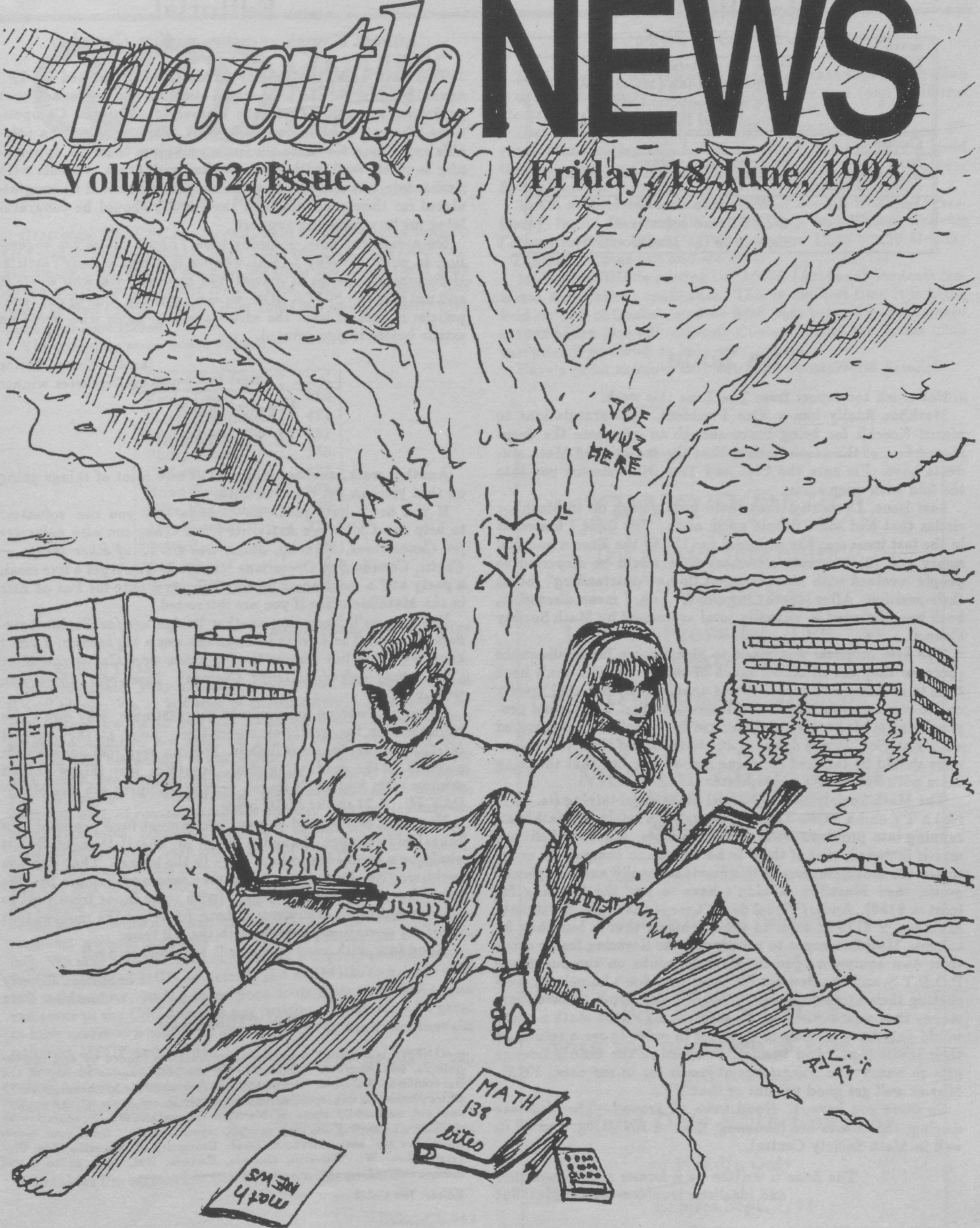


math

# NEWS

Volume 62, Issue 3

Friday, 18 June, 1993



## lookAHEAD

mathNEWS	
June 30	Issue #4 writers' night 7:00pm, abel lab (MC 3008A)
July 5	Issue #4 production night 7:00pm, abel lab (MC 3008A)
Co-op	
June 18	Ranking Forms Day
Misc. Events	
July 1	K-W Canada Day Celebration '93 <i>We still need volunteers!</i> Sign-up in the MathSoc Office

## The Zone

Not much to report from The Zone this week.

MathSoc finally has a Vice President. Congratulations to Marco Koechli for being brave enough to overcome the deep-rooted fear of the Math Society that the majority of Math students have. I'm sure the Prez and Trez will welcome you into the fold with open arms.

Last issue, I reported that there were goings on in MathSoc circles that had some people up in arms. The topic I hinted at in the last issue was the proposal to (1) pay the Exec a nominal salary and (2) to create a bursary that would be dispersed to people involved with MathSoc that do an "outstanding" job at their position. After lengthy argument... uh, I mean discussion, both were defeated in virtually total agreement by Math Society Council.

The first proposal was made to give Exec a lunch allowance (because they are at school much of their time and don't have time to go home for lunch). It was unanimously defeated mainly due to concerns of a Conflict-of-Interest nature. The second proposal was made to give an incentive for people to get involved with MathSoc. It was defeated due to the belief that, yes, volunteers should be thanked for doing a good job, but that thanking them with \$\$\$ wasn't appropriate.

The Math Society has hopes and plans on obtaining (ie. buying) a TV and a VCR. This was brought on lately by MathSoc's running into problems with showing movies. MathSoc believes, myself included, that if there is no admission charged for entry to see the movie, in fact, if the movie is totally and completely *gratis*, then MathSoc shouldn't have to pay the licensing fee (cost = \$150). Audio/Visual doesn't see it that way. So, it costs MathSoc  $\approx$  \$170 in total to show a movie that is less than \$4 to rent. MathSoc hopes to get around the licensing fee by using their own equipment (as certain other pubs on campus do — P.O.E.T.S. and the Bomber for those who don't know). By purchasing their own equipment, MathSoc also hopes to save some money that would otherwise be spent on A/V (the Math Society would only have to show  $\approx$  4 movies in order to see a return on their investment. And besides, everyone in the Comfy Lounge gets to watch *The Flintstones* at lunch (or in my case, *Y&R*). May as well get good use out of that TV.

So there you have it. Good news all around. The birds are singing, the flowers are blooming, the sun is shining, and all in well in Math Society Central.

The Zone is written by a former senior councillor and idealistic troublemaker at MathSoc

## mini Editorial

without a single mention of Kim Campbell

This past week, the Faculty of Mathematics hosted its 29<sup>th</sup> annual seminar for the high-school students across Canada that performed exceptionally in the various Mathematics Competitions (Fermat, Euclid, Descartes, etc.). This tradition is a valuable experience for these students, and gives them an opportunity to meet, work with, and socialize with other students with similar interests and abilities. These students should be congratulated for their successes, and the Faculty should be congratulated for its continuing support.

On a different note, someone took Flipper up on his suggestion to write a "Why I think Flipper is a real asshole" article. Unfortunately, as we at mathNEWS have no idea who wrote it and put it in the BLACK BOX, we can't print it. One of our (few) policies is that at least the editor needs to know who wrote an article before it gets printed.

Ian Goldberg, Editor  
and ex-Descartes winner

## Prez Sez

a TV in every pot!

Another week, another midterm. There a lot of things going on that you can get involved with.

If you don't have plans for Canada Day you can volunteer to help run Children's Activities [*Hey! They can also volunteer for Concessions, Security, Stage, and LOTS of other things — Curtis, Canada Day Operations Manager*]. You'll get a free meal, a party and a most amazing shirt. Leave a note for Pat or Eric in the MathSoc office if you are interested.

I'm sure we'll be having another Bridge and/or Euchre tournament soon. The Euchre tournament was a big success. I don't know who won but I know the big losers were Curtis and Mike [*The 3-time defending Loser Champs! Three-peat, three-peat, three-peat!*].

If you are looking for a way to procrastinate, why don't you volunteer for the yearbook committee. Look at the *Another MGC Reminder* for more details. You can even just donate your pictures of the graduating class, events or just things around campus. Oh, and don't forget, your grad blurbs are due MONDAY JUNE 21 in the MGC office.

Hopefully as you read this our endowment fund proposal is in John Leddy's office. I (and a bunch of others) thought that it would be a great idea to have a TV in the lounge. That way you could see *The Flintstone's*, daytime soaps and *Sesame St.* We would have a published schedule (with some input from you) so there would be no arguments. I hope (if we get the money) that it will be operational sometime in the fall term.

Good luck with your midterms!! Montreal in five!!

Monica Rooney  
MathSoc Prez

ISSN 0705-0410

mathNEWS is normally a fortnightly publication funded by and responsible to, but otherwise independent of, the Mathematics Society at the University of Waterloo. Content is the responsibility of the mathNEWS editor; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or mathNEWS. Produced with *plATamN*, including the new on-line layout facility. Send your correspondence to: mathNEWS, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to userid mathnews@undergrad.math.uwaterloo.ca on Internet.

Editor: Ian Goldberg





A Student Chapter of the ACM

## CSC Flash

Greetings! The CSC has recently held a programming contest. Our contest correspondent, Dave Ebbo reports... The CSC Programming Contest took place on Saturday morning. There were eleven contestants, fighting for the title. After three and a half hours of mad coding, Kevin Greer came out as the winner, with three problems solved.

The complete score board follows:

Contestant Name	Total
Kevin Greer	580
Steve Tomlinson	474
Michael Van Bie	357
Philip Chong	265
Colin Brace	227
Brian Rossmajer	176
Mike Van Lingen	157
Alex Brodsky	127
Keith Lau	84
Asif Islam	0
Brent Ross	0

David Ebbo, Contest Judge

Thank you, Dave.

Non-members! Why not come down to the CSC and see what it's all about. We've got tons of exciting events happening this term. Read uw.csc to find out all about them. In fact, if you become a member, not only can you go to our events for free, you can take advantage of our wonderful facilities, like our stapler, couch, tea pot, phone and extensive library. Furthermore you can engage in "stimulating" conversations about life, the universe, and, of course, computer science. It is particularly exciting right now, because we are in a valiant struggle with the Feds for the right to have our own computer (paid for by them). We intend to use this computer to benefit the Math Faculty, and the rest of the school. For instance, we would like to support those chinese fonts that some students need so badly. We could also provide a forum for discussion for groups who have members without accounts (yes, some organizations let artsies in!). We may also use the computer as a deprogramming centre for GIF, IRC and MUD addicts. If you would like to help us with this noble cause, saving these poor souls from themselves, you can come to the CSC and sign our petition. Wouldn't it be great to have access to a computer not controlled by the cyber-thought police at MFCF and DCS?

Wait! Micro Vader has invaded this article! He and his evil I.B.Mpire wrote the last five lines of the above paragraph. He must be exterminated! EXTERMINATE! EXTERMINATE!

Calum T. Dalek, and Micro Vader

"I do things I'm embarrassed to tell even other geeks like myself."

Buhr, CS 242

## Act Sci Club

Hi! I thought I'd give a quick update of what your Actsci Club is doing this summer. Now that exams are over (and midterms are here — boo!), let's have some FUN!

Last Friday was the Slo-Pitch Challenge between 3<sup>rd</sup> and 4<sup>th</sup> years. I'm writing this before the event but I'm sure a good time was had by all. We are also organising a trip to Pioneer SportsWorld in July, so watch for details.

The Actsci executive for the summer are Jill Hoffman (President), Ingrid Gokstorp (Vice-President), and Walter Wodchis (Treasurer). The office (MC3030) is open 12:30 - 1:30 Monday - Thursday. Come out and see us!

In January, UW is hosting the ASNA (Actuarial Students National Association) conference. This is the first time it is being held outside of Quebec, and we need your help. The Conference is tons o' fun plus educational! Contact any of the Actsci Club executive if you wish to help out.

Have a great summer and watch for SportsWorld details!

Jill

## GINO'S PIZZA

Try a little bite of Italy

747-9888

160 University Ave. W.  
Waterloo

The official pizza of mathNEWS

Medium 3 Item Pizza  
plus 2 cans Coke

**\$8.99** plus tax

Special with Coupon

Pick-Up and Delivery

Expires Sept. 1/93

**FREE SLICE**

with the purchase of One Slice  
and a Pop

Valid Only With Coupon

Pick-Up Only

Expires Sept. 1/93

## Grads Corner

*All Grads! Keep your eyes peeled!*

The summer of '93 sizzles for potential grads. Here are some things to look out for this summer ...

### *Tour of Waterloo Pubs*

July 8<sup>th</sup>. Along with each historical visit, events are planned at each location. Of course, washroom breaks are allowed.

### *Rock Climbing*

If you are interested in learning how to Rock Climb, Innerfission, the company associated with Good Life Raquet/Health Club on Columbia and Phillip, arranges trips to Elora Gorge. The price will be approximately \$20 and transportation will be arranged. If this excites you, please sign up on the MGC door. A date and time will be discussed with all potential climbers.

### *Slo-Pitch Tourney*

July 10<sup>th</sup>. We hope to attract teams from across campus to compete in this event. Sign-ups will begin the week of June 14<sup>th</sup>. Along with a fun-filled day of slo-pitch we will be providing refreshments, BBQ and sideline volleyball games. If you interested in helping out on July 10th, please sign up in the MGC

### *Weekly BBQ/Pizza*

These fundraising events have, in the past, been the Grad Committee's biggest money maker. Please help us follow in other Grad's footsteps. If you like people, like pizza/burgers you'll enjoy helping out. These events occur on Mondays or Wednesdays, so if you're around during lunch, please consider helping out. All "wannabe short order cooks", please sign up at MGC.

### *Mega Car Wash*

July 24<sup>th</sup>. This wet and wild adventure promises to be good clean fun! We are hoping to set up not one, but three car washes at various sites across Waterloo. Raincoats may be provided but you may wish to consider wearing your bathing suit (just kidding). The more people we get involved in this event, the

## Another MGC Reminder

*grad blurbs, grad blurbs, grad blurbs*

ARE YOU GRADUATING IN 1994? DO YOU WANT A SPOT IN THE YEARBOOK? DO YOU CARE?

Look, Math grad yearbook blurbs are due Monday June 21 at the MGC office. DO YOU UNDERSTAND? We don't want lots of empty space in the yearbook so we need YOUR BLURBS!!

Oh, and another thing... we need pictures. ANY PICTURES!! If we don't receive sufficient pictures SOON I'm going to put Eric's (you know, the red haired guy) nude picture as a pop-up centerfold.

Finally, yearbook meetings are every Thursday at 4:30 in the MGC office. We have only four people so far on our team besides Eric and myself. WE NEED YOUR HELP!! (please, pretty please?)

Go Leafs Go  
Elaine Ooi  
(Habs in five! — Monica)

better! It just requires a few hours of your time and it will give you a chance to get to know the Grad who'll be sitting beside you at convocation! Look for more details to come ...

### *Year Book*

It's time to dig up those pictures from Frosh Week, and any other embarrassing moments you have found yourself in. The yearbook is looking for pictures from every area of Waterloo life (Keg parties, hot tub parties, end-of-the-world parties, etc.), and most of all we want to see YOU!. Any pictures we get will be returned after the book is published, but be sure to put your name, ID and permanent address on the back. So remember the good times, remember the bad times, and remember the times that you thought you had forgotten. Any pictures can be left at the MGC office.

### *Blurbs*

You got the form when you had your picture taken, and now it's time to get creative! The deadline for handing in your yearbook grad blurb is Monday June 21<sup>st</sup>. Please get it in by this time, or you will never have the opportunity to say good-bye to all your friends in print! If you don't have a form, they are available on the 3<sup>rd</sup> floor bulletin board.

### *And Finally ...*

The main purpose of MGC is to ensure each Grad leaves Waterloo with a warm fuzzy feeling. Its second purpose is to raise money in hopes of reducing the cost of attending the Math Grad Ball. So make your last summer at Waterloo count! Volunteers are always welcome and a good time is guaranteed! MGC office is located across from the computer labs (where Math students spend all their time). So pop in, we look forward to seeing you out!

Da Grads

## Thinking About Graduate School?

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

**Tuesday, July 13, 1993**  
**3:30 p.m. - DC 1302**

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

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

All students welcome  
Refreshments available



## mastHEAD

Whoa... kinda hectic here. The computers went down for about an hour, and I have to leave early! Looks like this issue is going to be finished up Tuesday morning! (And so it is! — Tuesday morning comment) Thanks go, of course, to the following people who helped out (listed with their favourite reason for mathNEWS production being delayed): Shannon Mann (John Sellens), Stuart Pollock (NFS Descartes Net), Steve "Flipper" Shaw (Beer), EC Sutherland (Blood on all the keyboards), jpb-wetmiller (descartes, cayley, and napier decide to play a game of Mao), the "Phil" (Pizza!!!), Curtis Desjardins (Goddamn it, Shannon! You always take my answer!), Darren Rigby (The computer started smoking up, and I thought I should worry), Arsenyk Ustaris (Ian and Shannon were kidnapped by aliens looking for a good human being ;), and Colin Brace (CS 351 midterm). Special thanks to Darren and Colin for staying so late to L<sup>A</sup>T<sub>E</sub>X all the grids!

Thanks also go, of course, to Marion and her crew at Graphics Services, MFCF for booking the abel lab for us, and Gino's Pizza for the obvious.

Til next time,

Ian Goldberg (Whaddaya mean, favourite reason?)  
**Canada Day Party!!**

*Table for 60,000 please*

Hey all your party goers and people out there! Here is your chance to do something on Canada Day aside from sitting in a computer lab, or watching TV, or some other *mindless* task. The HUGE Canada Celebration of our nation is happening on July 1<sup>st</sup> of all things, but in order to make everything run smoothly, we need your help. Now, you're not being asked to get up at 9 AM, and you're not being asked to work your butt off all day. But, if you could spare just a couple of hours of your time, that would be wonderful.

I can just hear you asking "But what can I do?". Plenty. Volunteers are needed to help with Concessions, Security, Children's events, and a ton of other things. It doesn't take much, and in return for your kindness, we'll give you a neat t-shirt, and some food during the day. Then, at dusk the fireworks show will light up the night over Columbia Lake. This years show is said to be even bigger than last year, so you won't want to miss it.

"So, how can I get involved?" Just sign up on the the third floor bulletin board with your name and telephone number and what you would like to help out with. Thanks for your support.

Slave Boy

## A Mathematical Limerick

While surfing the Net one day, I stumbled across the following limerick...

$$\int_1^{\sqrt[3]{e}} t^2 dt \times \cos\left(\frac{3\pi}{9}\right) = \ln \sqrt[3]{e}$$

That is,

The integral, t squared, d t,  
from 1 to the cube root of 3,  
times the cosine  
of three pi over nine,  
is the ln of the cube root of e.

The Net Surfer says, "Hang 10" (Mbps, that is)

## Soc Toc

Bonjour to all of you out there in Math-land. It's another beautiful day, and I am here to tell you about some of the wonderful things that are happening this summer. By the time that this comes out, we will have already had our first movie night with Encino Man, and our first Euchre night of the term [*And Mike and I have successfully become the 3-time Last Place Champions! — Curtis*]. But don't you worry, there is plenty else for you to do this summer.

Aside from all the happenings with the MGC (see article *Grads Corner*), and the Orientation BBQ's (assuming they get good weather one of these days), and the FED activities (SummerFest I/II), there is still more to do.

There are going to be Movie nights every other Thursday, with the next one on the 24<sup>th</sup>. If you have an idea for a movie that you would like to see that has been released, just drop your ideas off in the BLACK BOX. We are always looking for ideas for new events. Presently, we are trying to get a night booked at Fed Hall, but there is some bureaucracy that is getting in the way, but we'll see what is going to happen.

There are also going to be more Bridge and Euchre nights throughout the term, with the next one being on June 23<sup>rd</sup> in the comfy lounge. Sign up sheet with be on the bulletin board.

Again, I am still looking for ideas for other events that we can run during the summer, and any input would be more than appreciated.

So, let's sit back, relax for a bit and take a look at the clouds and see what is going to be passing us by ...

Slave to my passion

# SUBWAY

OPEN LATE 7 DAYS A WEEK!

Look For This Coupon  
In Every Issue  
of mathNEWS!

**SUBWAY**

Sandwiches & Salads  
49¢ SUB

Buy any 6" submarine sandwich and a medium soda and receive the second 6" submarine (of equal or lesser value) for 49¢

Limit one coupon per purchase. Not valid with any other offer. Not valid on Supers. M Offer Expires June 30/93 Offer valid at 160 University Ave., Waterloo

**SUBWAY**

Sandwiches & Salads  
99¢ SUB

Buy any footlong submarine sandwich and a medium soda and receive the second footlong submarine (of equal or lesser value) for 99¢

Limit one coupon per purchase. Not valid with any other offer. Not valid on Supers. M Offer Expires June 30/93 Offer valid at 160 University Ave., Waterloo

160 University Plaza: 884-7821

## SAC Responds

Dear Flipper:

Because you asked, SAC, Students Advising Co-op, stands for ensuring that effective communication between the Co-op Department and the students is occurring. When opinions based on inaccurate facts, such as those published in the May 21 *mathNEWS* are expressed, effective communication of ideas is severely hampered. That *mathNEWS* article, "The New Co-op Process: A Thoughtful, Creative, and Constructive Look at Needles Hall's Latest Invention," contained many statements that indicated a serious misunderstanding of several key facts in the "New Co-op Process." Such misunderstanding will undoubtedly lead to the "maximum confusion in minimum time" referred to in your article.

Your primary concern appeared to be the implementation of the system, especially of the resume drop boxes. Resume packages may, in fact, be deposited in the boxes as late as 8:00 pm the night the job appears. The boxes are accessible three and a half hours later than the figure quoted in your article. These hours are clearly posted on the doors of Needles Hall.

The second concern you addressed was the apparent lack of order in job postings. The jobs are posted in the same order as they appear on the job Summary List. The Job Summary Lists are available to Co-op students at the beginning of each week jobs are posted, and they are also posted on the job boards. For those seeking only jobs related to specific programs, the last column of the job summary list is a listing of the recommended programs for each position. By scanning the last column and noting the corresponding job numbers, one can easily search the boards by recommended program, a process that did not exist for the Want Ads.

The most serious misunderstanding that arose was the issue of student involvement in the process. The new process is not carved in stone; it is a dynamic system. The system will be flexible and dynamic only if students with opinions, such as yourself, get actively involved. SAC is the formal liaison between students and the Co-op Department. Every society has at least one representative who attends the SAC meetings regularly. Any student who wishes to attend a SAC meeting may do so. SAC's External Affairs officer maintains office hours in the Federation of Students office and can be contacted with questions or suggestions. Watch for the revised "Dear Co-op" boards where students can submit proposals or questions through SAC to the Co-op Department.

If students have concerns about the "New Co-op Process," they should find the answers to their questions. If they have ideas that they think would work to make the new system more responsive, they should suggest them. The channels to reach the Co-op Department are the Co-ordinators, the placement advisors, the Feds (Board of Academic Affairs), your student societies, and SAC. Students don't have to sit and complain to the public at large, wishing things were different; they can talk to people who are there to help and participate in making things different.

Sincerely,  
Lynn Dupuis  
for Students Advising Co-op

"I like John better than Jim. I like Jim better than Wayne, but Wayne is cute."

Nguyen, ECON 201

## And Flip Responds

Dear Lynn:

First, I'd like to thank you for your reply. I always get a kick when I realize that people actually pay attention to me.

I apologize for the mix-up over the hours during which Needles was open during the job application process. The article was written on the first Monday of the job application period, the latest that it could have been written and still make the Friday issue. I had to assume that the information package from Needles Hall was accurate and up-to-date. It was quite gratifying to see that Needles actually foresaw this complaint and adjusted their hours to serve us better; it did, however, make me look like a bit of a dork, something I'm quite capable of doing on my own.

I still think that my complaint about the lack of order involved in the job postings is a valid one. While I do not want to scan every posting on the boards, neither do I want to go over the Job Summary and then go to the boards, intent on looking at jobs 4, 5, 13 through 17, and 98. I fail to see why posting jobs by discipline is a problem, except for those darned multi-discipline jobs, which could easily be posted under all applicable disciplines. I seem to remember that in the Dark Ages of my 1A term, engineering and math students (for example) had different *Want Ads*, different job application deadlines, and different interview periods. I am not suggesting a return to such extreme segregation, but rather a simple ordering of jobs by discipline.

Finally we come to the issue of student involvement in the new process. We can't get involved unless we know what is going on. I think Needles Hall needs a better way of communicating with students. I imagine that there were people who did not find out about the new process until their return-to-campus interview. The seminar given recently by Randy Klawitter was excellent: however, it would have been more appropriate during the first week of school this term. Seminars such as this give the co-op department a chance to explain why they've done what they've done, and clear up many of the misconceptions that the students have about the processes and personnel of Needles Hall. For example, I no longer think that Mr. Klawitter is a complete idiot. I don't believe that the new process is going to solve any of the problems that the co-op program has, but at least I now understand why this particular new process is being implemented.

While killing time before an interview in Needles Hall, I glanced over the minutes of the last SAC meeting, and it announced that there were going to be regular co-op columns in both the *Imp'tint* and the *Iron Warrior*. Overlooking for the moment that *mathNEWS* was ignored, I have yet to see either of these columns show up in our distinguished sibling papers. This is an excellent idea, and should be pursued. As soon as Needles Hall finds a way to open communications to everybody, there will be a lot fewer misunderstandings and the entire system should work better.

As it stands, now, though, the whole thing is pretty much a dead issue. The job application process is over for another term, and we're all a bit wiser. With any luck, everybody will continue to learn, and the system will continue to evolve until it approaches something like efficiency.

As for "complaining to the public at large", well, it's what I do best.

Flipper  
representing no one in particular

"Maybe the Leafs would have won if they would have played with two dimensional balls..."

Aczel, PMATH 332



# Math, the Universe, and Everything

## *Sleep Deprivation For Fun and Profit*

Midterm season is always easy to spot in the math faculty. People are walking around with zombie-like expressions on their faces, running into walls and generally being pretty dopey. It all comes from sleeping approximately three hours a week, due to the stresses of trying to learn two months' worth of work in slightly under forty-eight hours. Well, I'm here to tell you that avoiding sleep is not only fun, but will add years to your life and will possibly cure that halitosis that you've been plagued with since you were seven.

### *But How Can I Stay Awake?*

Have no fear, young mathling. Many are the ways that you can force yourself to stay awake long enough to finish that important assignment, study for the important midterm, or call that important 976 number.

- *Pain:* Slap yourself once in a while. After a few hours, that will cease to do any good. Move up to punching yourself in the nose, cutting yourself with a knife, and, eventually, shooting yourself in the gut. Note that this last one will probably kill you, so it had better be an important assignment.
- *Vigorous Masturbation:* Then again, maybe not. But it can't hurt to try.
- *Cold Water:* Whenever you start to nod off, throw a bucket of cold water over yourself. This will also quell any sexual urges that you may have. Note that combining "Cold Water" and "Vigorous Masturbation" is just asking for trouble.
- *Electricity:* Hook a wire into your house current and, when falling asleep, stick it in your mouth. This will cause your eyeballs to bulge, your brain to churn, your hair to stand up on end, and, if you're anything like me, will get you quite aroused. A beneficial side effect is that you'll wake up for at least twenty seconds.
- *Drugs, Illegal:* Quite a number of illegal drugs will help you stay awake. Unfortunately, many of them have the side effect of making purple spiders crawl out of your walls, so you may not get as much work done as you had hoped.
- *Drugs, Legal:* After numerous experiments, I can attest that beer in no way aids you in staying up for days at a time. However, there are numerous other drugs that will help you. One thing to remember is that caffeine is your friend. Whether you drink Coke, Jolt, or the old standby, coffee, the caffeine will allow to function normally for days on end without sleep. Don't forget the modern-day equivalent of a pot of coffee, either: wakeup pills! You, too, can do so much damage to your brain that random muscle spasms become an everyday part of your life.

### *Is There Such A Thing As Too Much Caffeine?*

No, not really. Here are the Six Stages of Caffeine Intake:

- *No Caffeine:* This state is a bit too placid for my liking. Breathing is slow, heartbeat is somewhere around normal, and sleep is just a couple of minutes away.
- *A Little Caffeine:* A couple of cups of coffee and you're set to stay awake and work your butt off. Respiration has increased, and heartrate has kicked up to around 90 beats/minute.

- *A Little More Caffeine:* A couple more cups of coffee, a Coke, and a wakeup pill later, you're bright-eyed and bushy-tailed. You'll get sudden urges to clean your house, to go for a run, and to study every book you've ever bought. Heartrate is around 100 beats/minute.
- *Some Caffeine:* Now we're talking. Take another five wakeups, and you're getting set to do some serious work. Heartbeat is running around 110 beats/minute, and you'll find it impossible to blink more than once or twice a minute. This will allow you to get even more studying done!
- *Enough Caffeine:* Another twenty cups of coffee and you're in work mode. You are guaranteed to stay up for at least another ten hours, partly because of the caffeine, partly because paranoia has set in, and partly because you'll be going to the bathroom every twenty minutes. Ignore any twitches that may run through your body, because that's just your body reminding you that you're awake. Heartrate is running around 135 beats/minute.
- *Too Much Caffeine:* Now we're moving into the realm of dangerous levels of drugs. Take another fifty or so wakeup pills, moving your heartrate up past 200 beats/minute. After about three minutes of this, you will spontaneously combust.

### *Benefits of Sleep Deprivation*

If you do manage to stay awake for days at a time, you will not only get lots of works done, but will gain the benefits of these side effects:

- make loads of new friends calling party lines at 4:00 in the morning
- get really really drunk for really really cheap
- personal hygiene becomes a secondary concern
- hallucinations without the drugs!
- *Beverly Hills 90210* starts to make sense

And if this doesn't convince you that going without sleep is a great way to spend your time, just remind yourself that midterms will be over in just a couple of weeks, allowing you to go back to sleep until finals roll around.

Flipper



Posters - Custom Framing - Laminating

170 University Ave. W.  
Waterloo, Ont. N2L 3E9 Tel: (519) 746-8650

Custom-framed Certificates — \$15 off any order over \$50

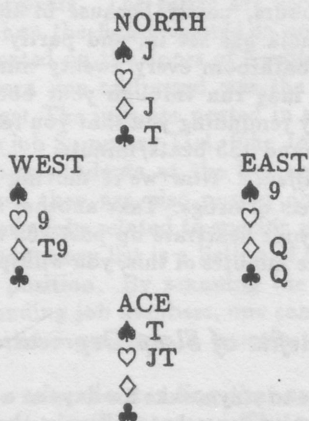
## Put into his Pl-Ace

*And leaving the rest behind*

Ace was very excited. He had just returned from the most important tournament in his life, and he hadn't cracked under the pressure. Sure, there was the occasional blunder or ten, but what mattered was that he had performed better than he had dreamed.

He sat down in the campus bar — The Trap Pass — and was telling everyone about his adventures. Many of the hands had wild distributions, and slams were flying in the breeze. But what fascinated Ace more than anything was the end-position he reached on one board. This one hand opened his eyes to the beauty and wonder of bridge, and it proved to him once again that he was infatuated with this card game.

This was the position with Ace on lead, spades were trump and he needed all of the remaining 3 tricks:



Ace knew that he couldn't afford to pull the last trump, because that would leave him on the board with both the diamond and club losers. If only the J and 10 of spades were switched. No use worrying about this, thought Ace, and he played a heart. When west followed, he again knew he couldn't afford to discard a minor suit card, for east would make his trump. So Ace had to ruff his winner with the J of spades.

Now the player in the east seat, a very fine player, started to squirm. If he played his trump, Ace could ruff a minor suit card and cash the last heart. But, if he discarded a minor suit Queen, Ace could lead that suit and he would be faced with another dilemma. Ruff and he over-ruffed and Ace cashes his heart. Otherwise, if he discards, so does Ace, as that card is now high (Try this at home if you don't believe me). He then takes the last trick with the ten of spades.

It is this beauty were a player can be forced to succumb in this type of bizarre situation that makes bridge a beautiful game. You may note that this position could easily be reached with a Euchre deck as well. Makes you wonder sometimes what subtleties are happening when we are busy collecting tricks in the comfy lounge.

Ace Upmysleeve

"It's not what I say. It's not what I write. It's what I mean."

McKiernan, AM 333

"Once you've made your definitions, you're screwed!"

McKiernan, AM 333

## Mind Bogglers

*And I thought I had you guys*

Yes, again, I tried to boggle the best and, I came close. Very close. One of the following gave the correct answer:

Blue Jay, The Evil Galactic Warlord Larry, et al., Doug Pilkey, Joe Molnar. And the winner is: Doug Pilkey.

The sequence is: 2, 5, 10, 28, 77, 238, 712.

This sequence was arrived at by taking the first  $N$  primes and adding them together for each element of the sequence. The fibonacci sequence was used to choose  $N$  for each element.

	1	2	3	4	5	6	7	←sequence number.
1	1	2	3	5	8	13	21	←fibonacci number ( $N$ ).
	2	5	10	28	77	238	712	←first $N$ primes summed.

Doug Pilkey, please see Ian (our Editor) to get your prize.

Now for next issue? I challenge you to send in your sequences. Each sequence must be accompanied by a description of how to generate it. In the next issue, we will choose the most interesting, subtle and elegant sequences. We will ask you math wizards to attack them.

The following issue will publish the responses, prizes given for the best sequence, for the most solutions, etc. I have another really neat sequence that I will keep until then...

And then there were none

## ultraCLASSIFIEDS

AAAA CCCCC DDD EEEEE FF GGG HHH IIIII  
 LLL MM NNNNNNNN OOOOOO PP RRRRRR SSS TT  
 UU W X Y Z

THE PUZZLE BANDIT

Happy 17<sup>th</sup> Birthday, my Luke.

Your Amber

I love the Mick. *Everybody* loves the Mick.

Flipper

Tyrant, Once upon a time, there was this *eel monkey*... and he had himself a bullum HEAD!

Chewbacca

Chewbacca, What in the heck is a bullum head??!

Rapunzel

## Canadian Tire IS Executive to Speak at Waterloo

Jennifer Thompson, Vice President, Information Services, Canadian Tire Corporation, Toronto will be in Waterloo on Tuesday, June 29, 1993 at 3:30 p.m. in the Davis Centre, Room 1302. She is taking part in the Computer Science Department's CP Seminar Series, speaking on Canadian Tire Information Services systems and tools. Jennifer will be discussing her personal experiences, both climbing the IS corporate ladder and with various IS technologies.

Complete information is included in the notices posted on the MathSoc bulletin boards. Everyone is welcome. Refreshments served.

Undergraduate students are particularly encouraged to attend!

Anne B. Pidduck



## mathNEWSquiz #3

... and he's the Ice Cream Merchant, and he knows it!

Hello, everyone! we're rather disappointed by the lack of initiative of the silent majority of squiz readers ... we only received one submission! May we remind you all that there are prizes awarded for squiz submissions? Okay, now that we've got the chastising out of the way, let's look at the answers for last week's squiz - **Movie Quotes:** 1) Sliver; 2) Fast Times at Ridgemont High; 3) Stand By Me; 4) Blazing Saddles; 5) Predator; **Potpourri:** 1) Who's on First. Why plays Centre Field; 2) Sparta; 3) Save Our Saucepans; 4) 746 watts; 5) 50 yards (slug races are generally held on 1 yard courses); **Saturday Morning Cartoons:** 1) Clarabelle; 2) Howie Mandel; 3) US Acres; 4) Wayne Gretzky, Bo Jackson, Michael Jordan; 5) The Smoggies (duh!); **Song Lyrics:** 1) Papa Was a Rollin' Stone - Was (Not Was); 2) Thin Red Line - Glass Tiger; 3) Fairies Wear Boots - Black Sabbath; 4) Girl With a Problem - Northern Pikes; 5) 911 is a Joke - Public Enemy; **Astronomy:** 1) Marc Garneau, Roberta Bondar, and Steve MacLean; 2) 88 days; 3) 5 billion years; 4) Venus; 5) Virgil Grissom;

Since we only had one submission, I'll make this short and sweet. Thah winnah is ... Thrash and Cosmic Charlie(5)! You can pick up your prize in the MathSoc office. Now, here're the questions for this issue:

#### Movie Quotes

1. "What do we tell the President?"  
"Tell him 'The Dream' is over. Tell him Howard Hughes said so."
2. "I hear you're making more money than the President."  
"Why not? I had a better year than he did."
3. "Fat and stupid is no way to go through life, son."
4. "She's not a woman. She's the Terminator."
5. "My name is Tooka-chinchilla"  
"What does it mean?"  
"It means 'Fluffy Bunny Feet'."

#### Hitchhikers Guide to the Galaxy

1. What was Ford Prefect's nickname in school?
2. On what day of the week was the Earth obliterated?
3. According to the *Guide*, what do you do if you want to get a ride from a Vogon?
4. Slartibartfast won an award for designing the fjords of what country?
5. What "Earth species", besides the dolphins, were smarter than humans?

#### Super Heroes

1. What superhero was, in his secret identity, a shoe-shine boy?
2. Who had a sidekick named Kato?
3. Who is Batgirl?
4. On SNL, Sinbad portrayed a superhero at Superman's funeral. Which one?
5. Where did Wonder Woman come from?

#### Video Games

1. What mutants can you play in the game X-men?
2. What game gives you extra points for cutting off arms and heads?

3. In what game did Mario first appear?
4. What video game has the original, a sequel, a championship edition, and a pinball game?
5. What are the names of the 4 ghosts in Pac-Man?

#### Song Lyrics

Name the song and the artist

1. Well she glides around the globe and she'll flimflam every nation,  
She's a double-dealing diva with a taste for thievery
2. We had to pass the Pyramid Blaster  
The JAMs are here, to put you in a rapture
3. Girls will keep the secrets  
so long as boys make the noise
4. Half my time I tell you baby  
Never am I all for sure
5. Like a full blown volcano  
I must let it be known  
That through this boy's vein  
Atomic lava blood flows and flows

Tony M. Nyphot's *Flying Riscu*  
(or, rather, Monty Python in General)

1. What television show featured the man who speaks entirely in anagrams?
2. What is the name of Dennis Moore's horse?
3. How much is it for a five-minute argument?
4. How much does each of George Humphries' feet weigh after his elephantoplasty?
5. Who is the first architect?

Well, good luck everyone (we hope to get more submissions this issue), and remember, you have the July 1<sup>st</sup> weekend to work on this. Happy Canada Day! Oh, by the way, you drop off your solutions in the BLACK BOX across from the Comfy Lounge.

The Ice Cream Merchant  
Jean-Guy!  
Slave Boy

## Notice of Deadlines

Coming into effect next issue, the following are the deadlines for submissions of items for publication in mathNEWS:

- **Puzzle Responses, text-only articles, and prof-QUOTES** must be in the BLACK BOX or emailed to us no later than 7:00 pm on Production night.
- **Non-text items, including art, ads, grids, etc.** are due before the end of Writers' night.

The dates for Production night and Writers' night of each issue are listed in the *lookAHEAD* in the previous issue of mathNEWS.

The Editor

## The Puzzle Bandit

Not a gridword... Again

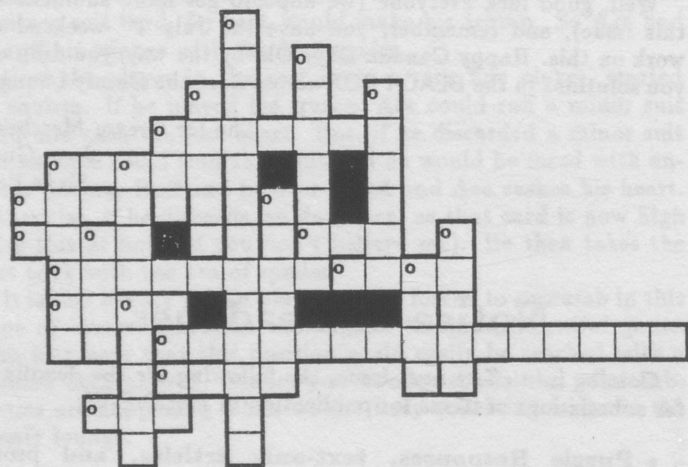
For last week's "What's the Question?" puzzle, we had a few good entries from such great people as "Eric Joanis," "Bashful," "Gus (with no help from Pitabread)," "Ziv Zero," and "Swiftly & Mighty Moe". All had the right answer, (MOSQUITOS = 93), but there can only be one winner today, and by my random d30 roll, that winner is: BASHFUL! (Truly, it was a RANDOM roll!)

Anyway, to simplify that puzzle for those who gave up on it, here's how to get E from a few simple building blocks:

SWEAT - WATER = S-R ; BEES - (S-R) = BEER [a necessity]  
 LAZY + JUNE + BEER - JULY - BREEZE = AN  
 REPEATS - PARTIES = E - I  
 SANDCASTLE - SANDALS - (E-I) = CTI  
 SHADE + CTI - ICED TEA - (S-R) = RH-E  
 VACATION+SHADE+SWEAT+FUN-SURF-HEATWAVE-(S-R)-CTI-AN-AN = DO  
 (RH-E)+OUTDOORS+FUN+FUN+BASEBALL-  
 FOOTBALL-DO-SURF-SUNBURN = HA  
 SHADE - HA = SDE  
 (S-R) + (E-I) + BIRDS - BEES = SD-E  
 SDE - (SD-E) = 2E

Now onto this issue's puzzle; a sequel to last fall's 'Not a Gridword' where the grid contains its own clues. But to make it a little easier I will say here that 2 of the entries are American Slang, 1 is British Slang, 1 is a Latin term, 1 is a German term, and 1 is a Spanish term. As well the 15-letter entry is really a 3 word phrase of 5 letters per word. If all this still leaves you stumped, I placed all the letters of the solved grid in the *ultra-CLASSIFIEDS* in alphabetical order. Good luck and see y'all next week.

tPB



"Why didn't you tell me I was stupid?"

McKiernan, AM 333

"To use politically correct language, [this function] is integrally challenged."

Baker, MATH 148

## Results (?!)

Such as they are

I am deeply disappointed. I was there when our editor broke into our BLACK BOX and there wasn't a submission for either of my contests! None! Perhaps you didn't know when the deadline was and were trying to turn it in at the last minute. (Check the back of the cover from the last issue, that thing with all the boxes? The production night is the deadline. Always.) For those of you who think that way, it will be three whole weeks until the next production night. Plenty of time. Perhaps you didn't realize that these puzzle could yield prizes. Well, then that would be my fault for not being clear. My puzzles from *mathNEWS* always have prizes attached. Perhaps you don't believe that *mathNEWS* prizes are real. I have been affirmed that they are (although I've never actually seen one first hand...) [*Those of you who still haven't picked up your prizes, may still get them at the MathSoc office — really! Honest and truly, they are! — Ed.*] Perhaps you don't believe that I'm real. To confirm my existence, come to the production night (Don't worry we won't force you to write anything) and ask to see the mythical Gridby. I'll wave, I promise. I realize that I'm a relative newcomer to *mathNEWS*. Until the beginning of the term, I thought 'abel' was an uncapitalized Biblical character. If any of my puzzles confuse you completely, then at the very least, drop me a Post-it saying "Dear Gridby, ?" or something. Anyway, for this week's (and last week's) puzzles. For the songs, each of last week's songs will be worth two points, while this week's will be worth only one. There is a new crossword maze, and the old solution is here. In either case remember that a complete solution is not necessary. Also, a new contest, suggested by our beloved editor. A *mathNEWS* prize will go to the person who submits the greatest integer among those submitted. The integer must be handwritten and be a number, and not an expression for a number. (No googol to the googol to the googol...) Submit your integers to the BLACK BOX.

Dear Gridby,  
 ?.

R	S	E	H	N	S	A	J	S	G	B	S	N	H	A	S
E	E	N	A	I	T	M	O	T	O	R	M	O	U	T	H
P	Ñ	R	N	T	A	E	C	E	O	A	O	R	B	E	Y
H	O	O	D	W	I	N	K	E	D	K	G	S	C	A	R
R	R	L	S	I	N	D	S	R	S	E	T	F	A	I	R
A	I	M	H	T	C	C	S	F	G	A	O	P	A	R	
S	T	E	A	M	E	R	T	R	U	N	K	A	C	B	C
E	A	N	K	O	D	A	E	I	L	G	E	M	R	U	O
D	S	T	E	V	A	N	A	L	L	A	N	B	E	L	T
S	E	E	I	R	E	K	L	S	R	A	U	S	L	I	
C	E	N	T	E	P	S	B	S	B	B	L	S	C	S	L
R	I	G	A	P	R	W	A	T	E	R	W	H	E	E	L
A	P	I	O	O	A	I	T	O	E	A	A	I	N	Y	I
W	I	N	D	O	W	S	H	O	P	I	Y	N	T	E	O
L	T	E	E	L	N	H	E	L	S	D	S	G	S	S	N



## Solomon Grundy

1. Author's best friend and worst enemy
2. Place to remember
3. Sword- or saw- ending
4. Wiseguy with wings?
5. Where oysters have breakfast?
6. Honest guy who never sold cars
7. Pile of money, in poker circles
8. A car with a keel?
9. Involve
10. Baseball statistic
11. Give away
12. Take away
13. State of wink-catching
14. Get out of jail free?
15. Conscious of
16. Language name
17. Plan
18. The S in DOS
19. Jekyll was one, Heckyl wasn't
20. H.S. grads' worry about U.
21. Horse's house
22. Nuns kick it?
23. Chunks of grass
24. Olympic site
25. Send in a new direction
26. Artsie's writing instrument?
27. Gin or rum
28. Key to a fairy tale?
29. Steal from a sculptor?
30. Celebs
31. Eccentric figure
32. Description of recall or transit
33. Nay-say
34. Adjective for a college prank
35. Cat's baby bed?
36. Boy's name is divisible by 2?
37. Eat
38. Child's address?
39. Shape of some noses
40. Can be common or junk
41. Spelling word (Vrscay's variable)
42. Rear of a ship
43. Bull's bride
44. Knock knock. A band's there?
45. ...
46. Sylvester's son
47. Binge, esp. of shopping
48. Example of 27.

"I'd be neglecting my duty if I didn't prove at least one theorem a day."

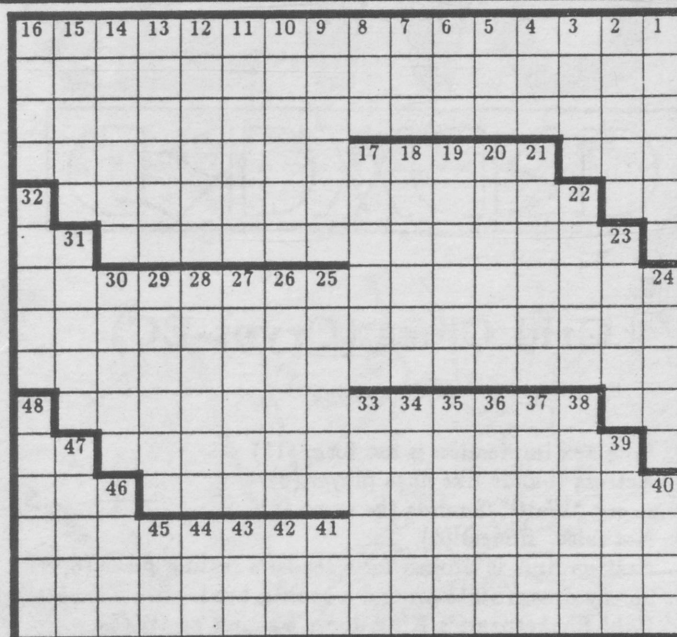
Wagner, C&O 230

"I claim that at the centre of the universe... is a busywait."

Buhr, CS 242

"Gram-Schmidt Algorithm, what do I know about them? Gram lived somewhere a long time ago, Schmidt lived somewhere a long time ago, and they got together and did something."

Moskal, MATH 235



## Son of Return of Clod

Take two.

What are these songs, based on these twisted titles?

1 point each

Divorce Manual  
Pulse  
Where'd it Go?  
Boomerang  
Baby Mozart  
Searching...

Paul Simon  
Rod Stewart  
Righteous Brothers  
Janet Jackson  
Falco  
A-ha  
Prince

What Watson Asked Bell  
Searching...  
Let Me Taste Your Wares  
Once  
Searching...  
This Town Ain't Big Enough  
For the Both of Us

Anne Murray  
U2  
1910 Fruitgum Co.  
Elton John  
Moody Blues  
Reba McEntire

2 points each

Kiosk  
Double-Edged  
Cardioid  
Take Two  
Wilting  
Ass over Teakettle  
Siamese Twin Dilemma  
Updraft  
Over Your Head  
Tight Stitches  
Who's the Pervert?!  
Describe the Unicorn  
An Advance

R.E.M.  
Gloria Estefan and  
Miami Sound Machine  
Jackson Brown  
Mike and the Mechanics  
Roxette  
Tears for Fears  
Michael Bolton  
Bette Midler  
Paula Abdul  
Hall & Oates  
Bruce Cockburn  
Fleetwood Mac  
Heart

Gridby

# GRIDWORD

## Grid Clues (Crypt-EC)

### Across

5. Poor sex impression is art form.(13)
8. Actress sounds like flute player.(8)
9. A cry "Wait!" Sounds the same.(6)
10. Not false. Honest!(4)
11. Nest on limb is broken for a leader's resting place.(6,4)
14. Sleepy dream state around a broken top is with a caveat.(6)
16. Ugh! Shakespeare's King doesn't sound pretty.(6)
18. Poor EC. EC is last clergyman.(10)
19. Sew around O, and you'll get to this city.(4)
20. Put in your comment will getting the needle.(6)
23. In uptimes, sap parts are waiting to ensnare an opponent.(4,4)
24. EC! Don't slop cyanide on the reference books!(13)

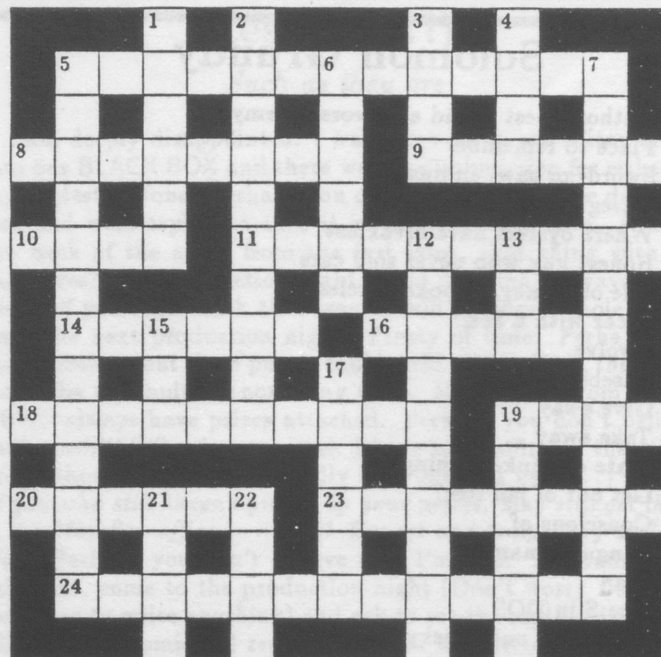
### Down

1. EC's lip is weaved together.(6)
2. Strange ones sleeping together.(10)
3. Ozone without love will go into a special defence.(4)
4. In a vain universe, there is a language.(4)
5. Fence EC's fever? It lights up the night!(13)
6. To pull along with thread.(6)
7. Changing when I met a shape-changer's sister.(13)
12. Horses of the evening can be disturbing.(10)
13. Skater Midori falls into you in France.(3)
15. Friend is up in my lap.(3)
17. Fidel is evil oil.(6)
19. EC's pit is disgusting.(6)
21. Ache hurts everything.(4)
22. A backwards black cat is found with a pin.(4)

## Grid Clues (Conventional)

### Across

5. Location of Cornell University.
8. Gymnast Bogemskia.
9. White Chicago basketballer.
10. Egyptian goddess.
11. Infants toy.
14. Like an object of devotion.
16. When you go on the record.
18. Having good foresight.
19. Army vehicle.
20. Astrologers guide to the universe.
23. Astronomers looking glass on the universe.
24. The solid product of salt and sulfuric acid.



## gridCOMMENTS

Well, you guys have finally done it. We got NO submissions for the GridWord! What happened? Has everyone died and no-one told me? This is really not good. I know it wasn't the best one we have ever had, but let's face it, it was still worth it to TRY. Anyway, now that I've said my schpeil, let me continue.

This week's grid is bigger, better and the words are all in your vocabularies, so don't be dismayed. Work on it. The wonderful prize is more than worth it, and if we continue to have few submissions for our Grids, we just may start seeing something else on the back page... [but we did receive a solution for our 3-D Monster Grid, so we have at least one person who will win the soon-to-be-cool mathNEWS profQUOTES Book Volume II. Coming soon to a bookstore near you... — Curtis, the 3-D Gridmaster].

Thanks to the Puzzle Bandit for the Grids, and aside from that remember to submit your grids (completed or not) to the BLACK BOX by the next production night (July 5th), along with your name, and your favourite piece of edible clothing.

Happy Gridding!!

Grid-EC

### Down

1. Used by skyjumpers.
2. What you can do with eggs.
3. Exchange.
4. Fraud.
5. Holmes, Poirot, Marples, etc.
6. Close.
7. Having understanding of a subject.
12. King Arthur's meeting place.
13. King of Egypt.
15. Operations (abbr.)
17. In a state of suspension.
19. The son of Lennon.
21. Henry Jones' dog.
22. A hint.