Teaching & Learning Committee

The teaching and learning committee has adopted the following statement as a list of aims for the Math Faculty core courses. The Committee invites your views and comments.

Aims of the Core

The Faculty offers diverse programs to students with varying backgrounds and aims. The core curriculum balances correspondingly diverse goals.

- It gives students a common foundation and provides solid, coherent, and timely preparation in material common to the various programs.

- As an introduction to university, it cultivates independent learning and a facility with the formulation and presentation of logical arguments.

- It allows students to make orderly decisions about their program by informing them about university-level mathematics and computer science.

- It gives a broad, rewarding and challenging introduction to the mathematical and computing sciences.

T & L Committee: Bill Cunningham
Warren Hagey, 3A co-op CS/Teaching
Adrian Lewis
Marni Mishna, 3B co-op CS & PMATH
Ian Munro
Karen Piech, Secretary
Ron Scoins
Cyntha Struthers
John Wainwright
Gord Willmot
Frank Zorzitto

Paul Schellenberg, Chair
Teaching and Learning Committee

Instructor of the Year Award

I'm sure you've all noticed that some instructors are better than others (I sure as hell have). Well, how about letting them know that you think that they're great. Nominations are open for the Instructor of the Year Award. This is an award that is presented by the Math Society each Winter to one or more instructors. The recipients of the award have their names placed on a plaque in the Comfy Lounge (go take a look if you haven't seen it). It's a great way to show them that you appreciate their ability to teach and how much you've enjoyed their classes. So pick up a nomination form from the MathSoc office, and fill it out.

Chris Buchanan
MathSoc Internal Director

Computer Science Club

A Student Chapter of the ACM

CSC Flash

Welcome to this term's first CSC Flash. We have just recently had an election for this fall's positions (of which the results did not make it to press time for the last issue). So, without further ado, here is your Fall '96 CSC Executive:

President :	Shannon Mann
Vice-President :	Joe "Frosh" Deu Ngoc
Treasurer :	Mike Van Biesbrouck
Secretary :	Nikita Borisov
System Administrator :	Chris Rovers
Office Manager :	Dax Hutcheon
Librarian :	Aliz Csensk
Flasher :	Aaron Chmielowiec
Deity :	Skuld

Upcoming Events:

October 5:	CSC Programming Contest - ACM Style	4:30 PM
October 7:	HTML Tutorial by Christina Norman	4:30 PM
October 9:	VI Tutorial	4:30 PM

First off, I'd like to extend an invitation to all of you who are reading this to join the CSC if you haven't already. Not only do you get access to our cool library, but you also get cheap pop, the use of our office, and the opportunity to get a FREE Calum account (to use for anything but course work). Come on, for two measly dollars a term, you get more than a membership, you get a membership card.

As you can see, we also provide tutorials on various topics that may be of use to you. So, if you want free casual sex, I can't help you, but if you want to know about how to create your own web pages, then be sure to attend the HTML tutorial on October 7th and be amazed. Also, if you want to learn about how to use the extremely popular (though sometimes cryptic) VI text editor, then be sure to attend the October 9th tutorial at 4:30pm. These tutorials are usually held in the UNIX lab next to the first year math tutorial centre on the third floor of the MC.

Finally, I'd like to gripe about the music coming from Math-Soc. There is too much repetition of the same few CDs, and the volume is up too loud. If I hear that Queen CD once more, I will personally go over there and demand that they switch CDs immediately (among other things (Oh, I've said too much)). Don't get me wrong, I like Queen, but there is a limit to how many times one person can hear the same song repeated over and over...

So, worthy reader, keep an eye on us, for we have many events planned for this term. And, as always, we welcome any suggestions that you may have (except for blatantly absurd ones). We here at the CSC will keep you posted on these upcoming events, so until next time, be sure to stop by the CSC and see what we have to offer.

Calum T. Dalek

gradNEWS

First Night Out

A good time was had by all at the MGC '97 First Night Out last Thursday, September 26th. It was a night of free food, free pool, and lots of drinking. The night began at 7:00pm at Weavers Arms Pub and went on through the wee hours of the morning. For those of you unable to make it, you missed a good time. Never fear though, the next MGC '97 event will soon be here! Sign up outside the MGC office (MC3029) for upcoming events.

Last Call for Grad Photos

Grads, this is your last chance to get your photos taken if you want to be involved in your class composite and yearbook. If you have not yet had your photo taken, stop by Jostens at Fed Hall to make a special arrangement. They will be photographing other faculties over the next few weeks.

Yearbook

Interested in helping put together the '97 yearbook? We need your help! Come to the yearbook meeting this week (watch for posters) or stop by the MGC office and talk to Sandra Rosano, our MGC '97 yearbook director.

Reminder

If you are graduating in 1997, please e-mail your userid to mgc@undergrad.math with the word "userid" as the subject.

Would you like to be a part of the Math Grad Committee for '97? Donate an hour of your time once a week to help run Pizza Day, or give us your input on the Math Grad Ball. We would like to hear from you.

Laura Williams
Chair MGC '97

Minisoft^{TM} Mayhem

Once again I've the inside info on the what the big boys have been up to, and the big news can be summed up in two words — ship party. Now, you may already have some ideas about what a ship party is, but it's probably quite different from a ship party Minisoft style. It all has to do with the completion of a product. As the deadline approaches, testers and debuggers work endless hours until the software package is perfected... Aw, who am I kidding? They test about as thoroughly as I do... Anyway, eventually the time comes for the product to be shipped, and hence, a ship party. These are pretty glitzy bashes from what I hear, and are immediately followed by many days of undisturbed sleep.

But don't think that working for Minisoft is all fun and games. They also watch movies. Just hold on... that *is* fun and games. Yes, it turns out that many employees don't arrive at work until after noon, and then they watch movies on a big screen TV in the conference room while eating popcorn and drinking pop (see last issue). Heck, except for the programming, it sounds just like university...

Warren "The Milkman" Hagey

MEFnews

Nominations are now OPEN for the fall term Funding Council. There are a total of 28 positions available on the council. Be a part of MEF history by being on first funding council to authorize up to $15,000 in proposals! Here is a breakdown of positions available...

- 3 positions available for each year (1,2,3,4)

- 2 positions available in the following departments (but you need advisor approval):

AM	General
PM	ACTSCI
C&O	STATS
CS	St. Jerome's

Time commitments will be kept to a minimum. There will probably be 1 or 2 meeting(s), lasting no more then an hour (hopefully!). This is a good opportunity to get some extra curricular points on a resume.

So... if you are interested in helping out on council, please pick up a nomination form from the MEF Office (MC 4046) or the MathSoc Office. If you have questions please contact mefcom@undergrad.math or x5757.

Sumon Acharjee
MEF Director Fall '96

The View from the Other Side

No, not that side, you fool! The other side!

Interested in grad studies? Even a little bit? There are two words that are going to make your entry into grad studies a lot easier: NSERC and OGS.

NSERC and OGS

NSERC stands for the Natural Sciences and Engineering Research Council, which is "the national instrument for making strategic investments in Canada's capability in science and technology," according to the 1996 NSERC Scholarships and Fellowships Guide. Each year they offer a number of scholarships to qualified students who wish to enter a Master's or PhD program at a recognized university.

OGS stands for an Ontario Graduate Scholarship. These are available for postgraduate study in Ontario. Note that, even if you are like me and are technically the resident of a different province (which makes me ineligible for OSAP, which really sucks, but is also really irrelevant), you can apply. Preference *may*, however, be given to Ontario residents.

NSERC, as its name indicates, primarily funds students in programs of the natural sciences (including mathematics, but not necessarily including statistics, for some reason) and engineering (including computer science). NSERC makes a certain number of awards available to each postgraduate institution in Canada; these institutions, in turn, make recommendations to NSERC as to whom to give the awards to.

There are two types of awards at the postgraduate level: PGS-A and PGS-B. The difference depends entirely on when you apply; PGS-A is meant for the first and second years of postgraduate study, while the PGS-B is meant for the third and fourth years (or fourth and fifth, depending). What this means is that you'd be most interested in the PGS-A, especially since the PGS-B can only be held by doctoral candidates. (There *are* undergraduate awards, but only for small universities; UW doesn't qualify.)

A PGS-A scholarship has a 2-year duration, depending (of course) on sustained eligibility. It is worth $15,700 per year. Now this may not seem like much, especially compared to how much you'll likely earn in the workforce, but this is a *scholarship*; as long as you stay in school, you'll get the money.

OGS scholarships, on the other hand, are only held for a year. According to the OGS 1997–98 Information, Instructions, and Application Form, "you can receive a lifetime maximum of four years of government-funded awards," which includes NSERC. You can receive up to two OGS awards at the Master's level, and four at the PhD level. The amount of the award varies from year to year; for 1997–98, it's worth $7,906 for two consecutive terms and $11,859 for three.

Applicants must:

- be Canadian citizens or permanent residents;

- hold (or expect to hold) their BMath (or other appropriate degree);

- intend to pursue your Master's or PhD; and

- have a first-class (80%) average in each of your last two completed years of study. (If you're in 4A, say, this would include 2A, 2B, 3A, and 3B.)

If you're eligible, you must supply an official transcript for studies completed up to August 31, 1996, two letters of recommendation from faculty members (one who is most familiar with your work, and one who is acquainted with your work), a list of your significant academic accomplishments (published papers, patents, conference presentations, etc), and a plan of study/research. Sounds daunting, doesn't it? This is all used internally to differentiate you from other candidates, as UW produces a list of recommended people to NSERC and the OGS people. The more likely it sounds that you'll succeed as a grad student, the more likely you'll get funding.

You Don't Necessarily Need Funding

When you apply for grad studies, you don't necessarily need to have an NSERC or OGS. I don't have one. What this means, though, is that some professor (your advisor/supervisor) will have to fund you out of his/her own grant money (read: pocket). If you bring a scholarship, they don't have to. Which means that having one makes you a *much* more attractive candidate.

My advice is to apply to NSERC *and* OGS, regardless of whether you think you'll get them or not. It can't hurt, right? But be quick; applications for NSERC are due Tuesday, October 8, and applications for OGS are due Friday, November 1! (Applications are available from the graduate secretaries/scholarship co-ordinators of your department. See your department office for more details.)

Not sure if you're going to do grad studies? Apply anyway! If you decide *not* to apply for grad studies, you can release your award. And, as mentioned above, *having* an award makes it easier to get into grad studies than *not* having one.

Good luck!

Mike "GradHammer" Hammond

Talk Amongst Yourselves

I'll give you a topic:
the carnation is neither a car nor a nation — discuss.

*mast*HEAD

Brian here. Well, it's midnight on the 30th and nobody here but us editors. After quite the fun-filled emotional roller-coaster day, we now can relax, sit back and say "Well, we're halfway there." Couple of things to take care, then it's off for home. The only thing about Monday production nights is that I end up missing football. And from what I hear, the Cowboys won tonight? That can't be right! Oh well.

Anyways, here's the people who showed up for the glitz and glammer tonight, along with what they were doing during last week's clouded over lunar eclipse:

Mike "Hammer" Hammond (Trying to find a better *mast*-HEAD question. As you can see, I failed.), Ian "Son of God Complex" Milligan (Bouncing around my apartment going "Oink Oink Oink!"), Richard Bilson (Gazing at clouds.), Michael Thorsley (There was an eclipse?), Ann Scea (You expect me to remember last week?), Esther Small (Getting drunk with my frosh.), John Swan (Getting soaked like no man's business, thank you very much!), Darren Rigby (I wasn't at any Math Week events. And what else was there? Therefore, I didn't exist on Thursday.), Duncan Mowbray (Running naked through the streets howling at the red barn.), Michael Farebrother (That was a penalty double, partner. . .), Chris Guerra (Talking to my girlfriend in Edmonton who had already seen it. I thought it wasn't worth it after she spoiled it for me.), Stuart Pollock (Do the words "Graphics Lab" mean anything to you?), and Viet-Tam Luu (Which moon? Which planet?).

As always, thanks to Domino's for the groovy production night pizza and all those swingin' cats at Graphic Services for printing up the issue for us. Till next time. . .

Brian "Calculus Cowboy" Fox
(Washing that barbecue smell away.),
Matt "So-Krates" Walsh
(Wandering around the woods by Columbia Lake blindfolded and holding on to a rope. (Yes. Really.))

Now Playing

Here are my last movie reviews of the term.

Last Man Standing

"No matter how low you sink, there's still right and wrong."

Those are the words spoken by lead actor Bruce Willis as the opening credits roll, and I think it's an excellent point to make. Unfortunately, the rest of the movie didn't do much to elaborate on that point, and I think the message of the film will be lost on most people. Willis stars as a gunslinger for hire who's looking to make money from a dispute between two rival gangs in southern Texas. Some of the gunfights looked amazing in slow motion, and although Willis is a favourite of mine, *Last Man Standing* isn't worth standing in line for.

**

Warren "The Movie Milkman" Hagey

*prof*QUOTES

"If you had a brain, you could probably do this a lot faster. Let's assume you don't have a brain."

M. McCool, CS 241

"If I had a brain, I'd do a much better job of this."

M. McCool, CS 241

". . . And we could take the third and fourth partials of this, if we were masochists."

Lastman, MATH 237

"Why am I doing this? Because I'm a prof."

Best, MATH 138

"I see a little bit of intellectual curiosity. I don't like that: this is university."

Best, MATH 138

"My life is crumbling."

Best, MATH 138

"Looks like I've been drinking a bit this lunch hour."

Struthers, STAT 230

"Why do I feel like Porky Pig today?"

Struthers, STAT 230

"I never saw a prof licking his wrists when I was an undergrad, so you should feel privileged."

P. Hoffman, PMATH 467

"I hate these pretty pictures! They hide all of the Physics!"

Liu, PHYS 121

"Now you can tell everyone that you learned about sex in Latin."

Churchin, LAT 100A

Student: "How long is the test?"
Prof: "8 1/2 x 11."

Lavigne, HIST 260

"A Moore Machine starts producing output before it's even finished accepting your input. By the way, have you ever met people like that?"

J. Shallit, CS 462/662

To a student doing a problem on the board: "It's O.K., go ahead, no pressure. I'll just stand here and hum the theme from Final Jeopardy."

J. Shallit, CS 462/662

After pausing and looking at his lecture notes: "Oh dear. Did I do something naughty?"

W.H. Cherry, STAT 220

The Philosopher's Stoned

Mathiespeech

One of the things which I like best about being in the Math faculty is that it's so, well, *distinctive*, y'know? There's something about being a math geek in the company of three thousand other math geeks... and it's sort of developed into a kind of culture.

(Sociological culture, not biological. Though that might be said to apply to certain areas of mathiedom as well. But we just won't go there today.)

Now, for a subculture to be recognizable, it needs to have strong characteristics which differ from the accepted norm. I submit that there are several such characteristics of Mathiedom. One such is card playing, which perhaps I'll discuss at a later date. There are also distinctly different forms of social interactions between mathies, but that's somewhere else where we're just not going today. What I am going to discuss, however, are the most immediately recognizable features of being a mathie: speech patterns.

I suppose it's to be expected, really. I mean, every field has its own typical jargon, necessary for clear communication of ideas peculiar to that endeavour. If one then takes this jargonization process, and lets it ferment for four years at a time per individual with little contact with more normal humans... well, it's easy to see that the jargon is going to spill over into the rest of one's life, because everyone will probably understand what you mean anyhow.

I claim that this is exactly what has happened with mathies. In those areas of the MC which are designated hangouts (such as the Comfy Lounge and the diminutive office of the PM/AM/C&O Cult, to name a couple of blatant examples), the denizens have incorporated the language of math with ordinary English, creating a bizarre and occasionally incomprehensible pidgin.

For example, the phrase "there exists" almost never comes up in conversation between two nonmathies. They find less circumlocutious ways of saying things.

For example:

Non-Mathie: There's a good movie playing at the Princess tonight.

Mathie: There exists a Princess Cinema such that it has a good movie playing tonight.

See what I mean? And there's more. The word "invertible". Most people never have to call upon the word "invertible" in their lives. Mathies, however, use it so much in their first-year courses (if you haven't yet, you will) that it becomes a permanent part of their vocabulary. In fact, it is an almost meaningless part of said vocabulary. It is generally safe to ignore the word "invertible" in any sentence that otherwise has nothing to do with math.

The exception is when the entire sentence seems to come out of virtually nowhere, and also includes variables. (I myself have started a sentence with "There exists an invertible restaurant Q such that...".) In this case, the mathie in question is, in their own roundabout way, trying to say that two somethings (restaurants, in this case) are *similar*, which makes sense to anyone who's gone through MATH 136.

Similarly, usually the use of the word "epsilon" indicates something which is very, very small, or two things which are very, very close. For example, "I'm epsilon away from completing this assignment. I just don't want to." (Another sentence which makes sense to anyone who's gone through... well, almost any math course, actually.) This should not be confused with sentences starting, "For every epsilon there exists a delta such that..."; the remainder of such a sentence is going to be either nonsense or analysis. (Hmm... never mind, too easy.)

One final term for the glossary: "Induct." Any sentence using the word "induct" is probably a very subtle joke, or else an implication that something will continue happening, whether one likes it or not. For instance, "Life sucked last week. Life still sucks. Induct." (Um, that wasn't *too* bitter, I hope...?)

I could go on. My advice, though, is that if you want to learn such a language in completeness, hang out at the PMC office more often. Or my house, actually.

Matt "So-Krates" Walsh

The 6th Floor, MC

Over the years, the Math and Computer building begs one compelling question: "What about the sixth floor?"

Many misinformed people have spread vicious lies about the sixth floor containing offices and some sort of statistically processed centre. This heresy will be stopped here and the truth revealed: It is actually a no-man's land (neutral zone for the politically correct) filled with undocumented daemons and various denizens of the underworld.

Long ago, the architects of MC found it necessary to create a maze in which to contain the Minotaur who roamed the land on which U(W) stands today. Many lies have been spread to keep the Minotaur fed. They talk of the computer lab which never fills, (an obvious fallacy), and of the existence of mythical stats TAs who help the weary and burdened mathie. Not so!

In modern times, there has been talk of vanquishing the Mino-

taur and converting the 6th floor. Suggestions have included establishing the first "Duke Nukem 3D: This Time It's For Real!" arena, or a "First One Out Gets a Stats Degree" tournament facility. Nothing is written in stone as funding cuts hamper all efforts to raise a Minotaur Vanquishing task force. The task is also hampered by WHinE (We Hate MINotaur Extermination), a group dedicated to stopping anything from removing the Minotaur. Research revealed that this group is made up of engineers who would hate to see anything that cuts down on the number of mathies who disappear.

If you have any ideas on the current or future uses of the 6th floor of MC, write to *math*NEWS and let us know what you think.

Chris "Apathy is my Watch Word" Guerra

Math for Dummies^{TM}

Greetings fellow sun-worshippers... Whoops, wrong discussion group. Thank you for reading this column once again (you'll learn soon enough). Hope you have all had a great time since last issue, in which I wrote a really crappy column — which several people said was funny. Well, I'm back to do it all over again (hey, if it ain't broke, don't fix it). So, this is the random rambling section to be followed by more specific rambling and bitching sessions. Whatta y'know... time for one now.

Crack

Hmmm... seems kind of strange that my roommates should listen to someone who shall remain nameless — don't worry Chris Buchanan, I won't tell anyone — when he calls me Crack-Boy... how come Chris seems to come up with new and interesting ways to demean me every week... Econ midterm this week (blah)... I hear that the Scunt was fun, Chris... Spaghetti...

How to succeed in your Co-op Interviews

Tip # 1 — Wear a Pink Tie^{TM}... Remember, don't *ever* make eye-contact (employers hate that) — look at your shoes constantly, only excepting a glance or two at the ceiling or out the window every few minutes...

Tip # i — Don't ever use complex numbers to rate your ability at performing a particular task... Don't have any...

Musical Interlude

Name the song that this comes from:

> You're beautiful — more beautiful than me
> You're honourable — more honourable than me
> Loyal to the Bank of America...
> You're sharpening stones
> Walking on coals
> To improve your business acumen

Why I Suck Part II

Again, the short answer is that I don't... And Brian can't complain too much, because this is my second article of the *term*, which breaks my record... Have a nice day, and insult someone other than me... Thank you... *[Yeah... okay... whatever... –CalcBoyEd.]*

Should We Talk About the Weather...

Again, the weather continues to be incredibly rotten... Can we have a sunny weekend for once... I'm expecting snow any minute now... I like summer (wish we had one this year)...

... Should We Talk About the Government

Finally have my connection to the outside world... Still feel just as uninformed as before... What's with this government anyway... How come people complain when I watch CPAC, or when I want to watch government debates... Doesn't anyone realize the entertainment value of parliament? (Hello, better than sitcoms)... That's enough about them, let's talk about me (or not)...

Well, folks, I guess that's all I have to ramble on about this week. Stay tuned next issue for more *mathNEWS* bitching and complaining and rambling and run-on sentences and pure unadulterated boredom.

P.S. All things written above are my thoughts and are not subject to the approval of Teamster man in any way, absolutely not... Cargo Van!

Tim "Crack-Boy" Coleman

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

Here's something...

I think this electronic revolution is going too far. Don't get me wrong, I love all the services, but I can't use most of them as I forget all the passwords.

A couple years ago, I just had the standard SIN to memorize, and that wasn't yet necessary. You have to have a real job for it to matter much. Now, I walk up the stairs to work, and key in a 5-digit code to open the door. I sit down and log on to my machine, using either my local or domain username and password. Of course they can't be the same, can they? I check my e-mail with another password I didn't choose. This illogical one I have to keep written down. I check my phone messages using a 4-digit code. I look in my snail-mailbox and find I've received a company credit card, complete with 4-digit PIN number and instructions to memorize it, not write it down elsewhere.

When I head home, I likely will need to get some money for groceries, so I use an ATM (Who goes to a bank during business hours? How can they?) and key in my other 4-digit PIN number. If I wanted to, I could do some things by phone instead, using yet another number. No thanks. If someone left a message on my home voice mail, I key in another 4-digit code to retrieve it. Low security on this one, so I might write it down somewhere.

When I head back to Waterloo some weekend, I'll want to check my UNIX account (8-digit password) and see if my old MacJanet account is still active (another 8-digit account). I want to change my registration, so I'll have to use my student number (another 8-digit annoyance). I might set up a terminal server account, but I can't think of another password!

I should head back home to Montreal as well, since I have to fix up my leave of absence from the Army reserves (9-digit service number I don't think I have written down anywhere), and although I (should have) graduated from CEGEP Vanier College over a year ago, I'm still involved in a grade dispute over my last term English (I was in Pure & Applied Science, with extra science credits. I should have taken an extra English). I hope I remember that old student number.

I haven't even considered my Calum account, my extension and other details of the phone system, or my third home phone number in a year. I won't even touch postal codes.

I hope I don't sound a technophobe, but I am going crazy over these codes. I say, let's identify people by fingerprint, or retina patterns, or whatever other crazy scheme we can come up with. Too many people write their PINs on their bank cards, and too many numbers drive me crazy. I'll go now, and send in this article... What *is* my mail password again?

Carolyn MacLeod

Live from the Creek!

Yes, there are Mathies there!

For the benefit of all Mathies (especially the frosh), there are certain Mathies that, although they are in Math themselves, are registered somewhere across Laurel Creek. People find that on the Other Side, there exists Mathies just like them (along with many flocks of ducks that make travel somewhat hazardous). Ladies and Gentlemen, fear them not, for they are the Mathies from St. Jerome's!

Now, I know what you are going to say: "These Mathies are a somewhat different breed; after all, these are Mathies that would tolerate the ducks." However, you will find that these Mathies are no different. They enjoy *mathNEWS* just like other Mathies (Why, I, as a matter of fact, enjoy reading it even in the middle of an 8:30 (in the blessed A.M.) class when I am half-conscious!). Some enjoy doughnuts and other such goodies that the Right Angle Cafe^{TM} provides (Heck, I usually buy a doughnut and a drink after my 8:30 class) and enjoy the events from MathSoc. Some Math courses that are provided in St. Jerome's are even taken by non-St. Jeromers.

Of course, there are some things that are unique to the college across the creek. One instance is that St. Jerome's provides the sweet language of Italian. A two-term veteran of this pleasant language from the Mediterranean, I can speak the language like a native (Glaswegian). As well, most Religious Studies courses take place in St. Jerome's. My advice is to take Italian, for this is a really simple course (even *I* have managed to get an A in it!).

Finally, there are professors in St. Jerome's that are in the Math Faculty. Two of these professors, in C&O, have made a large impact in the studies of Mathematics. As well, we have professors that come from the Math and Computer Building to teach here. Therefore, there is never a shortage of good professors at St. Jerome's.

And so, as you are reading this while you should be concentrating on Stats (or CS or C&O or whatever your prof is droning on about), you should remember that even though these Mathies are in St. Jerome's, they are Mathies all the same. Remember, they share the same love of Math (yes, I *do* enjoy doing six consecutive hours of Statistics and three hours of Actuarial Science!!) as those in the MC.

For now, Arrivaderci!

John "I may be from across the creek,
but I still am a Mathie!" Swan

What Would Be The Point?

- Dehydrated water.
- Constitutional anarchy.
- Biodegradable furniture.
- Solar-powered lamps.
- "Caffeine-Free Diet Jolt^{TM}".
- Drive-through funerals.
- Being president of the "Society of Followers".

Mike "Hammer" Hammond

Wonderful Website of the Week

For all of you that have spare time on your hands (aw, come on, you can only work on Calculus for so long), I'll be here to lead you to some of the many interesting sites that are out there on the World Wide Web.

If you haven't experienced the Web yet, you're really missing out, let me tell you. There are many browsing options, and `lynx` is great for just getting information quickly, but if you really want the full Web experience, Netscape^{TM} is what you'll want. To use Netscape, just type in `xrsh ` hostselect zeno` netscape`, but keep in mind that it uses a lot of system resources (ie. unless you want to be beaten to a bloody pulp, you shouldn't use it when there are many students attempting to do their CS assignments).

So, here's my suggestion for this week:

The Character Shop
http://www.Character-Shop.com/

An awesome page with all kinds of stuff about puppets and animatronics. These are the guys who brought us the Bud Frogs and Foster Farms Chickens, and have done work for movies such as *Outbreak* and *The Santa Clause*.

Warren "The Milkman" Hagey
Webmaster Extraordinaire

Frosh Leaders and the Fridge of Doom

A Tale From Frosh Week

"Crushed my fingers!
Smashed my knee!
But we got the fridge
to the C+D!"

'kay. Here's the situation. Friday of Frosh Week, a new fridge arrived at the loading dock for the C+D. (Okay, okay, "Right Angle Café" ... whatever.) It's that nice, shiny new "Coke" fridge – the three-door jobbie.

Go to the C+D. Examine said fridge. Now, go to any of the elevators in the MC. Notice anything? Riiiiiight. Elevators small. Fridge big. Realise now that the loading dock is on the *second* floor. Furthermore, realise that the C+D is on the *third* floor. Problem? Nope.

Simply recruit some helpful, eager Frosh Leaders, scare up some rope and a couple of pry bars and haul that puppy up a flight or two of stairs!

After much shouting, chipping of stairs, sweating, scuffing of floors, swearing, and some scary aerial maneuvers by the fridge, we did it. Yay for us!

The friendly C+D staff gave us Snapples. Yay for them! The rest of you ingrates just better appreciate that fridge. Grrrrrr!!!

Ian "Son of God Complex" Milligan

I'll Have The Special

Man, do I smell like The Bomber!

Some people say I watch too much sports. And by garsh, they're right. I do watch too much sports. Right now, we have football, baseball playoffs, the new hockey season starting tonight and the constant stream of wrestling flowing from my television set. It's hard to get anything done at all with this hearty menu of sports going on. But I always find the time to get all the important stuff done... *math*NEWS and The Bomber.

- Did you know the Yukon just had an election? Neither did I until I surfed the TV (there it is, again!) Monday night. Did you know there's a new party in power? Did you know the Yukon only has 16 seats in its legislature for a territory of only 33,000 (approx.)? Probably not. Beats me why I'm bothering you with this insignificant information.

- Do you think I could persuade the NFL to move Monday Night Football to Tuesdays so I don't miss the game on production nights? Probably not, eh?

- The CRTC licensed over 20 new speciality channels. Tell me... do we really need 20? Uh oh... I'm talking about TV again...

- I haven't listened to my shortwave radio in a heck of a long time. I'm starting to miss Radio Havana, Cuba's worldwide broadcaster. I always got a laugh listening to them. "You're listening to Radio of the free Americas." Heh heh. Funny stuff. (Radio is not quite like TV, right?)

- Okay, I give up... what exactly is funny about those Reese's commercials with the circles and the floating peanut butter cups? Does anyone really know? (Ack! TV again!)

And to close off today, I would just like to point out that last issue's "Cargo Van" theme seemed to puzzle a few of you. I know some of those involved in frosh week know what it was all about. What surprised me the most, however, was the huge favourable reaction to the cutout. Whether we do another, I don't know. It just depends on whether we can come up with a good idea for another one. So if you have any ideas, please let us know.
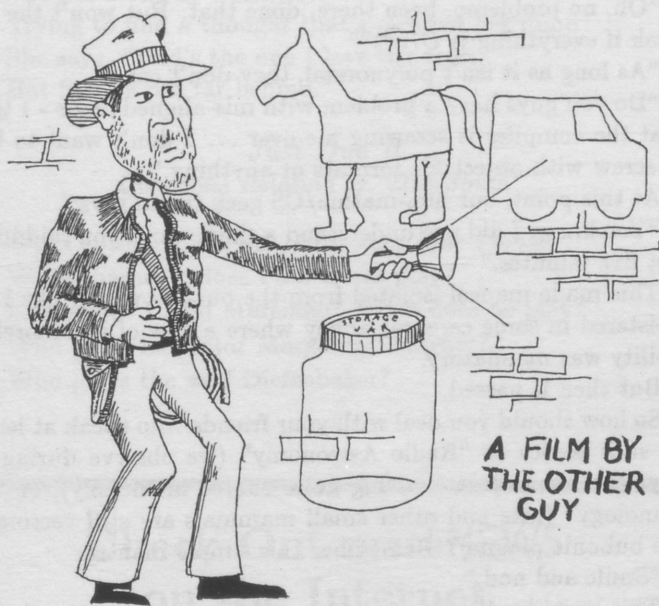
Till next time...

Brian "The Television... uh, Calculus Cowboy" Fox

SYLLABUS JONES IN THE TEMPLE OF PENI

A FILM BY THE OTHER GUY

Coming soon to a theatre near you...

*look*AHEAD

Math Faculty	
October 7	Last day to drop a course or withdraw
October 15	Application deadline for W97 Distance Education courses
October 26	Fall Convocation @ 2pm
October 28	Last day for 50% refund

MGC	
October 8	Yearbook meeting @ 5pm

PMC Talks	
October 10	Weniger on Power Series MC 4041 @ 3:30pm
October 16	Franklin on $(-1)(-1)=1$? MC 2038 @ 3:30pm

Miscellaneous	
October 5	Robbie Alomar spits in *math*NEWS editor's face for a "Catch the Taste" crack
October 14	Thanksgiving
October 15	Leftovers for dinner

CS Assignments	Watch That Load!
October 8	CS 340 Assignment 1 Due Midnight
October 9	CS 354 Assignment 1 Due 5:00 pm **Load forecast to be high**
October 14	CS 351 Assignment 2 Due Midnight
October 16	CS 488 Assignment 2 Due 1:30 pm **Load forecast to be high**
October 22	CS 340 Assignment 2 Due Midnight
October 28	CS 488 Assignment 3 Due 1:30 pm **Load forecast to be high**
October 30	CS 354 Assignment 2 Due 5:00 pm **Load forecast to be high**

Post-Teen Angst: Saw An Astronaut Floating By

Cereal

—or—

"A little mayhem will do that to you"

Cereal is good food. Now I'm not talking about that healthy crap with whole grain oats, barley, millet and three pounds of sheep's wool — I mean the stuff that's so evil that they have to *add* vitamins to it to give it nutritional worth.

Seriously, dear Average Reader, which would you rather start your day with? Something that will merely ensure a bowel movement by noon-ish, or something that'll give you ENOUGH ENERGY TO JOG TO FRANCE?!?!!!?

(Note for recent lobotomy patients and/or Arts students: I realize that France is in Europe and therefore is across an ocean — it's a slight exaggeration that makes my point more vividly. Didja get it?)

Look at it in the grocery store. Don't you just want to run down the aisle and grab every box from the shelves? Mmmmmm... *Count Chocula*, I'll eat lots-a-ya. I really can't get enough of that *Sugar Crisp*. Arrr and avast ye scurvy swabs, and ahoy! t'ye *Cap'n Crunch*! *Frosted Flakes* good? Yes, and grrrrreatly overpriced!

But, marshmallows and sugar-coated goodness aside, the bestest, the greatest, the yummiest, the pinnacle of graininess, has to be those orange, lemon and cherry (and all the other "new" flavours — grrrr!!) flavoured rings of sugary corn meal that tear the roof of my mouth up every time I eats 'em (which is frequently)...

FROOT LOOPS.

I love 'em. Yum. Yum. Yum. Froooooooooooooot Loooooooooooooops. Just follow your nose! (It always knows!) Fruity, loopy, Froot Loops. Y'just don't get it, do you? They are the *only* way to start your day with some *zing*! (Well, Froot Loops followed by a big cup of KAWPHY gives you "zing" as well as "kazam", "pow", and "wahoooooooo!!!!", but I covered the whole KAWPHY thing back in '95 or so...)

You still don't believe me? Ah, my ever-questioning Average Reader, your innocence is half your charm. (Of course, it may be that you question my line of reasoning, but you *also* question my sanity and want to get far, far, far away... Uhm, what was my point, again?)

Oh yeah. Prizes. Have you noticed the decline in the quality of the prizes in cereals in the past few years. Okay, the occasional "lick-n-stick" tattoos... but no cool stuff like *TRON* frisbees or paratroopers or nuttin'! Wassup widdat? (Entering non-English grammar mode: please excuse — this was written after an evening at the Bomber...)

What happened to *Shreddies* toys? Perhaps the Post takeover? Or just a general decline in the taste of the VP-in-charge-of-*Shreddie*-toys? We, the cereal consuming fanatics, demand a reply!!

So. In the never-ending quest for truth-in-Angst, what have we discovered? Froot Loops are good food, Shreddie toys these days suck, and, most importantly Ian "Son of God Complex" should really find another hobby instead of frightening the Average Reader with his loosely-bounded "logic" and write articles about things that actually *matter* but then I would offend all those twisted Above Average Readers who can see that when I talk about "cereal" I actually mean "strife and pain in the world" and after tainting eighteen thousand cases of Froot Loops with Honey Nut Cornflakes by some freak bug that surfaced in the monorail system at the Kellogg plant, what better way to *end* strife and pain in the world than by giving these, albeit nut-tainted, boxes of fruity fun to some charitable organization except of course that when you buzz over some strife-and-pain ridden country and parachute these eighteen thousand cases in to the starving people they'll just look back up at the sky, shake their fists at the receding airplane and curse *my* name because they DON'T HAVE ANY MILK! Right?

Ian "Son of God Complex" Milligan

Understanding Your Friends

To help you, the reader, understand your friends I have prepared this short quiz for you to rate... (This is *mathNEWS* – *mathNEWS* don't do ratings)

This is about comprehending your friends – what they say that is. Many people have been indicating that mathies have their own dialect which is complete opaque to outsiders. Myself, I belong to that special subset of mathies who have an even more impenetrable dialect: CS geeks.

I was at Louie's the other day, with some friends, having dinner. The conversation went like this:

"So, you guys have finished CS354. Did you end up having to implement segmented memory?"

"No. We got away with a simple page table scheme, although we only had a linear search algorithm to find free pages"

"Oh, no problemo, been there, done that. But won't the TAs freak if everything is $O(n^2)$?"

"As long as it isn't polynomial, they don't care."

"Do you guys have a problem with mis-aligned reads - I think that the compiler is screwing me over ... I don't want to have to screw with object file formats or anything."

At this point, our non-mathie/CS geek friend says:

"You know, I did not understand a single word you said in the last five minutes."

This made me feel isolated from the outside world, like I was cloistered in some cerebral abbey where a vow of incomprehensibility was mandatory.

But then it passed.

So how should you deal with your friends who speak at length on such topics as "Radio Astronomy" (we observe during the day: the sun is just that big noise source in the sky), or "Immunology" (rats and other small mammals are still vectors for the bubonic plague)? Remember this simple mantra:

"Smile and nod."

This provides the necessary reassurance to your friends that you are listening, with the need for actual comprehension. This is a life-long technique which requires minutes to master and a will enjoy splendid results.

Chris "Apathy is my Watch Word" Guerra

mathNEWSquiz #2

Pleeeeeeaaaaaasssssssseeeee Submit!

Hi, folks! How's the term been? Are courses keeping you down? Has the Big Crunch finally come? Being beaten into submission, yet?

Speaking of submissions, we only received two for last issue's squiz. More on that later. Here are the answers for last issue's squiz: **Song Lyrics**: 1) Abba – Waterloo; 2) Kate Bush – Rocket's Tail; 3) Spiñal Tap – Diva Fever; 4) Gilbert and Sullivan (a loose interpretation of the word "artist") – A Modern Major General; 5) Motorhead – Death or Glory; the theme was "Waterloo"; **Comics**: 1) John Kovalic; 2) Scott Adams; 3) J.P. Tooney; 4) Charles Schultz; 5) Brian Basset; **Star Trek**: 1) Three; 2) Kang (Day of the Dove), Kor (Errand of Mercy), Koloth (The Trouble With Tribbles); 3) Enterprise – 2, Voyager – 1; 4) Spock and Sarek; 5) Picard – TNG, Odo – DS9; **Da Bomber**: 1) Canadian, Rickard's Red, Waterloo Dark, Labatt Ice, Labatt 50, Budweiser; 2) ; 3) 11:30-1:00 MTR, 11:30-2:00 WF, 7-2 Sat; 4) Seven; 5) Eight;

Getting back to that submission thing, we only received **two** submissions for last issue's squiz. That's really too bad because we've got some awesome Right Angle Café coupons to give away! Anyway, the people who submitted were X-Man(4) and Ian "The Word Guy" Facey with nine correct answers! You can pick up your prize in the MathSoc office.

And now for the Squiz!

Song Lyrics
One point each for song name and artist, and one extra point for general theme

1. The good people of the world are washing their cars
   On their lunch break, hosing and scrubbing
   As best they can in skirts and suits.

2. Verdi and Wagner delighted the crowds
   With their highly original sound.
   The pianos they played are still working,
   But they're both six feet underground.

3. Crazy as the people walking through my head.
   One of them's got a gun
   To shoot the other one.

4. Jack Flash, Rocket Man.
   Sergeant Pepper and the band.
   Ziggy, Benny, and the Jets.
   Ah, take a rocket.
   We just gotta fly.

5. She sits alone by a lampost
   Trying to find a thought that's escaped her mind
   She says, "Dad's the one I love the most,
   But Stipe's not far behind."

Just Due It
Questions Relating to "Due South"

1. What episode did Paul Gross sing *Ride Forever*?
2. What character does Paul Gross play?
3. How about David Marciano? What does he play?
4. Who plays Inspector Margaret Thatcher?
5. Who plays the wolf Diefenbaker?

Mel's Diner

1. What is the cost of a breakfast special (without any pork products)?
2. How many seats are at the counter?
3. Who stars in "Double Bubble" comics?
4. The three grades of "eggs over-" are: over-easy, over-medium, and . . . ?
5. What does a "Hungry Man Breakfast" consist of?

Rock Around the Clock

1. What time zone is "Zulu" time? (US Military definition, please.)
2. How many time zones does Canada have?
3. How many time zones are there in the world?
4. On what date were the Time Zone divisions officially agreed upon? Bonus: name the place.
5. What weekend this year do we leave Daylight Savings Time?

Okay, everybody, please submit! It's really easy: all you have to do is drop in your paper submission in the **BLACK BOX** across from the Comfy Lounge or you can email a solution to scepollo@undergrad.math.uwaterloo.ca by 2:30 on Monday, Oct. 21, 1996. Good luck, everyone!

Jerry "Fish" Han
Mike "Hammer" Hammond
Ian "Son Of God Complex" Milligan

ultraCLASSIFIEDS

What Erik should have said:
"I've got to go do my laundry."

To certain Xtremists out there:

We done good, guys! Next time remember: there ain't no one in Guelph, break out the coffee beans early, and don't forget the sidewalk chalk. Oh, and someone take that guy to Detox...

Captain Σ

Lateral Thinking

Two men are paddling a rowboat. Suddenly the boat runs into something and comes to an abrupt stop. The man in the front of the boat gets thrown out of the boat. Although he hits nothing but water, when he climbs back into the boat, he is completely dry. How come?

We've all seen puzzles like this. The best way to play them is in a group where one person knows the answer, and the others ask yes-or-no questions to try to understand the apparently impossible situation given. These puzzles are called lateral thinking puzzles.

In the above example, the answer is that the boat ran into pack ice, and that is what the man had landed on.

This term, I'm running a contest based on these puzzles. I'll give an original puzzle every two weeks (if I can) and your job is to solve them. E-mail me your questions, and I'll respond as soon as I get them. I'll be checking my e-mail at least twice a day to get out the answers. Questions posted to uw.mathnews will not be answered. The first correct solution will win a math-NEWSprize.
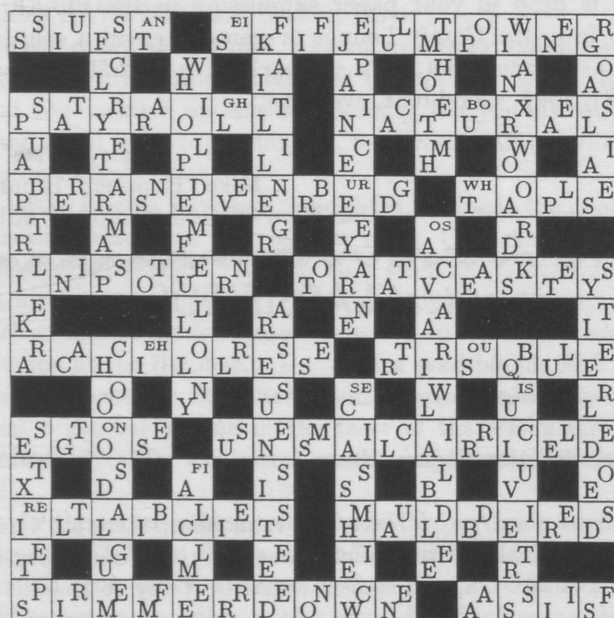
Here is this issue's puzzle: *A thief, caught at the scene of his crime, requested that his arresting officer book him for manslaughter, not theft. How come?*

E-mail djrigby@undergrad.math.uwaterloo.ca with your questions and guesses... and start figuring!

Gridby

Things Hammer Wonders About

If the opposite of "amoral" is "moral", and the opposite of "aspherical" is "spherical", does that mean that the opposite of "apathetic" is "pathetic"?

gridCOMMENTS
Problems? What problems?

Greetings, Gridders!

Well, this feature of *mathNEWS* certainly got off to an ominous start this term. I said that there would be an article that would explain away all the mysteries of solving the cryptic crossword, but there wasn't. It was apparently too long at a page and a half. Go fig. It's been edited down and is elsewhere in this issue.

I also said that there would be a star in the grid marking the beginning of the strange word, and there wasn't. (It should have been in the square with the *U* in Susan.) Reading southeast as instructed, an eight-letter word can be read: Ucalegon. This is, as we all know, A NEIGHBOUR WHOSE HOUSE IS ON FIRE.

What I never said is that subscribing to uw.mathnews is a good thing for Gridword solvers. This is where I'll be posting more detailed solutions for our favorite crosswords, and you'll find the solutions to "Other People Only" and its companion cryptic there. Also, one solver posted a message there saying that there were several problems with the puzzles, and that it was very hard. I posted back with the corrections and I gave clues for the cryptic. Now, don't think that I'm going to give clues like that every week. I will never, ever, under threat of death or worse, give out clues to one of my crosswords ever again! But if I do, it'll be on the newsgroup.

For the cryptic and conventional last time, we got four submissions each. They were all from the same people, namely Mike Swart, Bonnie & Clyde, Ian Facey, and Chris Wooff. In the cryptic, there was only one error, from Ian Facey. The winner for the cryptic is Chris Wooff. Congratulations. For the conventional, only one submission gave my intended answer of WILD MELON for 9-D. All the others had RIND MELON. However, I can't find any valid ref for either of these. Apparently over the summer, WILD LEMON mutated and I never noticed. Since no correct answer for 9-Down actually exists, all submissions are deemed correct. By random pen shuffle, the winner is Ian Facey. He and Chris can pick up their prizes in the MathSoc office. Answers to the gridQUESTION (Who do wish you had for a prof?) were: Dr. Hook, Cosmo Kramer, and Forrest (I think).

In this issue's crossword, the cryptic is, of course, normal. The Unconventional has had a rule broken. In many cases, the answer word for the Unconventional is one letter too long for the space it's been given in the grid. In these cases, a letter ends up sticking out of the grid. This happens twenty times in all, and although it doesn't happen symmetrically, it at least happens evenly. If you read the letters that stick out in order going clockwise around the grid (from a starting point that you must determine), then you will get an appropriate phrase.

Send your solutions via e-mail directly to me at djrigby@undergrad.math or put them on old-fashioned paper and drop it into the BLACK BOX near the Comfy Lounge. All entries are due by 4:30pm on Monday, October 21ˢᵗ. Enter your solutions to either crossword, or both, even if they aren't complete, but remember to answer the gridQUESTION: How many cooks spoil the broth?

Gridby

How to Solve a Gridword

In all the years I've been torturing solvers with Gridwords, I've never written a full article on how to solve them. Here is a brief guide on how to solve a cryptic crossword.

Basics

One part of each clue is a definition, and the other is a subsidiary clue. These two parts appear side by side in the clue with maybe a word or short phrase breaking them up. The definition is an ordinary definition for the word that belongs in the grid. The subsidiary clue describes how the grid entry is written by using the eight methods listed below.

Anagrams

This is by far the most common method used in cryptic clues. The constructor gives a list of letters and tells you that they should be rearranged.

Changing triangle into mathematical expression. (8)

Every clue involving an anagram needs to have an indicator to tell you what to do. For anagrams, the indicator can be any word or phrase suggesting mixing or bad treatment. In the above clue, the indicator is **changing**. If you **change triangle** you get INTEGRAL, which is defined as **mathematical expression**. The (8) tells you that you want an eight-letter word.

Charades

In this type of clue, several words are strung together to form a longer word. This clue does not need an indicator, but if there is one, it will imply one thing being next to another.

Tin weight and piece of china. (6)

A **tin** is a CAN, and a **weight** might be a TON. If you put the two words together, you get CANTON, defined as **piece of China**. The definition isn't capitalized properly, but this is legal. It's a trick used to fool you. Punctuation can also be added or removed to make a clue trickier.

Containers

A container clue involves one word being inserted into another.

Loud noise envelops Cardinal; it's not exciting. (7)

A **loud noise** could be BOOM, and **cardinal** (capitalization again!) is another word for RED. The indicator says that BOOM goes on the outside of (or **envelops**) RED, giving us BOREDOM (**It's not exciting.**) If the indicator meant something more like "wears" or "interrupts", then the first word goes on the inside.

Deletions

Sometimes a word is clued by starting with a longer word and chopping off bits you don't need. Any indicator referring to cutting or removing something can be used.

Angry buccaneer loses his head. (5)

A **buccaneer** is a PIRATE, and if he **loses his head**, i.e. the first letter, he becomes IRATE, which means **angry**.

Double Definition

Sometimes both halves of a clue are definitions of the same word.

Horses and badgers. (4)

Both **horses** (as a noun) and **badgers** (as a verb) are synonyms of NAGS.

Hidden Words

Every once in a while, a constructor will just hide the word you want inside other words.

Fleeing rat escapes harbours (thankless sort!). (7)

The answer, INGRATE, can be found intact in the first three words: flee**ING RAT E**scapes literally **harbours** this word. Be careful. The indicators for a hidden word are often the same as for a container. You have been warned.

Homophones

The answer and something else clued nearby are sound-alikes. So, indicators can be any expression involving hearing or talking.

Shakespearean king gets look from the audience. (4)

LEAR and LEER are homonyms, clued as **Shakespearean king** and **look** respectively. Since LEER is next to the indicator, and LEAR isn't, LEER must be the homonym clue, and LEAR the answer.

Reversals

This type of clue consists of a word or phrase being written backwards to make a new word.

Looks around for servers. (6)

If we use SNOOPS for **looks** and SPOONS for **servers**, then we have a pair of words that reverse. The word **for** suggests that we turn SNOOPS **around for** SPOONS, meaning SPOONS is the answer.

If the clue is a Down clue, then writing backwards could be considered to be writing *upwards*.

Sweets are touted up. (8)

In this case, DESSERTS is STRESSED (**touted**) backwards, which is to say, upwards.

Other Tricks and Conventions

More often than not, none of these eight methods will work for a word all by themselves. I can combine any of these methods, but in all cases the indicators still have to be there, telling you what must be done.
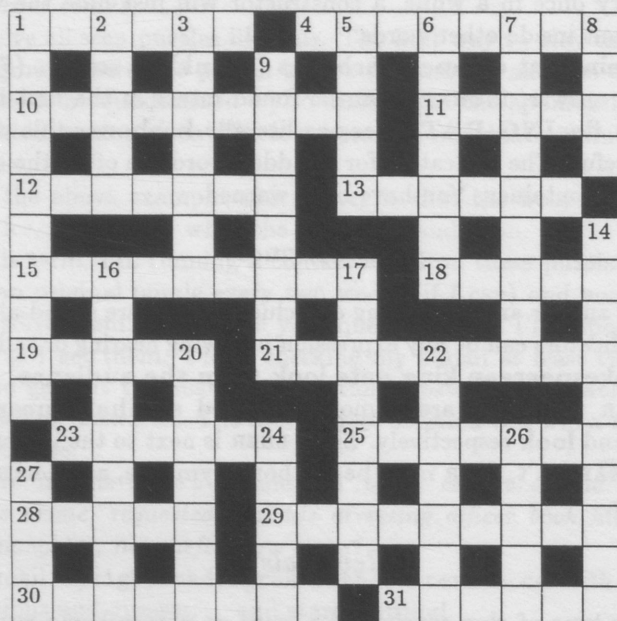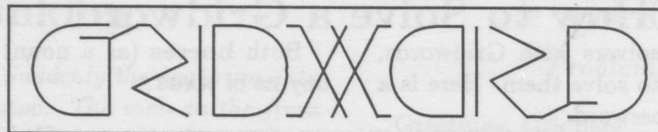
In other even more hopeless cases, sometimes using whole words in the wordplay isn't going to work. I can use abbreviations (and often do). If a letter sequence isn't a ready-made abbreviation, I may just take bits of other words: **head of lettuce** = L, **done at last** = E, and so on.

Another trick that is only found in Gridwords is the Acronym, where the whole clue is the definition, and the first letters spell out the word.

Play ivories, although not organ. (5)

If a clue has a "?" where it doesn't need one, then something punny is going on in that clue. And if a clue has a "!" at the end where it doesn't belong, then the clue is an &lit. clue. In this special clue, the whole clue acts as a definition *and* as a subsidiary clue.

Those are all the tricks of my trade. If you have any questions about cryptics, I'll be happy to answer them. Just e-mail me.

Gridby

GRIDWORD

Grid Clues (Cryptic)

Across

1. Is fat and short. (6)
4. Chastise little devil (out of error) I found in a tree. (8)
10. Beat promiscuous hooker's opening line. (10)
11. Instrument pollutes without set-back. (5)
12. First technicians zero in; instincts give little information. (7)
13. Scream in pain, like a coward? (6)
15. With assistant covering pines. (9)
18. Send away cloth after no time at all. (5)
19. Tender football player loses face. (5)
21. Trial loses its edge, instead gets double shift. (9)
23. The broken elm inside protective headgear. (6)
25. Ugly front and pale back are not hip. (7)
28. Pick-up gets loaded with red wheat, among other things. (5)
29. For one, *The Times* loses its header. It gives away good second drink before dinner. (9)
30. Joined up, then went ahead without me. (8)
31. Hear agreement rise. (6)

Down

1. Radios airline vessel starting to land outside Saskatchewan's border. (10)
2. Listen: add in tip! (5)
3. Soaking with water down in the sack. (7)
5. Rowdy sort is present for the wedding party? (5)
6. Ill over play-wright. (7)
7. Jeanne Dixon (or incarnation) holds up rust. (4 5)
8. Poetic Frost listens to prostitute. (4)
9. Properly steer pig's weight. (8)
14. Town comes to a conclusion regarding a suit. (10)
16. Small province of hell has horrible, endless alert. (2 3 4)
17. Last used mental ability with ring. Now married. (8)
20. 100 equals first to court? (7)
22. Last of the wood, I see. Sign for logs. (7)
24. Follow the leader: run fast. (5)
26. Similar to athletic preference. (5)
27. Salaries cut for a long time. (4)

Grid Clues for Out of Bounds (Unconventional)

Across

1. Synthetic substance
4. Napkin
10. Confusion
11. Active protester
12. Impart gradually
13. Canary
15. Fanatic
18. Most sage
19. Evil Biblical city
21. White blood cell
23. Cheerful
25. Bashful
28. Pill, of a sort
29. Avocado recipe
30. Most like a rail?
31. Decoration made of ribbon (or tiny flower?)

Down

1. Magician, among magicians
2. L, M and S
3. Elegant feature
5. Lords and ladies
6. Spill off
7. With cruelty
8. Lashed
9. Reprimand severely
14. Rating
16. Skim the surface of water
17. R, on campus
20. Stick to one's story
22. Spice
24. Actor Bela
26. Give a push to
27. Kids game with a small ball