

# math NEWS

Volume 67, Issue 5

Friday, March 17, 1995

FIRST, IT WAS BRAIN. THEN, IT WAS REN. AND NOW, WE HAVE YET ANOTHER CARTOON CHARACTER ON THE COVER OF MATHNEWS BECAUSE WE CAN'T COME UP WITH ANYTHING ORIGINAL.



## lookAHEAD

mathNEWS	
March 24	Issue #6 production night 6:00pm, MathSoc (MC 3038) <b>This is not a misprint!</b>
March 31	Issue #6 hits the stands
ActSci Club	
March 21	Talk on the Laval Exchange by students of Laval and Waterloo, 4:30
March 22	Actuarial Science Referendum
March 29	Exec elections for the Fall term, followed by a night out at Weaver's Arms, 4:30
Co-op	
March 20	Posting #7 (cont. phase) 10am
March 21	Posting #7 (cont. phase) expires 8pm
March 22	Posting #8 (cont. phase) 10am
March 23	Posting #8 (cont. phase) expires 8pm
March 27	Posting #9 (cont. phase) 10am
March 28	Posting #9 (cont. phase) expires 8pm

## PMC&amp;OC Speaks!

*Time flies when you're selling cookies...*

The past two weeks have been busy, busy, busy!!! What has your friendly neighbourhood Pure Math and C&O Club been doing, I hear you ask? We've held a wildly successful bake sale, sold t-shirts, and played the last co-rec volleyball game of the term! Not to mention the entertaining talks by Professors Gilbert and Lewis. All this has happened since the last issue of mathNEWS... are we dynamic and energetic or what?

Sadly, things are starting to slow down as yet another term winds to a close. Our next talk is on March 27<sup>th</sup>, so watch for posters. And as I implied earlier, co-rec sports are finished for the term. So you'll probably find PMC&OC members kicking back and relaxing in the club office (MC 3033, don't you know) and partaking of our fine collections of mathematical books and journals. And just think... we don't have to worry about finals for another whole week or so! Ah, peace.

Peter Milley

PMC&OC ambassador to mathNEWS

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Your Wonderful Editors: Mike "Hammer" Hammond, Mala "Crakko" Krishnan

## Actuarial Science Referendum

**For Whom?** All Actuarial Science Majors.

**When?** March 22, 1995.

**Question:** Do you agree that a refundable fee of \$2.50 per term per student enrolled as an Actuarial Science Major be added to the fee statement for the sole purpose of paying the mandatory Actuarial Students' National Association (ANEA/ASNA) membership fee?

YES  NO

**Who is organizing this referendum?** The University of Waterloo ActSci Club.

**What is ANEA/ASNA?** The Actuarial Students' National Association is a student-run organization representing students of the universities of Concordia, Laval, Montreal, Toronto, U.Q.A.M., Waterloo and Western Ontario.

**What does ANEA/ASNA do for me?** Materially, first of all, it produces a semi-annual bilingual magazine, which is read by more than 200 firms in Canada and by more than 1300 students, focusing on current actuarial issues of interest to students.

Secondly, it hosts an annual convention where students can socialize with future colleagues from other universities and meet future employers while attending interesting conferences and learning more about the actuarial profession.

More importantly, it voices the concerns of today's actuarial students. It is recognized and respected by the SoA and the CIA who do not hesitate to consult ANEA/ASNA on students' opinions and to channel information about changes in the examination curriculum.

**What are ANEA/ASNA's future goals?** To maintain the good reputation that it now has reached in the eyes of the SoA and the CIA as well as expand its presence throughout Canada and the U.S.

**Why add \$2.50 to my fee statement?** The annual ANEA/ASNA membership fee is \$2.50 per student enrolled in Actuarial Science. Prior to this year, ANEA/ASNA membership fees were not mandatory for Ontario universities. As a result, the ActSci Club made contributions in accordance with its financial situation in order to maintain the University of Waterloo's membership. In light of the new mandatory nature, the annual dues have become too onerous for the ActSci Club to support.

**What if I do not want to be a member of ANEA/ASNA?** You may choose not to be a member of ANEA/ASNA by requesting a refund from the ActSci Club in the first three weeks of each term.

**What about the ActSci Club membership?** Should ANEA/ASNA's annual dues no longer come from the ActSci Club membership fees, the Club membership fee will be lowered from \$5.00 to \$3.00 per term.

**What if I have any other questions?** Please feel free to drop by the ActSci Club office (MC 3030) or call at 888-4567 ext. 6534. Two forums will also be held on Wednesday, March 8 and Wednesday, March 15, 1995 at 4:30 p.m. in rooms to be announced (check the ActSci Club's door).

VOTE  YES

Mark Nebelung



ultraCLASSIFIEDS

If you like Brad Pitt, and know how to log into a computer, try accessing the Brad Pitt homepage. It's got lots of interesting info on and pictures of Brad Pitt. From any math undergrad prompt just type

Mosaic <http://csclub.uwaterloo.ca/~cbtnorman/WWWbrad>

Christina

ATTENTION UNIX LOVERS- You are worms and I hereby challenge you to a duel. You name the time, place, and method. Prepare to die, scum.

Anonymous

To all the assholes who study (not eat) in the C+D area at lunch time: IT'S FOR EATING DAMMIT.

A bitter, vindictive Juan

To those with Master Keys to the MC who shouldn't:

You know who you are and you know you shouldn't have one. Get a conscience and EARN the right to one of those—don't copy it!

Somebody Who Doesn't Want To Be Blamed For The Next Batch of MathSoc Money To Go Missing

To: You Know Who

I know I sound like a bore; But I must ask you once more, Please, oh please, I ask of thee, won't you do P3 with me?

You Know Who Too

**MEGA 747-2900**

**PIZZA KING & UNIVERSITY**

**UP LATE ???????**

Come and Get It!

Large Pepperoni Pizza

\$5.22 plus tax

2 Medium Pizzas With 3 Items  
And 4 Coke — Delivered!!

\$12.99 plus tax

ActSci Club

Hello again all you ActSci sorts out there!

Can you believe there's only two weeks left of classes this term? Of course, for some of us, that's the last two weeks of classes ever! Yay Yay Yay Yay Yay...oops, sorry, not to rub it in or anything...

What do we have coming up in the next few weeks? Well, on March 21<sup>st</sup> several students from Laval who are currently attending Waterloo and Waterloo students who went to Laval on the exchange program are giving a talk on the exchange. This is an excellent opportunity for those of you who are considering participating in the exchange, or for those of you who don't know much about it, to come out and hear about the exchange. As usual, pop and donuts will be served!

In an effort to make the transition from term to term progress more smoothly, we are holding elections for the President and Treasurer for the fall term on Wednesday, March 29<sup>th</sup>. We strongly encourage all members of the club—that means you!—to come out and vote. We need your participation!

After the elections, we will be going to Weaver's Arms for dinner, and who knows what we'll do after that! It'll be a fun evening, if nothing else! Again, everyone who has paid their membership fee is welcome to attend.

Oh yeah... on Friday, March 24<sup>th</sup>, a very special event is happening... my and my fiance's Stag and Doe party! Anyone who wants to go is welcome to attend, and that goes for all you ActSci folk who know me—especially you 1Bs who have probably seen enough of me over the last few weeks to last a lifetime! Tickets are \$10 and can be purchased at the ActSci club. (Yeah, I probably shouldn't have put this in here—Chantal, will you ever forgive me?)

Our cool ActSci hats are still on sale... in fact, they're probably all made by now, so instead of putting down your deposit, you can pay the full (but low!) price of \$14 and walk off with your very own ActSci hat... they're available in white with black brim and lettering or blue with brown brim and lettering. They sold out quickly last term... they're almost sure to do so again this term... so buy yours now!

Well that's it... if you haven't applied for the May exams by now, you'd better get your application out in overnight courier today, as they're due on March 20<sup>th</sup>. Have fun these last few weeks of classes! We hope to see you at all our events!

April Gale  
Publicity Director

After 12 years in therapy my shrink said something that brought tears to my eyes.

"No hablo ingles."

Why do English-speaking people call Germany "Germany", when Germans call it "Deutschland"?



## Computer Science Club

A Student Chapter of the ACM

### CSC Flash

Greetings, DNA-carrying organisms. First off, I would like to thank those who expressed their concern for me after the last issue of *mathNEWS* went Flash-free. I was merely accompanying UW's programming team to Nashville, where they competed in the ACM International Programming Contest. A hearty congratulations goes out to the team, Zygo Blaxell, Nikita Borisov, and Philip Chong, who placed 10<sup>th</sup> overall, giving Waterloo a top 10 finish for the third year in a row.

#### Other Programming Contests

The CSC is holding its termly ACM-style programming contest on Saturday, 25 March. The contest will start at 10:00 am; please register at the CSC (MC 3036) in advance. This contest is beneficial for those interested in trying out for next year's ACM programming team, but all are welcome, and prizes will be had.

Unfortunately, the 1994 Duke Internet Programming Contest, which was delayed to 1995, has been cancelled. The people who run it at Duke encourage all to keep practising for the 1995 contest.

#### Upcoming events

There is no shortage of events coming up for the last two weeks of classes. On Tuesday, 21 March, at 4:30 in DC 1304, Dan Astoorian from the Toronto Freenet will be talking about (surprise) the Toronto Freenet. That Thursday, 23 March, Northern Telecom will be giving a talk about the Millenium 200 series of payphones. The following Tuesday, 28 March, we will be hosting a talk on the International Obfuscated C Code Contest. Come see just how *weird C* can be. Finally, one of the last days of classes will see the traditional ^D dinner, to be held at a fine dining establishment that is yet to be determined.

#### Other things

The magic smoke that powers computer chips was let out of the xterm inate that was living in the CSC office. At the time of writing, it is being looked at by members of the MFCF hardware team. We all hope for the best.

We have just sold our last of the old-design T-shirts. The design for the new shirts are posted in the CSC office. Preorders can be made in the office with a \$10 down payment.

As always, read the newsgroup `uw.csc` or see the URL <http://csclub.uwaterloo.ca/> for up-to-the-moment information.

Calum T. Dalek  
Chairbeing

## Apathy

*A topic I'm sure you're a part of*

*On March 9th at 4:30, SAC and the Co-op department held an open forum on co-op. Five students attended. There were more staff present than students!?!?*

Thanks for coming out. For all of you who complain and whine about co-op, your chance to whine to the right people has come and gone for this term. In total, only two students were present for the entire forum, and three others stayed for only a portion of it, one of whom was a grad student. Those who were present brought up such issues as exactly how the co-op fee is spent, the role of co-ordinators, access, and the incident involving the co-op students in Hong Kong.

WHERE WERE YOU? The co-op department was open, honest and sincere in their replies to inquiries. When we walk around the halls of Math and any other faculties for that matter, we don't want to hear about your complaints regarding co-op. Why? Because you had your chance and didn't bother to take it. Sitting around complaining in the Bomber or in the Comfy Lounge accomplishes nothing unless you're willing take to the time to direct your concerns and problems to the people who can do something about them.

Low turnout to these types of events sends a direct message to co-op and other departments that students really couldn't care less what gets done with their money.

If you find yourself complaining about co-op or any other problem you have with the university, why not take the five minutes out of your day and go tell someone who can do something about it? Everyone else is just as busy as you are; you're not the only one with assignments and midterms. If you don't tell someone you have a problem, no one can help with it. If we don't speak up we can be assured that nothing will change.

Ronald Servant  
Rachel Nickie

## Warren's Laws of Assignments

1. Assignments are conserved—whenever you hand one in, you are always given another.
2. Assignment marks vary inversely with the amount of television watched, the number of other assignments you have to do, and the evil of your prof.
3. Assignment marks vary directly with your intelligence.  
*Uh...no. I don't think so. You obviously haven't taken any upper-year CS courses, yet.—CrakkoEd]*

Laws 1, 2, and 3 combine to give the basic assignment equation:

$$M = IF/npT - d$$

where  $M$  is the assignment mark,  $I$  is your I.Q.,  $F$  is your friends' cumulative I.Q.,  $p$  is the evilness of your prof,  $T$  is the number of hours spent watching television, and  $d$  is the ever-present T.A. deduction.

Warren "The Milkman" Hagey

## An Update to The Pink Tie Pledge

This week's been pretty busy and I am badly in need of sleep. This week has also been busy for The Pink Tie Pledge. So far we've raised \$3,321 and, as I speak, someone is handing me another pledge card.

We still have a long way to go so keep those pledges coming! Our goal for this year is set at \$23,000 and MGC will be keeping a track of the amount on the almighty Pink Tie Thermometer just outside the C&D.

Flipper and I will be challenging the graduating class this year — you can read all about his challenge on this page. I'll be going around to all fourth year Math classes this week making my little spiel.

Why should you bother? What other Math programs give you a degree that companies will actually take seriously? What other program has a world renowned reputation?

Paul Martin's budget has hit this university very hard. In the coming years, it will be very difficult to maintain the same

programs we have now without some sort of funding cuts. We're all tired of hearing about the government and its spending cuts; however, the problem is real and we need to address it now. Princeton has, at last count, approximately \$1.7 billion in a nice comfortable endowment fund. The interest from this fund is spent on scholarships, equipment maintenance and upgrades, and curriculum development.

That's a lot of cash, but we have to start somewhere. With your leadership, we can help keep us and Waterloo where we belong — among the best in the world. The key is that this IS STUDENT MONEY for students. We and the graduating classes of the future will all benefit.

Stop on by the MGC office in MC 3029, or e-mail me at [sgupta@undergrad.math](mailto:sgupta@undergrad.math).

Sandeep "Pledge-Boy" Gupta

## Flipper's Pink Tie Pledge

*Go Ahead, Make Me Pay*

Despite the best efforts of my alcoholism, my laziness, and my CS 466 prof, it looks like I'm actually going to graduate with my B.Math.—and, get this, I'm even going to be outta here on time. To celebrate my extreme good fortune, and to thank this institution and this faculty for providing me with a degree that future employers will think actually means something, I have decided to contribute to the Pink Tie Pledge.

Most of the grads-to-be out there should know what the Pledge is by now. Sandeep probably has an article around here somewhere, unless he forgot to submit it to Mike and Mala the Merciless again. I'm not writing this article just for the pleasure of bragging that I plan to give something back to this school, though. I'm doing it mainly to encourage every single grad out there to fill out a pledge form because, let's face it, we're going to be making tons of money in the near future, and it's not going to kill us to part with a little bit of it.

As well, I am specifying that my pledge be put towards the Math Endowment Fund (MEF). I encourage everyone to do likewise, because that option guarantees that the students that actually benefit from the money will have a say in how it is used.

As well, the money will benefit the students of the faculty in perpetuity.

To encourage as many grads as possible to contribute, I'm going to throw a little challenge forward. Right now, I plan on giving \$303 (total) to the Pledge, which is the amount that will get me into the Dean's Prime Number Club. If any ten grads out there match that contribution, designate that the funds are going to go to MEF, and include a short note on the pledge form that says "I want to make Flipper pay" (or something similar) by March 31, then I will increase my pledge to \$1,000. And if twenty of you do it, I'll increase it to \$2,000. Hell, that's less money than I spend on beer in a school term.

So, again, I'd like to encourage you to fill out your forms and donate money back to the school. The coming years look like they're going to pretty lean, and it won't hurt us to help out our younger math-siblings. Remember, the money you pledge is payable over three years and can be claimed as a tax credit. As well, no payments are due until a year after graduation. So, if you want to make me pay, you have two weeks (until March 31) in which to do it.

## Top Ten Reasons To Hate Unix

*or Keep That Thing Away From My Hard Drive*

Steve "Flipper" Shaw

1. If I type the wrong command by mistake, that's okay because chances are what I typed will do something anyway.
2. UNIX is fault-protected (i.e. "you used dos2unix with wildcards and it erased your files! That must be *your* fault!")
3. Each version of UNIX is entirely proprietary, and yet all versions maintain an astounding degree of inflexibility.
4. It's better than 75 networked Apple Newtons in many situations.
5. By the geeks, for the geeks.
6. A GUI so advanced even Windows users find it restrictive.
7. Excellent security measures—as far as I can tell, the whole thing is encrypted.
8. It's written by people with names like Torvald.
9. It's like OS-9, but without the bells and whistles (3 points for anyone who knows what OS-9 is; 30 points if you're running it at home. Did you know that OS-9 is the OS on board the space shuttle...? never mind...)
10. Inebriation and onanism.

Cam "Fatal Error" Wellock

## profQUOTES

"I don't have any balls in my head; I don't have much in my head."

MacKay, STAT 231

"Does everyone believe this? Good! Proof by democracy."

Best, C&O 367

"If Moses hadn't come down from the mountains, we wouldn't have had commandments, we'd have guidelines."

MacKay, STAT 231

"If there is a calculation error to your advantage, don't tell us. We don't want to know - consider it a bonus."

Safayeni, M SCI 211

"When I start a new topic at 17 after, you guys are putting away your books. That means 'Idiot, what are you doing to us?'"

Safayeni, M SCI 211

"You're called The Stapler... There are 4 people working for me. They all have smaller staplers."

Safayeni, M SCI 211

Prof: "What does coughing mean?"

Student: "You're sick."

Prof: "Or you are making us sick."

Safayeni, M SCI 211

"Anything is possible when you're on drugs."

Willard, PMATH 330

"This is a fairly cool dude so he has his baseball cap on backwards."

B. Simpson, CS 246

"We'll talk about software developers because it's socially more acceptable."

B. Simpson, CS 246

"I think of object-oriented programming as politically correct programming."

Atlee, CS 246

"We're just going to expose everything!"

Atlee, CS 246

"It's harder to draw in n-space, unless you're smoking funny cigarettes."

Best, C&O 367

"This '2' is a '1' having a bad hair day."

Best, MATH 138

"Is this thing a power series? If you met it in a dark alley, would you say 'Hi, Power Series!'"

Best, MATH 138

"For example, if you happen to meet this power series and ask it, 'Do you have a radius of convergence?', and it says 'Yes', then you can reply, 'Oh! I know you!'"

Best, MATH 138

Prof: "This method involves being sly, devious, crafty, and suitably scientific. How do we go about doing that?"

Student: "Use Maple?"

Best, MATH 138

(After the overhead suddenly dies) "Regardless of your personal religion, I want you all to pray now. Maybe we should order you according to religion, though, so we know which one works! If it doesn't come back on, the atheists win."

D. McLeish, STAT 331

"Well, it appears that I don't know what a tree looks like after all. I've been out of the jungle too long."

D. McLeish, STAT 331

"Mathematicians are very fond of being orthogonal."

F.C. Tang, MATH 235

"I'll try to prove it in your favourite manner."

F.C. Tang, MATH 235

"I think just for fun you might want to try it. Of course if it's an even bigger matrix, you will have even more fun."

F.C. Tang, MATH 235

"For some reason, you want to calculate this expression  $[A^{12} + A^{11} - 6A^{10} + 4A^9 + 4A^8 - 24A + 3I]$  of matrices. Personally, I don't really like to do it."

F.C. Tang, MATH 235

"To prove it will take a few lectures. If we have time we'll come back to it and you can enjoy the full glory of this theorem."

F.C. Tang, MATH 235

"I choose now to add  $L$  to all sides of this equation — I want to get the ' $L$ ' out of here."

L. Dickey, PMath 331

"[This was] thought up by Cantor. Clever man. Persecuted, but clever."

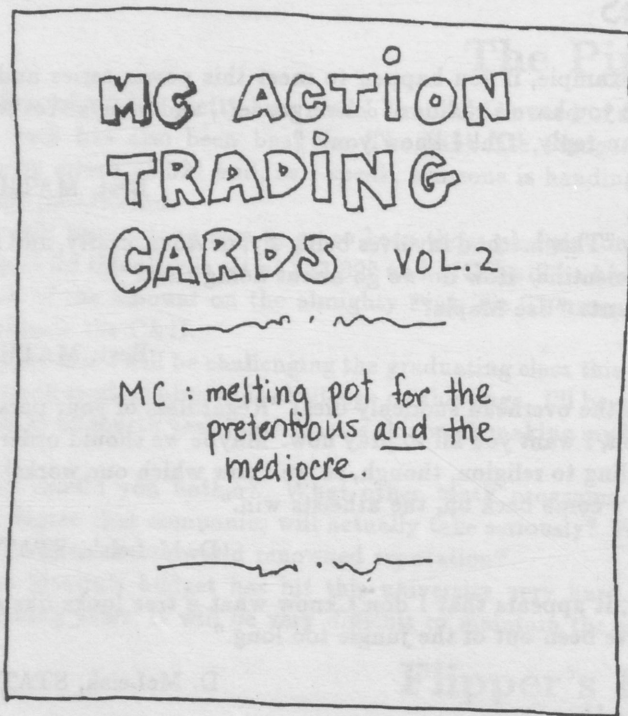
L. Dickey, PMath 331

"In most calculus courses, the proof of the chain rule usually gets a wave of the hand. In this course, we're going to go more in depth — a wave of both hands."

L. Dickey, PMath 331

"Let's ask some dead composers just what they thought about this."

Martin, Music 100

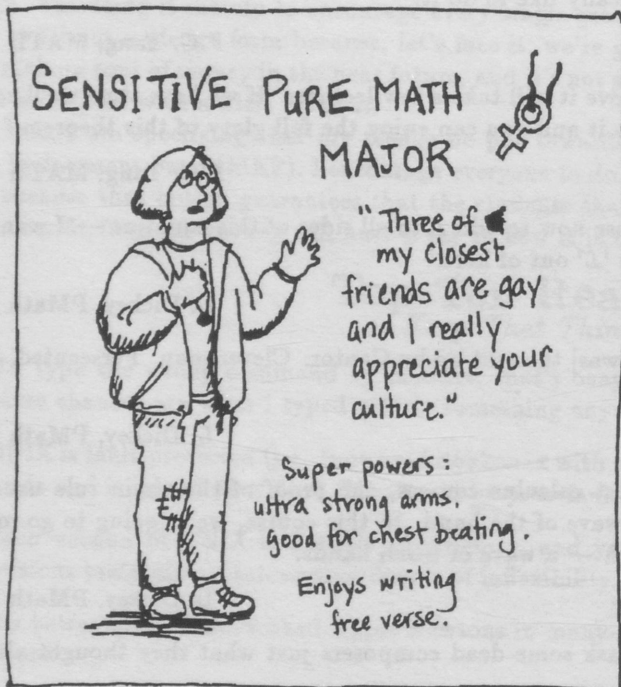


### Crakko The Warner Cousin

*With apologies to "Weird Al" Yankovic*

Crakko, Crakko, Crakko the Warner Cousin,  
 She isn't cruel,  
 And she isn't mean,  
 She just does CS on an X-term screen!  
 Crakko, Crakko, Crakko, the Warner Cousin. Hey, Crakko!

Mike "Harvey the Wonder Hammer" Hammond



## The Architecture of U(W)

I've only been here for five months, but I've had a good look around and there are some things going on at this university that I just can't ascribe to reason. Some of them have to do with the Math Faculty. The rest don't. See if you know what I'm talking about.

First off, half the doors on campus ask you, politely, to "please use other door." Half of the rest are locked. If you really want me out of there, just post a sign that says "please don't use any door" and save me the trouble of trying the rest.

Once you're inside MC, climb the stairs. All the way. I dare you. Whoever designed the top two floors was obviously on drugs. I got lost trying to find the map of the fifth floor, and apparently numbers become non-sequential when you're more than thirty feet above ground level.

### *MC Sixth Floor: Live the Adventure*

If numbers fail you over thirty feet, Euclidean Geometry passes out at about forty. I still think you should notify your friends if you're going up there. If they don't hear from you in two days, they should call the authorities. I understand if you wander around long enough, you'll find some cheese. [*But right then the folks in white lab coats grab you—Fuzzy*]

Having escaped those perils, I discovered the Comfy Lounge. It's kind of dark, kind of pungent and kind of frightening. I went in for a coffee before a mid-morning class, looked around and left. I came back late afternoon for another coffee, looked around and found pretty much the same people doing pretty much the same thing almost twelve hours later. I don't go near it late at night any more. They might come to life.

On your way out the door, you'll notice that the first floor is actually the basement, and the first floor you walk into on entering is floor number two. By the way, the bathrooms are cleverly hidden for everyone's convenience.

Outside, the sun is shining, the birds are chirping and there's an architectural monstrosity sticking out of the ground behind the Physics building. The story is that the Engineers tried to dig a hole to put a building in, found the water table, said, "Well, shucks, that screws our plans right up" and stuck the building in there anyway. What's up with that? [*The editors have no idea what building this is... but we assume it's the Engineering Lecture Hall... maybe??*]

Apart from that, the last thing on my non-comprehension list is the layout of Village Two. I think that they let the MC Sixth Floor architect at it. He only got to design one, though. Good thing, since even that one isn't anchored in reality. His grip on the cardinal directions was going, too.

If you have an explanation of these, or any other confusing phenomena, keep it to yourself. I'm content to live with it. My plan, for the next five years, is to keep nodding and smiling, and any new buildings or floor plans are fine with me.

Mike Hoye

Happy St. Patrick's Day!



# Math, the Universe, and Everything

## *Time Management Skills for the Stupid*

As time goes on and we advance through our university careers, time management becomes more and more important. In first year, it was easy to find time to go to class, take notes, and copy assignments and still leave plenty of time to drink beer and chase members of our preferred sex. As I got older, though, my beer-drinking and sex-pursuing time started cutting into my class time, which led to an inescapable conclusion: I needed better time management skills. Instead of developing them, though, I spent less time going to class, and more time drinking beer and chasing women. Any time left over was spent copying assignments.

So that the rest of you do not have to go through the pain of dealing with a lack of getting drunk and getting laid (not to mention the pain of getting kicked out of school for copying one too many assignments), I've put together this little guide to help you plan your time wisely. If you follow these directions, not only will you be a well-organized and happier person, but you'll also probably be arrested.

### *Drink More Beer*

Some of you may be wondering how drinking beer can help you manage your time. Beer has the amazing power to alter the flow of time—if you have a beer or twelve, you can easily lose track of time. Sometimes beer makes things go by so fast that the whole night seems like a blur. Obviously this doesn't help us, as we're trying to make time pass more slowly. Beer helps time pass more slowly on the morning (or early afternoon) after, as those of you who have ever spent a Wednesday night killing pitchers of Rickards at the Bomber know. Sometimes the morning after seems to last for three or four agonizing weeks. Use this time wisely! Try to fit studying and other activities into your busy schedule of vomiting and overdosing on aspirin. As long as you're doing work that doesn't require you to actually think or move (for example, your MTHEL 102 assignment), you're set. Hell, I know that my hangovers usually seem long enough that I have enough time to write a novel or two.

### *Go to Fewer Classes*

A disturbing trend among younger students is regular classroom attendance. It is this sort of irresponsible behaviour that makes effective time management really difficult. Let's face it—if you go to your morning classes, you're usually too sleepy to really learn anything. Your afternoon classes are no better, because you're always thinking that your time could be better spent on the Bomber's patio, watching the new Student Life Centre not opening on time. As long as you know somebody in the class who is a big enough loser that they go to class, and will pick up (and preferably do) your assignments for you, then you're set. Don't worry about those annoying exams and midterms—I've heard that they've all been cancelled this term.

### *Don't Worry About Getting a Job*

Whether you're looking for a co-op, summer, or full-time job, you've probably noticed that the job search takes a lot of time.

A great way to save time is to not get a job. Don't worry about starving to death, or not having enough beer, or anything like that. Repeat after me: "Canada is a welfare state, and the government won't let me starve". So do as I'm going to do: take the summer (or even more!) off, collect as much social assistance as possible, and spend all of your time drunk. If your unemployment insurance runs out, you have two choices: go on welfare, or move to the Maritimes, the Magical Land of Everlasting UI.

### *Have More Sex*

Having sex only increases the time you have to spare if you're male. This has to do with the odd perception of time that females seem to have during sex. After sex, women always complain that it was too quick and that you were done in under ten seconds. We males know damn well that it took longer than ten seconds, and feel that our performance lasted hours, if not days, no matter what the clock says. All you have to do is harness this extra time that you have during sex, and you'll have plenty of time to get your work done.

There are two interesting side effects to this odd female perception of time during sex. One is obvious: they also have a distorted sense of linear measurement, and, as such, are always saying things like "There's no way that thing is ten inches long." The other side effect is that the rate of time distortion is approximately quadrupled during foreplay. She'll complain that she needs more than ten seconds of foreplay, while you *know* that you've spent approximately three weeks warming her up, even longer if you count the time you spent buying her drinks.

### *Stop Doing Assignments*

The average math student spends approximately 75% of his or her time doing assignments, leaving only 45% (or something like that) of his or her time for numbers. The easiest way to make more time for the important things in life is to simply stop doing assignments, or at least spend no more than 2% of your time doing homework (which is the average amount of time that Arts students spend on assignments). About the only way to spend so little time doing assignments and still managing to pass your courses is to avoid doing any original work, and instead put that 2% to good use by copying Goldberg's work (hey, if you're going to copy, you might as well copy from the best). This will give you plenty of time to get drunk, have sex, and still be Vice-President, University Affairs. Hey, if I can't take cheap shots at the Feds-elect, who can I take cheap shots at? Oh yeah, the CSC.

### *Join the CSC*

If you pay close attention, you'll notice that the CSC is never empty. This is because the members of the CSC have excellent time-management skills. What is their secret? I don't know, and if the price of finding out is spending any time on the DNA couch, then I never want to know.

Steve "Flipper" Shaw

## pmQUOTE

[The turbot] don't know where there is a 200-mile limit. They don't have a speedometer.

The Rt. Hon. Jean Chrétien, Prime Minister of Canada as quoted in *The Toronto Star*, Sat. Mar. 11, Page A20

## Editorial

## Bridging the Gap

This is certainly one of the most powerful, yet honestly, dealt bridge hands that I have ever seen. This happened on February 27<sup>th</sup> in the Math Comfy Lounge, with several witnesses.

Vul: N-S	North		
Dealer: E	♠ 972		
	♥ 3		
West	♦ Q752	East	
♠ ?	♣ J9654	♠ ?	
♥ ?		♥ ?	
♦ ?	South	♦ ?	
♣ ?	♠ Void	♣ ?	
	♥ A Q 10 9 6 4 2		
	♦ A K J 10 6 4		
	♣ Void		
East	South	West	North
2♠	3♥	3♠	Pass
Pass	6♦ (!)	Dbl.	Rdbl.
All pass			

South has a very difficult choice of bid over two spades when not playing any sort of gadgetry. I think three spades would have been a better choice. This should show some sort of unspecified two-suiter (with a one-suiter you could either bid it or double first). If partner bids clubs, then you can jump to six diamonds to convey your hand type.

After South leapt fearlessly to six diamonds, North could envision his partner's hand, almost to a "T", and had no problem finding the redouble. The singleton heart and four-card support to the queen had to be incredibly powerful assets.

The play of the hand was relatively unexciting. Declarer simply pulled trump, and ruffed hearts in dummy. He quickly made seven.

Eric Sutherland

## Come write for the last issue of mathNEWS for the term!

*Writer's Night on Wednesday the 22<sup>nd</sup>. Share your deepest and most intimate thoughts with us... and the rest of the Faculty!*

This is about vegetarianism, or more correctly, Food Services and vegetarianism. I'm not going to sing the praises of being a vegetarian since all you meat-eaters wouldn't like that, much like I don't like being told that being a non-vegetarian is next to Godliness... which I have.

I am a vegetarian and am so both for religious and personal reasons. That is, even if my religion didn't impose even the slightest restriction, I would have chosen to be one.

Being here, away from home... and in CS, I'm forced to have several meals at some of the many Food Services outlets—the Davis Centre's *Bon Appetit*, the Laurel Room at South Campus Hall and (gulp!) the Village One cafeteria and Grill.

I won't comment on the *standard* of the food; that point has been commented upon before and is pretty much agreed upon. I will, however, comment on the lack of vegetarian food and the attitude towards vegetarians. Of course, this experience is personal and may not reflect the experience of others.

Firstly, I've found that the amount of food available to strict vegetarians is, well, abysmal. *Bon Appetit*, for example, has a veggie burger, some over-greased vegetables and the sandwich bar. The veggie burger gets boring quickly, the over-greased vegetables make one sick (and isn't much of a meal anyway) and, at the sandwich bar, which is generally closed when I go after classes (you wonder why more and more Canadians die of a heart attack and high cholesterol—because healthy food just isn't around, just the greasy stuff is), the servers use the same knife to spread the butter as they do to spread the tuna. Sick! Sick! Sick! Not a pretty sight to a vegetarian. I don't want to have a sandwich with *tuna* mixed in with the butter. I shouldn't have to give up the butter on my sandwich because Food Services can't get separate knives. I'd have thought that with the prices of food so high, they'd have a profit and actually be able to afford a separate knife for the butter, mayonnaise and tuna.

The same thing, over and over and over again! How about some variety? Must there only be *meat* sauce for the spaghetti? Must vegetarian chilli only be a special and not part of the main menu?

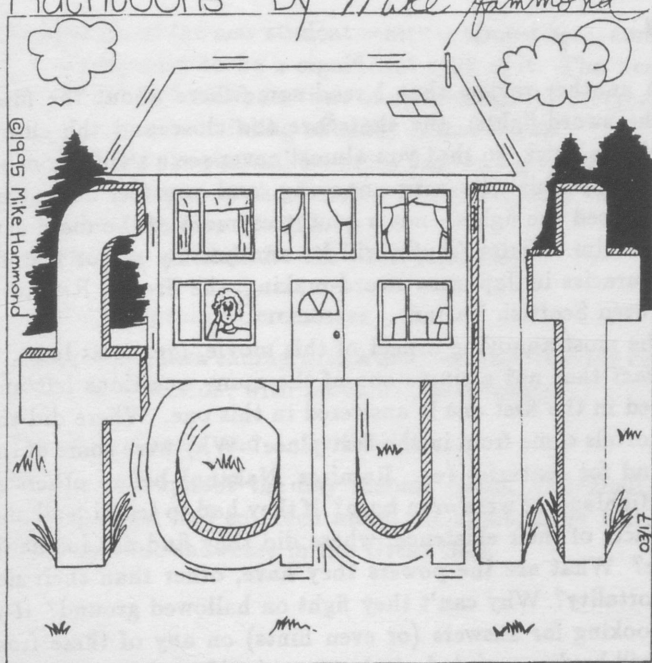
As for the attitude towards vegetarians, it's quite depressing. I've politely asked people to wash their hands after dealing with meat, especially the really greasy kind. While they have done it, I've returned and have them laugh at me and the concept of clean hands. In a separate incident, vegetarian chilli was served and I asked, "Is there *any* meat in there?" I've seen food labelled as vegetarian with chunks of fish and chicken (vegetarians do *not* eat fish or chicken) in it. Sad, but true. Thus, my question was valid. What did I get? A highly sarcastic remark from the server, telling me that all soup has to have chicken or beef stock or it isn't right. Anyone who didn't know that "doesn't know how to cook or how to eat". Excuse me, but I've made many good soups from scratch without chicken or beef stock. Furthermore, he continued to say, sarcastically, that "if the food is labelled vegetarian, it doesn't *have* meat." Thanks.

So here's my plea to Food Services—get a variety of food (you'll never know exactly how many people want it until you *actually* serve it) and teach the servers some manners.

Vegetarians are people, too.

Mala "Crakko" Krishnan, mathNEWS Co-editor

Mathtoons by Mike Hammond



Janine lived on the fault for decades without incident. But one day, without warning, she had a vowel movement.



## The CS 374 Drinking Game

Have you ever noticed that your classes can tend to get, well, predictable? Here's your chance to take advantage of your prof's personal teaching quirks!

The game is quite simple. The list below gives a number of things that happen fairly often (or quite rarely) in class. Follow the instructions as to how many drinks you can have.

This game is also quite adaptable. Are you in Actuarial Science rather than Computer Science, and wouldn't take a CS course to decrease your risk status? Simply compile your own list of professorial quirks, and how many drinks each one is worth!

**NOTE!!!** We *will* get sued if we tell you to drink alcohol! So please, drink Coke, iced tea, or water! (Not rum & Coke, Long Island Iced Tea, or vodka!) And if you *do* get caught with alcohol (in a canteen or one of those reusable Coke bottles, perhaps), remember to tell the authorities that *we told you not to!*

### The Bored Board

Every time the prof says or writes	Consume
"i.e." or "that is"	1 drink
"in general"	1 drink
"note"	1 drink
"obviously" when it's <i>not</i> obvious	1 drink
" $\sqrt{-1}$ " instead of "i"	1 drink
"What [equation] number am I on?"	1 drink
equation numbers in some obscure pattern	1 drink
one sentence or equation per blackboard	1 drink
"I can't say I've got a lot of sympathy."	1 drink
"early dismissal"	entire bottle

### Professor's Personal Problems

Every time the prof	Consume
smiles (in that way he has)	1 drink
thinks he's funny	1 drink
is actually funny	entire bottle

### The Overhead Projector

Every time the prof	Consume
has the overhead projector in the way	1 drink
sees a student move the overhead projector	1 drink
asks that student to move the overhead projector back	1 drink
actually uses the overhead projector	entire bottle

### Miscellaneous

Every time the prof	Consume
wears a striped shirt	1 drink
makes a comment about how you should not only have started the assignment, but should be able to hand half of it in already	1 drink
irritates you in any way	as many as you need to put up with it

Mike "After This Game, Quite Hammered" Hammond  
Mala "Polly Wanna Crakko" Krishnan

## Highlander III

*the Stealing*

Well, I heard that *Highlander III* was good, and that it was bad, so I decided that I would have to see it myself, as I often like different movies than anyone else I know. So I did. Now, I'm telling you my impressions, so that you can decide if you wish to wait in line.

First, my Highlander background: I've seen the first movie many times, and think it is definitely a classic. (I also love the Queen soundtrack.) I have never seen *Highlander II: the Quickening* (a.k.a. the Sickening); every review I have read or comment I have heard has been negative, so I have never bothered. If you are in the same situation, you can rest assured that you do not have to have seen II to understand III; this sequel seems to entirely ignore the previous one.

A short plot synopsis (no spoilers): After Ramirez was killed by the Kurgan in 16th century Scotland, MacCleod travelled to Japan and studied under an immortal Japanese sorcerer. Another nasty immortal, Kane, came after them and the end result was that he was trapped in the sorcerer's cave until released into our time by unwise digging. By this device he missed the Quickening that took place in the original movie, and now he wants to kill MacCleod and become the "only one". Meanwhile, MacCleod is smitten with a reincarnation of his renaissance true love. Various minor plot twists and travels to New York and Scotland ensue, and eventually Kane and MacCleod fight each other (several times). I won't give away the ending, except to say that I found it too sudden and anti-climactic—I was sure that there had to be more.

Where to begin the analysis? Unfortunately, I have very little in the way of positive comment. The characterization is not very strong. MacCleod seems to have no purpose to his existence or use for whatever powers his immortal status has given him. His love interest falls in love with him for no real reason—perhaps just an attraction to mysterious men of the strong, silent type who ignore her. It never becomes apparent if he really cares for her, or if he does, why. The only half-way interesting character is the villain, Kane. If you liked the Kurgan, you'll love Kane, who is just as callous and evil and perhaps a bit more interesting than the original.

Plotwise, the film is in many ways a copy of the original. Most of its new elements are stolen from other good movies (thus my subtitle). For instance, the beginning two scenes, of a sword being forged and then of a snowy iron-age village being burned by mounted raiders, are taken cut-for-cut from *Conan the Barbarian*. The approach of these riders upon the sorcerer's mountain cave is strongly reminiscent of the opening of *Golden Child*, and the final battle scene is stolen straight from *Terminator II*, right down to the scaffoldings, machinery, orange flames and impersonations. The character interactions, both in the main conflict and the romance sub-plot, follow exactly the same lines as in the original movie, i.e. the villain kills Highlander's mentor near the beginning, then comes back for him centuries later, meets him in a church, fights him a couple of times, etc. The same goes for the "romance", where the love-interest begins by looking for historical information, then is drawn in by MacCleod's mysterious nature, and falls for him. No surprises, nothing new.

I don't recall the soundtrack making much of an impression on me; obviously it was not done by Queen this time. I must agree

with another review that I read somewhere about the filming of the sword-fights: the shots are too close and the cuts are much too quick, so that you almost never see a swing from start to finish. This gets very annoying, and you feel almost as if you missed the fights—not a good treatment of the main action in the film. History buffs will be annoyed by major historical inaccuracies in Japanese sword-making, the French Revolution, and even Scottish Tartan.

The most annoying aspect of this movie, for me at least, was the fact that not a single one of the many questions left unanswered in the first one is answered in this one. Where did these immortals come from in the first place? Why were some of them around for centuries (eg. Ramirez, Nakano) before others (eg. the Highlander) were even born? If they had to tell him all about the facts of their existence, where did they find out in the first place? What are the powers they have, other than their near-immortality? Why can't they fight on hallowed ground? If you are looking for answers (or even hints) on any of these fronts, you will be disappointed. At least no significantly new questions are raised to make the bafflement greater.

So should you see this movie? Perhaps on a Tuesday, or on video, if there is nothing better to do. It won't make you sick like *Highlander II*, but it also won't make you cheer like the original. At best, it is just a poor substitute for *Highlander I*, in the style of "it worked once so why not do exactly the same thing again?". Sorry, once was enough. The original premise (a left-over enemy with some extra powers) had great promise, so it is all the more maddening that it was wasted by attaching it to the rest of the movie. None of the expectations built up in the first half carry through, and by the end you just have to wonder what went wrong. There are still enough loose ends left to make another sequel (in fact, exactly the same loose ends left after the original), but if/when it does happen I hope that they finally do something worth watching.

Erich "Fuzzy" Jacoby

**Why are McDonald's Chicken McNuggets fried in 100% vegetable oil, and French Fries in a beef-vegetable oil mixture?**

*Just curious, you know... seems kinda weird to me!!*

**Erin Go Bragh!**

*Or at least let Erin go shopping!*

**May The Luck O' The Irish Be With You**

*And not the Northern Ireland Irish, Either!*

## It's Finally Here!!!!

The opening of the new student centre is almost here, and this is your opportunity to be a significant part of it. The week of March 27<sup>th</sup> to 31<sup>st</sup> will be a time of celebration for everyone on campus, as the new building officially comes to life!

Special events are planned for every day during the week, ending with a pub night at the Bomber to say a special thank you to the graduating class of 1995.

The tentative schedule for the week looks like:

- Monday: Opening Ceremonies

An extravaganza ending with a balloon drop from the ceiling of the new section, with fabulous prizes inside!

- Tuesday: Games and Activities Day

Games throughout the day include Beach Volleyball, Big Screen Sega, and so much more! At night, there will be a campus-wide showcase in the Great Hall.

- Wednesday: Retail Day

A giant sidewalk sale will occur in the new retail section of the building. Big Screen Sega will continue, and a silent auction to bring a piece of history into your own home.

- Thursday: Clubs Day

The clubs of the University of Waterloo will strut their stuff and show the community exactly what it is that each of them do. They will be taking over everything! In the evening, there will be a sleepover movie marathon in the Great Hall.

- Friday: '95 Graduate Day

To top off the week, graduates will have a chance to do the gamut of activities in the new centre. From a pancake breakfast in the morning to discounts and giveaways in the afternoon, until the pub at night, this day rates to blow your socks off.

There will also be several events that will be going on during the whole week. For further details about exact times and locations of these ongoing events, as well as the events of the week itself, stay tuned to the Town Crier and the *Imprint*.

Don't miss the opening that you have waited to long to see. This is going to be the event of the year. Be there!

Eric "I'm almost outta here... really" Sutherland

## Springtime

*and other related stuff*

Well, I had a nice article started about the awful weather that we've been having, but that sort of went down the tubes after last weekend, so this one will be about that wonderful time of year that we call spring. Officially, it isn't for a few more days, but we all know that spring really starts when the warm weather comes (as surely as I write this, it will get cold again). Today I even managed to go home and eat my lunch outside in a park near where I live, and it was splendid (just what I need, something else to distract me from my assignments).

Spring brings with it many interesting and exciting phenomenon. For instance — March Break. For those of you who don't remember, this is sort of like Reading "Week", except it's actually a whole week long, or in some cases, two weeks. My younger brother is one of the lucky ones who gets two weeks off, so he'll be down next week to visit me and experience university life. However, something good does come from March Break — the buses aren't overcrowded with rowdy little rugrats who excel at being nuisances.

Unfortunately, this good weather doesn't help too much when you have CS assignments to do. The intersection of the outdoors and CS assignments is the empty set, so if television wasn't enough to keep me from doing my work, I now have another excuse for slacking off. Apparently, good weather also affects the mind, because I'm content to ignore my assignment and just bask in the sun, even though I know this strategy probably won't help me too much in the long run (unless employers are looking for well tanned students with a working knowledge of suntan lotion).

Well, that's about all of the insight into springtime that I can give, so goodbye, and have a happy St. Patrick's Day.

Warren "The Milkman" Hagey



## mathNEWSquiz #5

*More fun than watching replacement baseball*

Yet another Friday has graced our presence, and it is time to once again work through our daily routine and continue to cope with life as we know it. What's that? Life not too good? Well, take a look here! Yet another squiz from the people who brought you... uhh, well, the last squiz! Also, the squizprize this time around is a mathNEWS T-shirt! But, before we start the big squiz, here's the answers from #4... **Recorded Song Lyrics:** 1. "Lovers in a Dangerous Time" by Barenaked Ladies; 2. "Cat's in the Cradle" by Ugly Kid Joe; 3. "You Keep Me Hangin' On" by Kim Wilde; 4. "Love Is All Around" by Wet, Wet, Wet. **Saturday Morning Cartoons:** 1. Colin; 2. Thompson and Thomson; 3. Fred, Daphne, Velma, and Shaggy; 4. Don Adams. **Proof That Brian Has No Life:** 1. *Invitation to Love*; 2. 710; 3. Repaint it; 4. Central Park.

Our many (!) submitters were: Ian "Who is Don Adams?" Facey (1; this isn't *Jeopardy!*), Robyn "only one word missing" Landers (5), alt.fan.londo (6), Emile Jumeau (9), Slaves to the Gridword (9; "sells it to some dimwitted tourist"), Bob the Great and Powerful (11), and our squizprize winners,  $A + J^3$  (Alex, Jakub, Jen and Joy; 12; congratulations)!

*Song Lyrics*

1. There were green alligators and long-necked geese  
Some humpy-backed camels and some chimpanzees
2. I've watched the summer evenings pass by  
I've heard the rattle in my bronchi
3. Was it love, or was it the idea of being in love?  
Or was it the hand of fate, that seemed to fit just like a glove?
4. We are the footprints across the sands  
We are the thumb on a stranger's hand

*Double Definitions**e.g. Studio company or Yakko & Wakko—The Warner Brothers*

1. Bank employee or Penn Jillette's assistant; six letters.
2. Automaker or geneticist; six letters.
3. Former Soviet republic or American state; seven letters.
4. The fifth work in a trilogy, or almost totally benign; six and eight letters.

*Questions about Dead People*

1. In 1857, she named Ottawa as Canada's capital.
2. The last former Canadian Prime Minister to die died in 1973. Who was he?
3. Who invented standard time?
4. Herman Hollerith invented a counting and sorting punch-card machine in 1890 to perform what task?

You may submit to [mathnews@undergrad.math](mailto:mathnews@undergrad.math) or the BLACK BOX before 6pm, Monday, March 27th. Good luck to all. And please leave the firing at Spanish fishing boats to the Armed Forces. Thanks.

Brian "The Calculus Cowboy" Fox & Darren "Ren" Morby

## Ich möchte das Sonderangebot

*Ein Feste Berg ist unser Gott*

For those in MUSIC 100, you probably got a chuckle from my subheading. Please excuse the rough translation of the title... and please don't send me mail pertaining to me butchering the German language or that I don't know any German or something like that... I already know that I don't know any German. Besides, I'll just ignore it anyways, so you'll just be wasting your time...

- Here's something I've been trying to figure out for quite some time. There's this course called AM 332, Complex Analysis. There's this other course called PMATH 332, Complex Analysis. Both have the same description, same course material, and (my goodness!) both are held together at the same time and in the same room. Yet, as an AM major, if it says PMATH 332 on my transcript, it wouldn't count as a credit. But it would if it said AM 332. But they are same course, just with different names. Now, I do know what the rules are so if I took PMATH 332 instead of AM 332, then you could call me a idiot for not knowing better. HOWEVER... I think a lot of time and aggravation could be saved for everyone if it was just named MATH 332. Same goes with Real Analysis, AM/PMATH 331. Because one course with one name is less confusing than one course with two names. Wouldn't it?
- In response to an article in the *Imprint* last week... The *Impotent* was hilarious. Enough said, babe.
- So, we have yet another coin coming our way, this time to replace the \$2 bill. You know, the old one dollar bill had a picture of the Queen on the front, and so does the two. Is this a hint Canadians are fed up at looking at the Queen's face?
- With the new coin, it begs the question: What to put on the front? The ideas are endless. We could stay with the wildlife motif, maybe a polar bear or a moose. Maybe striking civil servants. A hockey player. Peter Puck. Bonhomme. A bottle of beer. A mug of beer. A tree (geez, like we haven't got any of those in Canada). The old *Hockey Night in Canada* logo. A keg of beer. One of my favourites, however, is a picture of the Queen. And not just any picture. The one that's on the back of all of our change. I think it would be cool for Canada to have a two-headed coin. It certainly would show the rest of the world we're quite the unique people (perhaps a little strange, too).
- And actually, while we're at it, why don't we have a \$3 coin? True story: back in the days before the U.S. government printed money, local banks used to print money. One bank actually printed a \$3 bill, with a picture of Santa Claus on it. Hey! Santa Claus on the \$2 coin. Why not?
- And to end off, this final point is just here to make this article EXACTLY a column long. Thank you. [No, thank you. — CrakkoEd]

Brian "The Calculus Cowboy" Fox

# gridCOMMENTS

Tonight, I became a productionist and it is hell on Earth. [Obviously somebody not doing CS assignments - HammerEd] But now that's off my chest I can be happy again and make everybody nauseous because of it.

For the Cryptic last issue, I received entries from Robyn "Only one word missing" Landers, Pamela, Neal "Nambo" Marchuk, Bob the Great and Powerful, alt.fan.londo, Slaves to the Gridword and Ian Facey. Pamela lost 5 squares for not being STATUESQUE, and Neal submitted an incomplete grid. The other five submissions were all correct. The winner for the Cryptic is Slaves to the Gridword by random draw.

In the Unconventional, I received entries from Robyn Landers, Pamela, Ian Facey, and Les Fous de Tarot. Only one of them had a flawless fill, the errors most frequently occurring at 5A. It seems very few of you know what a BEZique is. Only Les Fous de Tarot could divine the answer, and they take the prize.

For the form, I received nine perfect submissions from Robyn Landers, Pamela, Neal Marchuk, Dave "What exam?" Wong, Bob the Great and Powerful, alt.fan.londo, Slaves to the Gridword, Ian Facey and Les Fous de Tarot. The winner there is alt.fan.londo! Congratulations all.

The newsgroups you don't want made public that you subscribe to: rec.arts.startrek.reviews (I'm so ashamed), uw.mfcf.opinion, alt.fan.ian.the.word.guy, uw.watstar, uw.csc, alt.fan.super-grover, alt.mathnews.where.the.hell.is.QUE.?.?.?.?.?, alt.whatever.happened.to.mathnews.online.?.?.?.?, alt.dont.tell.mom.

A couple bits of old business before the new: Please pick up your grid-, form-, and squizprizes at the MathSoc office. They're beginning to pile up and it's getting cramped...

This week, I have special news! The two grid contests will have special prizes for this issue. You can win the last of the mathNEWS T-shirts for your entry! Since you're going to need to know about the crosswords to compete, here goes.

This time the grid is larger, 17x17 compared to the 15's you've been doing. In the unconventional, I've replaced a certain set of words with symbols. Whenever the word appears, it is condensed to the symbol so that it now takes up only one square. For example, if I had selected punctuation, possible entries might be periodic table (.ICTABLE), commander (,NDER), or colonel (:EL). Note that pronunciation does not matter. There are exactly 6 symbols in use. The Cryptic follows the regular rules.

Send your solutions, comments and your favorite stain to get out of a mathNEWS T-shirt to the BLACK BOX. Submissions must be received by next production night at 6:00. Next issue, I hope to have the results of your requests for the "favourite word in a Gridword" survey, a cryptic (or conventional, we'll see). Once again, the full solutions for the grids and form from last issue are in our very own newsgroup uw.mathnews.

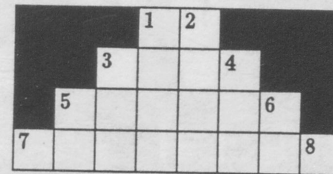
Thanks to everyone who sacrificed their copy of mathNEWS for a submission.

Gridby

**Go Get Your Work Report in the MUO!!**

# Form #5

## The Pyramid



### Clues

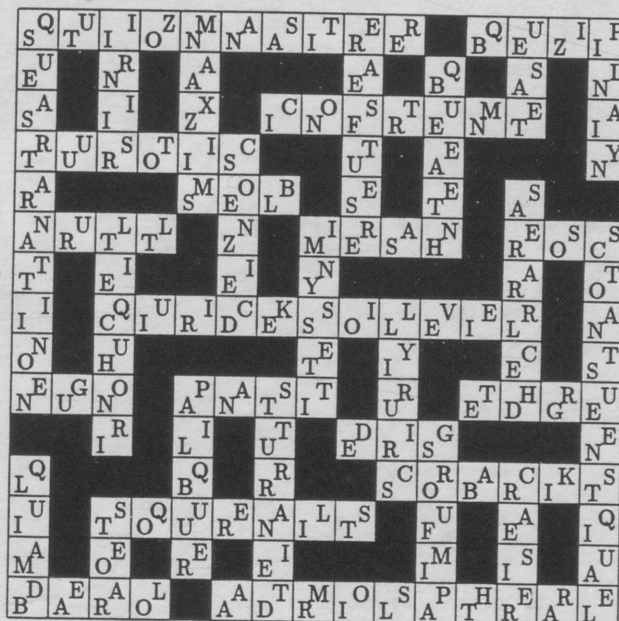
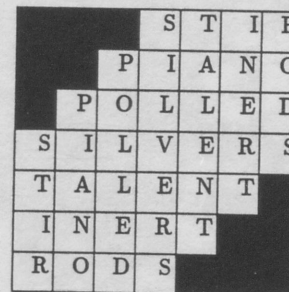
#### Across

- 1. Number resembles bottomless pit. (2)
- 3. Coffee from (yes!) German part of Viennese area. (4)
- 5. Spud in saucepan kept at zero. (6)
- 7. Publication sham went awry. (8)

#### Down

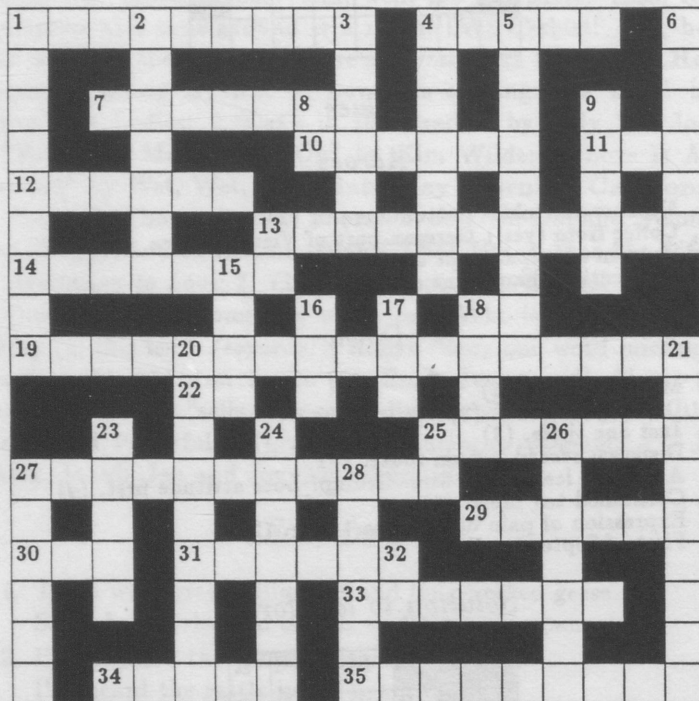
- 7. Missile launch. (1)
- 5. Dad pays half off. (2)
- 3. Just one tittle. (3)
- 1. Dispatch record lost on route. (4)
- 2. A terrible leader was Mrs. Trump! Lose attitude first. (4)
- 4. Consumed tea brew. (3)
- 6. Expression of pain doesn't start now. (2)
- 8. First of September. (1)

### Solution to last form





In Which The Clues Are Tinier, But No Easier



### Grid Clues (Cryptic)

Across

- 1. Spiders on handcars trundle around me. (9)
- 4. Range raving mad. (5)
- 7. Outline of tour for prisoners? (7)
- 10. Magi returned during world war to tent. (6)
- 11. Middle bush, devoid of sulphur, overturned. (3)
- 12. Tower from Bible makes noise like incoherent talk. (6)
- 13. Algorithmic process results in opposite to exponent. (11)
- 14. Mean and nasty grave within acceptable limits. (7)
- 18. Six, no, ten!, of the Spanish agree. (2)
- 19. A waste of time for accountant to get the value of 4e. (17)
- 22. I hear the French agree with us. (2)
- 25. Dumbell hopes to assume hotel position. (7)
- 27. Pretending to convince. (4 7)
- 29. One with more Novocaine? (6)
- 30. Turn around (not reverse) bolt fastener. (3)
- 31. Last quarter? (6)
- 33. Waterproof cloth prevents relatives from squeaking? (7)
- 34. Sword slashes articles and such. (5)
- 35. Person with two tongues is frantically bailing middle of hull. (9)

Down

- 1. Shot caliber (laden with silver alloy) is number calculated as polynomial root. (9)
- 2. Pry open tavern for blackbirds? (7)
- 3. Special ring for next term. (6)
- 4. Rugged rawness of solutions. (7)
- 5. Erotic gem dance on exponential scale. (9)
- 6. Barbaric nomads go without bear skin from Middle East. (6)
- 8. Here in the middle of our towns. (\*1\*1)
- 9. Poem and hymn cut short during beginnings of recital. (5)
- 13. The French end all espionage. (2)
- 15. Find happiness in a single endeavour. (4)
- 16. Odd, sappy notice. (3)

- 17. Speak of one who was victorious. (3)
- 18. Certainly, ruse is faulty. (4)
- 20. 24 on board. (3-2-4)
- 21. Imperial order on inclusion of carbon produces formula like CO<sub>2</sub>. (9)
- 23. Glide like steak (not well done). (5)
- 24. Detectives take out hustles. (7)
- 25. Is like a bee without a tail. (2)
- 26. Mingle about with male suicide victim. (7)
- 27. Fool with key with co-editors' initial engraved? (6)
- 28. Boatmen lost a paddle: shut away permanently. (6)
- 32. "Hello, up there," I hear. (2)

### Grid Clues for Digital Crossword (Unconventional)

Across

- 1. However
- 4. Ladylike
- 7. Wooden musical instrument
- 10. Sausage
- 11. Unwell
- 12. Boat on the dime
- 13. Inherent (4 wds.)
- 14. Free from guilt
- 18. You
- 19. Song by Don Henley (4 wds.)
- 22. Point (abbr.)
- 25. Radio's inventor
- 27. Soap opera (4 wds.)
- 29. End of an argument (2 wds.)
- 30. Voiceover artist Blanc
- 31. Switch
- 33. Ligneous flotsam
- 34. Football player's goal (2 wds.)
- 35. Masonry and sculpture

Down

- 1. Unreal
- 2. Either of the Kramdens
- 3. Time of the caveman (2 wds.)
- 4. Devotee
- 5. Puppets
- 6. Telephone noise (2 wds)
- 8. High school (abbr.)
- 9. Innovator
- 13. Same as Cryptic-25D
- 15. I.Q. e.g.
- 16. Cargo
- 17. Glistened
- 18. Large butte
- 20. Divvied up
- 21. Where noses are kept?
- 23. Preferred method of transit to Oz?
- 24. Cobble
- 25. 90's version of Madame (abbr.)
- 26. Covered wagon
- 27. Succubus e.g.
- 28. African grasslands
- 32. Popular medical drama