barbecue (some of these I have learned the hard way). Here is a list of the tips that I have been taught by experience, trial, error, brute force, ignorance, et cetera (that is "and others" for all you Latin scholars out there):

1. Make sure conditions are favourable

Nothing can spoil this good ritual more than unfavourable weather (e.g. rain, low temperatures, gale force winds, et cetera). Therefore, you should make sure that the temperature is at least 20° Celsius (or 68° Fahrenheit for any Americans that may stumble upon this article), light winds, (so that you are able to light the coals without too much difficulty) and a clear or partially cloudy sky. Once you have deemed the conditions to be favourable, all you really need to worry about is the size of the mosquitos that will feast on you as you are cooking.

2. Keep a keen eye on the fire (this should be obvious)

This point should be common sense to anyone! If anything is amiss, don't forget to check that everything is up to shape (i.e. the screws, nuts and bolts should be tightened and the garden hose should not have any leaks whatsoever (just in case)). Also, a standard first aid kit should be available at a fairly close distance should any emergency arise (see #3 to know what I mean).

3. When separating hamburgers and/or hot dogs, never use the tongs!

Take this tip from my own personal experience! The hamburgers and/or hot dogs you will cook are probably going to be frozen and you may be tempted to use a sharp object to separate them. Unfortunately, accidents will happen even when you do your best to try to prevent them (hence the above mentioned first aid kit), especially with people watching. Injuring yourself while people are watching is especially bad since it allows them to bask in your utter stupidity and be amazed at the fact that you can convey rather rude words and obscene ideas in 12 different languages (including Latin, German, Spanish, Italian, Gaelic and Japanese) since you are in a good deal of swift and sudden pain.

4. Always cook your hamburgers, hot dogs and/or other meat on the barbecue medium to well done.

Not only should your meal taste good, it should also be free from anything that could do a good deal of mischief on you (excluding the beer). Therefore, any meat that you cook should be brown inside (if you are cooking hamburgers) or at least 160° Celsius (320° Fahrenheit) in the middle of the piece of meat, that way, all the bacteria (including the infamous 'Hamburger Disease' strain) can be killed. Remember,

you don't want your hamburgers to be called Jack-in-the-BoxTM hamburgers.

5. Finally, time the side dishes correctly.

Of course, man does not eat only meat when involved with a barbecue. Therefore, side dishes such as potato salad, other salads, corn on the cob and baked potatoes are used to give guests variety and a more complete meal. As a tip, anything that is made with mayonnaise should be made after the meat is finished cooking according to the advice set in step #4 (After all, we don't want the potato salad to start evolving and attacking people). As for corn on the cob, potatoes and other side dishes that can be preserved for several hours, they can be done before the meat is put on the barbecue on the stove (For baked potatoes [*and corn—CrakkoEd*], they can be done on the grill).

With these tips, a good barbecue can be enjoyed by all (even by the mosquitoes who feast on you and your guests).

One final tip, don't drink and BBQ! Save it until after, O.K.?

John "The BBQ man" Swan

Steve Rants

What's with this weather, anyway?

OK, I'm annoyed — I'm wet again. And before you think of something rude, no, it's because it's raining again. It's Monday night as I write this, and it's now rained twice today. What's with this weather anyway? Did somebody move Waterloo to the west coast while I wasn't looking? It's a three mile drive from home on my motorcycle, and when it rains it's not very enjoyable.

The chipper radio announcer on CFNY told me the other morning that in the last month, it has **not** rained on only three days. It's not forty-days-and-forty nights type rain yet, but this stretch of rain is of biblical proportions.

Saturday morning's thunderstorm caused havoc for electrical systems everywhere. Computers were down here at school, and the power went off at home.

Here's another thing that annoys me: why do digital alarm clocks forget the time when the power goes off? Sure, they have battery back up, but the manual for my clock says the battery only lasts ten minutes. Hello! My watch battery has lasted three years without needing to be changed. Surely clock designers can do better than a measly ten minutes.

Well, that's enough ranting for now. I hope summer gets here soon!

Stephen "Pepper" Johnston

mathNEWS BBQ

Thursdays 11:30 to 1

Sneak Peek

In this mathNEWS exclusive, we take a look at the preliminary text of next year's undergraduate calendar:

New Incidental Fees:

- Student Salmonella Insurance Plan — \$85.13
- Voluntary MFCF Chair Purchase Plan — \$15.00
- Boredom Refund Fee — \$198.99
- Fee Management Fee — \$25.00
- Fudge-Factor Fee — \$0.03

New Department in the Faculty of Mathematics:

The Department of Procrastinatorics & Relaxation (P&R)

- Undergraduate Officer: To be determined at a later date.
- Pre-registration in P&R courses misses the point.
- Lectures may begin in the 11th week of term.

P&R 230 Beer Drinking 3C, 10L

Introduction to the theory of generation of beer. Map theory. 'Shortest path to Bombshelter' algorithms.

- Lab Fee: \$7.75/pitcher
- Anti-Req: Placement on the Dean's Honours List
- Also offered at Federation Hall in the Fall term.

P&R 330 Advanced Alcoholic Consumption 1C, 20L

Beer-drinking postures will be analysed, and shooters will be introduced. Will also study methods for coping with side-effects such as hangovers and vomiting.

- Coffee and Tylenol supplied.
- Lab Fee: dependent upon experience.
- WHMIS Training Required.

P&R 352 Tanning 1C, 5T

The quest for the all-over tan. Investigation of flipping patterns, with and without reflector. Course graded on the SPF scale.

- Pre-Req: CHEM 267 and BIOL 273 or intimate knowledge of skin and creams.

P&R 437 Pick-Up Lines

A brief overview of vulgarity, anatomical references, and inflated self-worth. Students will also learn to understand and cope with rejection. Advanced students may be introduced to subtlety.

- Pre-Req: 80% or higher in P&R 230.
- Not open to students in the Faculty of Engineering.

P&R 498 Readings In Procrastinatorics & Relaxation

Topics of study dependent upon student's interests. There will be periodic seminars on recliners, Ottomans, hammocks, and coping with distractions such as assignments and midterms.

Christopher "Two Chocolates" Pattenden
 Jason "My eyes! The goggles do nothing!!" Testart
 Matt "When you're this big, they call you Mr." Labarge

AT SAC, WE ACT!

Calling All Chairs!

Believe it or not, we are half way through yet another term. Most midterms are finished, with a few stragglers left to come. This is that great time of term when you get to catch up on work that was neglected during midterm hell week ... oh, and on a few hours of sleep too!

This is also the time of term that SAC starts to look for energetic people to carry SAC into the next term and to an all new level of involvement and commitment.

We are now accepting applications for the position of Chairperson and Assistant Chairperson - Communication for the Fall 1996 term, up until July 12, 1996.

These are the duties that you can expect to take on:

• Chair Person

The Chair is responsible for ensuring that SAC stays on the right track, and that everything that is started is seen to its natural conclusion. Overseeing many small projects that will be carried out by groups of volunteers will be the primary focus of the Chair persons duties. The Chair will liaise with the Co-op department, faculty, and the Vice President of Education of the Federation of Students.

• Assistant Chair Person - Communication

The Assistant Chair is ultimately responsible to make sure that SAC and its activities are known across Campus. This involves overseeing the writing of articles for the Iron Warrior, the Imprint and mathNEWS. This position also involves advertising for SAC events, maintaining the SAC bulletin boards and newsgroup, and liaising with the various student organizations and completing any duties that cannot be taken care of by the Chair.

We need two people who are motivated and willing to put in the time to make SAC great! You must have some good managerial and people skills and you have to enjoy working in a very diversified group of people.

If you are interested in either of the above positions, here's what you can do:

1. Write a "volunteer" resume. Let us know what types of experience you have in volunteer organizations.
2. Write a letter, addressed to the Chair Etienne Phaneuf, explaining why you want to hold a Chair position, and what you plan to do in that position.
3. Send both of the these in an email message to:
sac@undergrad.math.uwaterloo.ca
 Include "I Wanna Be A Chair!" in the subject line.
 This MUST be in by July 12, 1996.

If you have any questions or want more information, email the above address and Etienne or Graham will write back quickly. Remember, we need these applications by July 12 so that we can decide on next terms Chairs and then get them brought up to speed on SAC.

GOOD LUCK!

mathNEWSquiz #4

Submit, people, submit!

Carolyn always gets to have all the fun up here so I thought I'd just type a couple sentences before failing my Algebra midterm. First, just a correction to the last squiz: Mercury's 151 attack should have read "Mercury Aqua Rhapsody". The typo did not affect results, and I've recovered from the shock ;) Second, where are all the entries for the last Squiz? (It was about math! I expected at least 10...) Please submit or I think we'll lose our jobs in September... don't make me beg, it's not pretty. Anyway, the answers to the last squiz are:

1.1-Lady Byron/Lovelace (I didn't know she was the woman in math for the week...sorry) 1.2-L'Hôpital bought the rights of the rule from Cayley 1.3-Jean, Daniel and Jacob were given, but there are about eight Bernoulis in the encyclopedica 2.1-Cayley 2.2-Not Pascal first, it's older and Chinese, no easy name 2.3-Newton/Leibniz 2.4-Fubini 3.1-Hypatia 3.2-Pascal 3.3-It's the smallest number that can be expressed as the sum of 2 cubes 3 ways 3.4-Hardy

Hey, here in Carolyn's e-mail is a last minute entry... Tyler Bannister with a score of 8 out of 18. That entitles him to a C&D voucher to be picked up in the MathSoc office.

And this issue's Squiz:

Song Lyrics

1. "You're looking for somewhere to belong, you're standing all alone for someone to guide on your way, now and forever"
2. "You better hope and pray that you're gonna wake back in your own world"
3. "It took me a year to believe it was over and it took me two more to get over the loss, I took a beating when you wrote me those letters And every time you told me to get lost"
4. "The wave rolls back, upon the water, and the ocean cries, we look to our sons and daughters, to explain our lives as if a child could tell us why..."
5. "Once there was a boy who woke up with blue hair, to him it was a joy, until he ran out into the warm air"
6. "If there's a bustle in your hedgerow, don't be alarmed now, it's just a sprinklie for the May queen..."
7. "Do you need some time, on your own Do you need some time, all alone"

Chess

1. What two pieces are involved in "castling?"
2. Who was the youngest American chess champion ever? (at 14)
3. What computer became the world computer chess champion in 1989?
4. Who is the current world chess champion?

Well, it looks like the two topics will be enough. Be sure to answer these questions, so that when we check our e-mail at chmacleod@undergrad.math and gbtaylor@undergrad.math we'll find extra submissions than those in the BLACK BOX outside the Comfy Lounge.

The deadline is Monday, July 8th, 1996 at 3 pm!

Greg & Carolyn

He lives...

S.J. Simon said 80 years ago "Don't double suit slams with two aces." Why? Your opponents know they're missing them - it's 100% that one has a void. For more proof, we go down to bridge night at the LBC (London Bestiary Club).

Bird is sitting happily at the table. He was a bit worried when his partner showed up - an 8 foot tall monster with a bolt through the neck. But Frankie (as he introduced himself) seemed to be a friendly chap - until an ill-timed psyche by the bird went horribly wrong.

Next match. First board. Bird still a little worried about not coming back from the dinner break. Welcome new opponents, a moose and a deer. Pick up hands, carefully avoiding partner's stare.

♠ KQ96	♠ AJT5
♥	♥ AKJT86
♦ KQJT	♦ 732
♣ KQ632	♣

The optimistic bidding was:

Bird	Deer	Frank	Moose
1♣	pass	1♥	pass
1♠	pass	3♥	pass
4♦	pass	5♠	pass
6♠	pass	pass	DOUBLE!
pass	pass	pass	

3♥ was forcing, so the Bird (who didn't really want to be eaten just yet) patterned out his hand. 5♠ had been agreed as "bid slam if you have good trumps," and he did. He refrained from redoubling, however.

The opening lead was a small heart. Knowing this hand will either win or lose the match for you, how do you play?

"Well, I was going to lose the ♦ A, so I can't lose any more. If I tried to crossruff the hand, either they would ruff in on the diamonds, or they would lead trump when they got in, or both. The clubs won't set up, but the hearts might...How do I keep enough entries?"

He pondered. He squirmed. Then he started to play. Take the ♥ A. Lead a diamond, losing. Back came another diamond, which didn't get ruffed. Spade king. Then, crossing his feathers, spade to the ace. When both followed, the bird visibly calmed down. Heart King - both followed. Bird even happier. Heart J, covered with the queen - claim. "Ruff, pull trump, diamond, diamond, club ruff, heart."

The sun sets on the match to the plaintive call of the moose - "But I had to double. I had two aces..."

Michael Farebrother

mathNEWS

All the news that fits to print

The Oracle Speaks

... in a loud booming voice that would tend to give one a headache had one spent entirely too much time drinking the previous night...

The Oracle is asked: What are the questions on the MATH 136 mid-term exam?

The Oracle speaks: Foolish mortal. You tempt my wrath by asking me this question. Seeing as how the 136 mid-term was on Monday, (mathNEWS production night, by the way. Why don't you come out and help instead of posing stupid questions?) any Tom, Dick, or Carolyn has the answers (or questions) you seek.

The Oracle is queried: Should I go to school tomorrow?

The Oracle answers: You again?! Let me explain something to you. Your question, when asked, may be relevant. Keep in mind, however, that your question will not be answered until Friday, at which point any meaningful information you were hoping to glean from the vast expansive knowledge of the Oracle will have become obsolete. However, since I have almost as much patience as I have wisdom, I will answer the question for you for the next week:

Today	No
Tomorrow	No
Sunday	Not unless you really feel like it
Monday	Yes
Tuesday	Yes
Wednesday	Definitely yes
Thursday	Probably not



The Oracle

Hey, even I can
rite four mathNEWS

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

gridCOMMENTS

Last issue's gridWORD was pretty easy. We received fifteen submissions, and most of them would have been correct if they knew how to spell the bad guy from Star Trek V, who's name is Sybok. A few were caught offguard with the spelling of Bart's teacher, Mrs. Krabappel.

And this winner is WuTang Sword and Shaolin Tiger. They had a correct grid and submitted "York Bites Immensely" for their mystery acronym. Other correct solutions were submitted by (along with their acronyms): Eugene Kim (Yawning Blood-Shot-Eyed Insomniacs), Chris Ingram & Wendy Wright (Yeast: the Bread Ingredient), Pepper and Super Dave (Youngish Ballerina, Irreplaceable), Anandi Carroll (Yokels Brazenly Inbred), Dale "The Jaff" Burkell & "Fyre" (Yellow Banana IceCream), "Order of the Flying Dagger" (Yodeling Barbarian's Institute), Bubba (Yank Barney Immediately), and Dave Thomson & Jodi Spall (Yokels for a Better Infrastructure)

I also received submissions (albeit incorrect) from Devon Groen (Yodelling Belittles Intelligence), Des Cartier (Yoda Best Intuition), Alison & 'Sk'o, (Yahtzee Barbituate Imbibers), Greg Morey, and Rico Suave.

Good luck with this issue's gridWORD. It took quite a while to make this one, and there are a few non-words. But, every square is used in both an across and a down clue, so this will hopefully make it a little easier. Be sure to submit your entry in the BLACK BOX or by email to csevern@undergrad.math by July 8th, 1996 at 3pm.

CAS

Last Issue's gridWORD Solution

The Simpson's Grid

	A	T		B	E	D	S		M	A	Y	O	R		
		L	O		A	X	E	D		A	L	A	R	M	
H	A	I	R		H	T	M	L		R	O	L	E		
P	L	A	S	M		R	O			G	U	E	S	S	
D	I	S	O	R	G	A	N	I	Z	E	D				
			S	O		S			S		L				
S	Y	B	O	K		U	T	I	L	I	T	I	E	S	
	B	A	R	R		N	R	A		M	O	S	T		
L	I	B	R	A	R	I	A	N		P	O	A	C	H	
		E		B			T		I	S					
			M	A	R	V	I	N	M	O	N	R	O	E	
S	C	O	O	P			V	A		N	O	O	N	S	
	H	T	T	P			A	E	I	O		R	A	T	S
M	A	T	T	E			B	L	V	D		T	M		
S	T	O	O	L			E	Y	E	D		H	S		

If you win a Squiz or gridWORD pick up your prize!!!

Or we'll take it!



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	36
37						38					39			
40					41						42			
43					44						45			
46					47						48			
					49						50			
51	52	53	54			55	56	57			58	59	60	61
62						63					64			
65						66					67		68	
69						70							71	

Grid Clues

Across

1. Bad guy in *Back To The Future*
5. Summed
10. Writing artist
14. Cookie
15. Shirley Temple movie
16. Island
17. Run ----
19. Slang for periodicals
20. --- Loma
21. Astronomical tools (2 words)
24. Amon --
25. Disney attraction with Michael Jackson: "Captain --"
26. Former conception of solar system (2 words)
37. Greek letter
38. Smallest of the batch
39. Greek letter
40. Significant other
41. Swings a club
42. Mystery Acronym!
43. Scream you might make if you fall off a cliff
44. Last half of name of TV show: "MacG--"
45. Deadly
46. Astronomical sight (2 words)
49. Not out
50. Logic word
51. Astronomical angle (2 words)

62. Them
63. Chair
64. Natural religion movement
65. Acronym of the computer network that has those silly TV commercials where the computer says "You've got mail!"
66. Mid-range male voice
68. Song in opera
69. Long-lived Canadian rock group
70. Takes off the top
71. Green vegetables

Down

1. Male mammal
2. Female name
3. Quarrel
4. Points at which rays of light converge
5. "Say --"
6. A unit of local government in ancient Attica
7. Phone someone
8. Rulers have one
9. Cut open
10. Sega's kiddie game machine
11. Student's financial helper
12. Programming word
13. Orange Pekoe and Earl Gray
18. North and South ----
22. Result of time spent outside
23. Types of ports
26. Greek letter
27. Female name missing the last letter
28. Chose
29. Stadium noise
30. Treasure ----
31. Ran
32. Special type of red
33. Dorothy? (2 words)
34. Greek letter
35. Possible phrase if Spielberg's 1982 film was remade today: "---- home" (2 words)
36. "----gagging"
41. Competing at Olympics this summer
45. Electricity unit named after Michael Faraday
47. Lubricant
48. Pronunciation of word meaning clotted blood
51. Astronomical point of light
52. Old English word
53. Water snakes
54. A type of pin
55. Smell
56. Short form of French verb "To make into bread"
57. Tiny particle
58. Jump
59. Italian moneys
60. Continent
61. Statutory holiday
67. Half of initials found on invitation cards