

# math NEWS

Volume 92, Issue 3

Friday, June 13th, 2003

## UW Chancellor

*New Version*

Mike "The RIM Guy" Lazaridis



**RUNS TWICE AS FAST!!  
SUPPORTS WIRELESS!!**

**UW  
INSTALLS  
NEW  
CHANCELLOR**

*Sos Go  
June 9, 2003*

**lookAHEAD****mathNEWS**

June 15	Issue #3 rediscovers bicycling
June 23	Issue #4 Production Night 6:30 pm, MathSoc (MC 3038)
June 27	Issue #4 crashes a few BBQs

**Math Faculty**

It's midterm season...good luck, suckers

**MathSoc**

June 16	MathSoc Council Meeting
June 20	First Day of Summer Event
June 24	Cotton Candy
June 26	Game Show
June 28	SportsWorld Trip

**MGC**

Grad Photo sign-ups continue  
There will be none in the Winter

**MEF**

July 4	Funding requests due
July 4	Funding Council nominations due

**Co-op**

June 13	Interviews end, and you have no job
June 16	Ranking forms available at 10AM Due back at 4PM
June 20	Continuous Postings begin
June 23	Job match results available Meeting for those without jobs

**Miscellaneous**

June 15	Father's Day
June 21	First day of Summer (woohoo!)
June 24	St. Jean Baptiste Day

**R. Kelly: What The Hell?**

Normally, I try to avoid giving my opinion on popular culture, as I am of the belief that people should be free to like what they want, regardless of how bad I think it sucks. However, something has really disturbed me lately, and that is R. Kelly.

Now, I try to avoid using my jump to conclusions mat, but all the cards are stacked against R. Kelly in this case. He married Aaliyah when she was 16 (or was it 15?) And although I haven't brought myself to download the tape that brought about the latest set of charges, the allegations are shocking. R. Kelly would have been 33 when the video was shot, and the girl that he supposedly peed on would have been 13.

Yet, despite all of the evidence, and numerous allegations brought against him, last time I checked (about a week ago), R. Kelly has 2 songs on the Billboard top 10 list. This just boggles my mind. Maybe I am the only one, but everytime I hear one of his songs, I can't help but think of him singing about peeing on and having sex with a 13 year old. And what boggles my mind even further is the fact that no one seems to care. </rant>

Brian DePratto

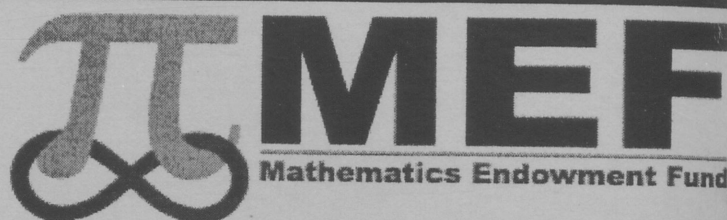
**Hail to the Thief is out!**

*All Hail Radiohead!*

Holy shit!

Bootleggers: Shame on you!

Aaron

**MEF Update***Professional Development Fund*

MEF has \$750 available for individual professional development for undergraduate students. This includes attending conferences, seminars, or workshops related to your field of study. Application forms for this can be found on the MEF website.

*Funding Proposals*

MEF funds projects that benefit undergraduate math students academically. In the past MEF has funded academic clubs, research/teaching assistants, computer equipment for MFCF, guest speakers, course notes and much more. If you have a project that will improve education in the Math Faculty, submit a request for funding.

*Funding Council*

If you are interested in deciding how MEF spends money, apply for a position on funding council. Funding council typically meets once a term, and you get free food in exchange for your time.

Funding request forms and funding council nomination forms are available on the MEF website, [www.mef.uwaterloo.ca/resources](http://www.mef.uwaterloo.ca/resources). All forms are due Friday, July 4.

*Office Hours*

This term I will be holding a weekly office hour, Mondays at 10:30 in MC 4046. Drop by if you have a question, or want to learn more about MEF.

Yolanda Dorrington  
MEF Director, S03

E-mail: [mefcom@student.math.uwaterloo.ca](mailto:mefcom@student.math.uwaterloo.ca)  
Web: [www.mef.uwaterloo.ca](http://www.mef.uwaterloo.ca)

**mastHEAD***Compile This!*

There's nothing quite like having to put an issue of *mathNEWS* together when there is a midterm for a first year course going on. I mean, we love our lackeys... I mean our frosh. Anyway, we eventually got it all said and done after our beloved frosh arrived once their exam was done. Through some amazing coincidence, this just happened to be the same time as when the pizza arrived.

So for no reason in particular, we asked our staff "What software package would you be?", to which they replied: Lino (A Big One), Albert (BloatWare), Syss Mouse (Microsoft 'Linux'), Diana (A 'user-friendly' one), Eric (The prOn-o-matic), Brian (The one with the biggest... ah forget it), Craig (Abacus v1.0), Aaron (Whichever One Works), Chris TW (rpm—install...(install packages!)), Soo (Broadcaster v2.3).

Ian W. MacKinnon (Open source VS .NET)

Louis Mastorakos (Remember Popples? Yeah, those.)  
Chris Harasemchuk (Software? Pshaw... I got Hardware!)

## Prez Sez

### *Suck my Student Society!*

Well midterms are upon us. Mine are placed carefully almost all in one week for my convenience. In between studying here is some stuff I am looking at. As always all the information about what I am doing is at [www.mathsoc.uwaterloo.ca/prez/](http://www.mathsoc.uwaterloo.ca/prez/).

Want to help shape the future of the comfy lounge? We are selecting what furniture to add to the comfy lounge this term. If you want to get involved in the selection e-mail me at [prez@mathsoc.uwaterloo.ca](mailto:prez@mathsoc.uwaterloo.ca) and ask to join the comfy committee.

Want to know more about the MFCF/CSCF split? I am currently looking into understand what is happening and why. If you have any specific questions you want asked, e-mail me with them at [prez@mathsoc.uwaterloo.ca](mailto:prez@mathsoc.uwaterloo.ca).

I am also looking into getting more space for students, still looking to start a shadow pool program, and working on safety issues around pizza day. If you have anything you think I should be looking into, e-mail me at [prez@mathsoc.uwaterloo.ca](mailto:prez@mathsoc.uwaterloo.ca), or stop by the Exec Office during my office hours, or by appointment, and we can chat (the office is across from MC 3038).

Albert O'Connor  
President Spring 2003

## Folding @ Home

If you are going to donate your spare processor cycles to a worthwhile project, join Folding @ Home, team 12005. Here are a few reasons:

1. Team 12005 has a really nice page to view your stats on.  
<http://folding.cubicproductions.com>
2. Folding at home produces useful results that the medical community is using to help you and your friends live longer healthier lives.
3. The software is stable, and has never crashed or caused problems for me (on Windows and Linux).
4. It's fun to watch your name climb the ranks.

From the website of the team that I am on:

We are giving up our spare (and sometimes not so spare) CPU cycles to medical science, in particular the Folding@Home project. In a nutshell, the project goal is to simulate the folding, unfolding and misfolding of various proteins across thousands (millions, perhaps) of computers worldwide in a unified effort. Sections of this simulation, called work units, are given to each computer, which in turn solves one tiny piece of the puzzle. Organizations, clubs, groups, etc, can band together in "teams" and contend for the top spot in friendly (though fierce) competition, ranked by completed work units. Many different proteins are involved in many different situations, and the project will last for years to come, revealing lots of interesting discoveries along the way. It is hoped that the results of this effort will help in finding the eventual cures of diseases like Mad Cow, Alzheimers, Parkinsons, various Cancers, HIV (AIDS), etc.

So, help out today. Join Team 12005 on Folding @ Home.

<http://folding.stanford.edu>

Marvin the Manic Mouse

## Essential Sites 2: Electric Bugaloo

It's time once again for another edition of Essential Sites™. This week features two sites that both suffer from the same problem; being too damn good. Seriously though, neither of these sites have really been updated within the past 4 or 5 months. Regardless, they are both great ways to kill an afternoon.

[www.seanbaby.com](http://www.seanbaby.com) (Thanks Graeme). If all the funny in the world could be rolled up into one little ball, then forced into a man, that man would be seanbaby. At one point, his site was updated semi-regularly, so there are a huge number of articles to read through. Definately check out the Stupid page, as well as the Nintendo page. Now if only we could force seanbaby to update it more than once every 5 months.

[www.leisuretown.com](http://www.leisuretown.com) (Thanks me). Leisuretown is a comic like no other. Instead of drawing the comics by hand, they are created by photoshopping the characters (childrens bendy toys) into everyday scenes. This site also has a huge glut of content, with some comics spanning over 60 pages. Definately check out QA Confidential (a personal favorite), as well as a Comedy Crisis. Who am I kidding, they are all good, so read them all.

That is all for this edition. If you didn't see your submission, that's because it sucked. No, just kidding, you will probably see it next time. Remember to keep the submissions coming to [bdepratt@student.math.uwaterloo.ca](mailto:bdepratt@student.math.uwaterloo.ca).

Brian "Oh Snap" DePratto

## Signs That You're a Big Dork

- You have Linux installed on your cell-phone
- You have more "No's" from the opposite sex than Access
- You don't associate with those who run XP
- You have made a real effort to move an object with your mind like a Jedi
- You have not left campus since you got here for the term
- You refer to the Putnam team as a "Varsity Mathematics Team"
- Similarly, the ACM team is a "Varsity Programming Team"
- You're reading this in the Pure Math Club office
- You have a laptop open in your MATH and STAT classes
- You e-mail your parents in 1337 \$p33k;

Ian W. MacKinnon

## Conspiracy Theory of the Fortnight

Monday, June 9<sup>th</sup>, 2003 was *mathNEWS* production night. But a few events took place that coincided with this fortnightly event. There was a MATH 136 midterm scheduled for that night. It was the night of the 7<sup>th</sup> game of the Stanley Cup final. It was the night of "Pints with Profs" which may have been more accurately titled "Pint with a Prof." It appears that we were victims of an anti-*mathNEWS* conspiracy in which the conspirators were the Faculty of Mathematics, MathSoc, the Computer Science Club, and the National Hockey League. How else would you explain all these events occurring on production night?

## Letter To The Editors

As a person in England, I found your recent article of Mad Cow jokes rather inappropriate here. Please ensure that similar articles are restricted to North America's Internet. Thank you.

Bts

## profQUOTES

"I have a lot of sympathy for those who go through this and get them wrong."

New, PMATH 330

"Little kids are annoying. Therefore, we *should* smoke around them."

Pawlikowski, PHIL 145

"We want a general-purpose programming language like C, C++, or java, or COBOL if you're a masochist."

Hjaltason, CS 448

[Prof] "What is the name of the the author [of the textbook]?"

[Student] "We don't have to read the cover."

[Prof] "Minus one on midterm"

Zima, CS 354

"I can't provide a definition for pornography, but I know it when I see it."

Cowan, CS 341

"Like all definitions, it isn't supposed to make sense."

Godsil, CO 342

"Recall' is a mathematical term which means that we told you, and you forgot."

Godsil, CO 342

"Venn diagrams are pretty useless."

Godsil, CO 342

"Actuaries do it continuously under a bar"

Hardy, ACTSC 232

"The one thing Samnites do well is make more Samnites. They're like rabbits."

Hutter, CLAS 202

"Bill Clinton must have been a 'new man,' I mean, Arkansas, how much more plebian does it get?"

Hutter, CLAS 202

"Goats were considered to be the most amouros of farm animals. You have to lock them up because they'll screw anything."

Hutter, CLAS 202

"I'll give you the things I need to make clear, or obfuscate as the case may be."

Cormack, CS 452

"I have had a subscription to *mathNEWS* since you were in diapers... I am aware of the [comic] in it... I am also aware of the web site likening me to Agent Smith... Where you people find the time for this, I have no idea!"

Smith, ECON 102

"No, nobody is expecting my baby, and don't send me any resumes."

Smith, ECON 102

"What would you buy if you like purple underwear? God only knows! Disney?! Yes, Big Brother may be watching your underwear buying habits."

Smith, ECON 102

"Go to Jumbo Video... Oh excuse me, you now steal your videos like you do your music. Okay, steal the video 'Money Pit.'"

Smith, ECON 102

"All your life you should have this little voice inside you saying, 'Remember the dot-bombs.'"

Smith, ECON 102

"I suppose you could buy your neighbour's house, build a little walkway and put your children in that house."

Smith, ECON 102

"It's a simple question. Do you want a kid or do you want a Porshe?"

Smith, ECON 102

"Consider the consequences of not having children. Perhaps in the future your country will ask you to RISE to the... oh crap... to... to do your duty."

Smith, ECON 102

"Crayolas are great. You can't stick the fat ones up your nose."

Burris, PSYCH 101

"When someone sneaks up behind you and yells, you jump. Of course, where I come from this may be accompanied by the drawing of automatic weapons."

Burris, PSYCH 101

"I had a troubled childhood. I hate it when I get shampoo in my eyes. [pause] Then I have to get conditioner in my eyes or they go all frizzy."

Burris, PSYCH 101

"First one to get head wins."

Zhu, STAT 230

"If you are a pork roast..."

Lubka, ACC 122

"...we're singing in honor of the 50th anniversary of the Queen's coronation. This matters to me a whole lot as an American."

Brown, CS 360

[Thinking it's Thursday] "We'll continue this next week." [Realizes it's Tuesday] "Oh, I wish it were next week."

Kierstead, CS 342

[Loud buzzing noise interrupts lecture]

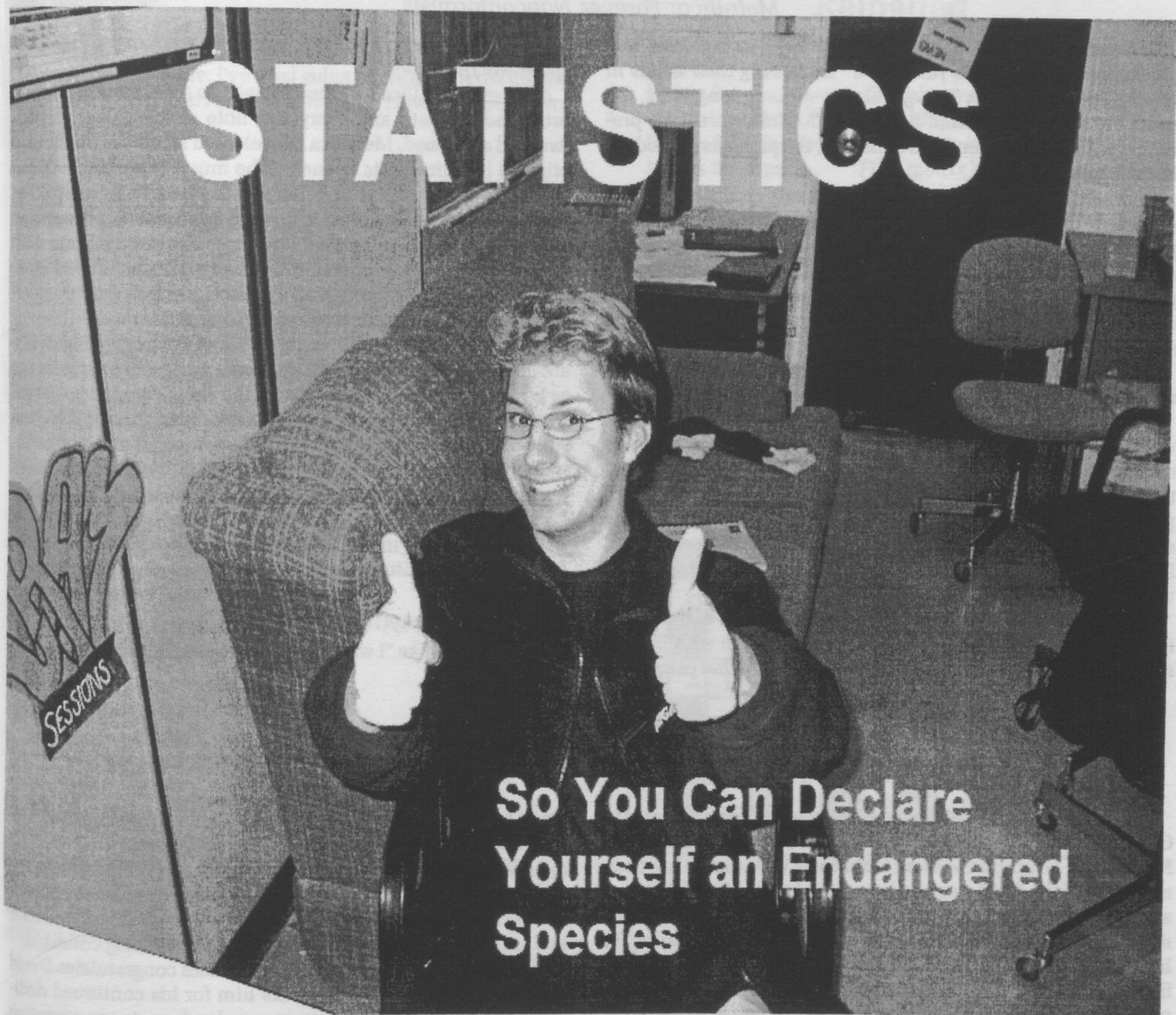
"We need a hitman."

Dickey, PMATH 360

"I wonder if this agrees with my cheat sheet... [Checks sheet] It doesn't."

Dickey, PMATH 360

# Math Faculty Promotional Poster



**So You Can Declare Yourself an Endangered Species**

Ian W. MacKinnon

[In 6th week of lecture]

"Now we can finally look at page 1 of the course notes."

Dickey, PMATH 360

"We begin getting you enthusiastic about computer science and we show you the dumbest algorithm we have. Wow, I really want to go into this field now."

Vasiga, SE 240

"The term 'heap' is overloaded. The term 'overloaded' is overloaded. The term 'term' is overloaded."

Vasiga, SE 240

"I see a red root and I want to paint it black. The Rolling Stones wrote that song about red-black trees. It was the late 1960s, they were doing drugs and working with data structures."

Vasiga, SE 240

"Say your dad is a supporter of the Reform party, and you are a member of the NDP. Words like 'racist' and 'pinko' tend to get thrown around the dinner table and things get a little tense, while your mom sits eating away."

Vasiga, SE 240

"In a political argument, guess who wins? The parent."

Vasiga, SE 240

"I don't think it would matter much if I was drunk right now"

Woolford, STAT 231

"You ask people around about sex... I mean gender."

Woolford, STAT 231

## Metal 101

### *Metallica: Forever Nonconformists*

Brothers and sisters, many of our brethren in high and low places spent most of this June the 5<sup>th</sup> scratching their heads in bewilderment. After six (or arguably seven) long, long years, the small but stalwart legion of heavy METAL followers were presented with a new album from Metallica, the pioneers of modern METAL themselves.

And many of us were completely and utterly confused by what we heard. Or rather, what we did *not* hear. We did *not* hear a polished, professional production. We did *not* hear any of the complex bridges or sudden riff changes that were so prevalent in previous releases. Perhaps most conspicuous was the complete absence of long, complex solos that has characterized the Metallica sound since the band's inception.

Indeed, what we heard was what none of us expected. But, my brethren, I ask you this: why are we so surprised?

In the early eighties, when the false school of Glam METAL was reaching its peak, Metallica developed a sound that was completely at odds with everything that METAL fans had heard thus far. Caustic, uncompromising, and blisteringly fast, it appealed to the segment of the population that was tired of the slow rhythms and insipid lyrics of the dozens of hair band clones. It was a style of music that was completely new, and completely unexpected.

In the early nineties, after the immense success of their self-titled release, Metallica switched directions again with *Load*, a slow, emotionally dense, and very bluesy album that ostracized

many rock and heavy METAL fans who were expecting more speed-METAL antics.

And now, Metallica has done it again. In an age when music is produced to death and every last note of every last track is tweaked and toned, Metallica has released an album that is chaotic and bleeding in its rawness. The music is simple, without question; however, it is unbelievably intense in its simplicity. Radio DJs have no idea what to do with 8-minute long tracks that are rife with seething venom; longtime fans contemplate with trepidation the future direction of their favorite band; and those few of us who appreciate diversity and honesty in music are left with a new and fantastic work of art to experience.

It is easy to identify the weak points of *St. Anger*. The lyrics are not as poetic as Metallica's past efforts, and the music is not as layered or as complex. However, the sheer *emotion* projected by the wall of sound in each track is overwhelming; it is impossible to listen to the album with an open mind and not be instantly infused with new rage and singular determination. To those of us who draw strength from our music, *St. Anger* is a godsend.

I encourage all of my brothers and sisters in METAL to give *St. Anger* an honest listen, and to enjoy it *because* of its warts, not in spite of them.

Farewell until next time, my brethren.

-Mike "I want my anger to be healthy" DiBernardo

## CECS NEWS

### *University of Waterloo's David Everest Elected President of EWO*

University of Waterloo's David Everest, a field co-ordinator in Co-operative Education & Career Services, was recently elected President of Education at Work Ontario, (EWO). David has been a member of the EWO since he joined the University of Waterloo about eight years ago. He completed his undergraduate double major in English and Philosophy before coming to Waterloo for his Masters degree in Language and Professional Writing. As a field co-ordinator, David monitors the work term progress of co-op students in the Faculty of Arts in Toronto. Some of his many responsibilities include visiting students on a work term, conducting end-of-term interviews and contacting existing and potential co-op employers.

EWO is one of seven regional sections of the Canadian Association For Co-operative Education (CAFCE). This Canada-wide group formed in 1973 includes "members from colleges, universities, government and business sectors [who] actively advocate and promote post-secondary co-operative education" as their website denotes. Education at Work Ontario "strives to promote and foster quality co-operative education, while ensuring an integral partnership between students, employers and post-secondary educational institutions." EWO proudly proclaims "a membership of over 200 Co-op Educators working with more than 40,000 Co-op students, at 21 Colleges and 15 Universities." The University of Waterloo has over 40 members in the organization.

As President of EWO, David will be leading four major initiatives this year including working on increasing the Ontario tax

credit for employers who hire co-op students, upgrading the EWO Web site to make it more useful for employers as well as EWO members, an annual statistical survey focusing on the state of co-op in Ontario, and organizing their annual Conference scheduled in May of 2004. Another project in the works is a museum and archive of co-op artefacts, which are now being collected.

Co-operative Education & Career Services congratulates David on his recent election and thanks him for his continued dedicated service and volunteer time towards advancing co-operative education.

Krystina Benson  
CECS Communications Associate

### ISSN 0705—0410

*mathNEWS* is normally a fortnightly publication funded by and responsible to the undergraduate math students of the University of Waterloo, as represented by the Mathematics Society of the University of Waterloo, hereafter referred to as MathSoc. *mathNEWS* is editorially independent of MathSoc. Content is the responsibility of the *mathNEWS* editors; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or *mathNEWS*. Current and back issues of *mathNEWS* are available electronically via the World Wide Web at <http://www.mathnews.uwaterloo.ca/>. Send your correspondence to: *mathNEWS*, MC3041, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1, or to [userid mathnews@student.math.uwaterloo.ca](mailto:mathnews@student.math.uwaterloo.ca) on the Internet. They work hard for their money: Ian W. MacKinnon, Chris Harasemchuk and Louis Mastorakos

## Ask the Yellow Pages

Dear Yellow Pages,

I'm in my first year of university, and after having gained the "frosh fifteen" pounds, I'm worried that my girlfriend won't find me attractive any more. I've tried going on a diet, but the quality of cafeteria food doesn't make that feasible. How can I maintain a reasonable weight?

-Putting on Pounds in Philadelphia

Dear Putting on Pounds,

### GUIDO'S HEALTH AND FITNESS CLUB

- Certified personal trainers
- Individualized fitness programs
- Affordable monthly rates
- Change rooms and shower facilities on premises

476 Random Street ————— 555-THIN (8446)

Dear Yellow Pages,

This morning as I was pulling out of my driveway to go to work, I accidentally ran over our family's pet dog. My son and daughter loved that dog dearly, so I've been trying all day to find a similar looking dog as a replacement, but without success. How can I break the news to my children?

-Pet-icide in Pittsburg

Dear Pet-icide,

### Tony's Taxidermy

385 MacDonald Blvd. ————— 788-3348  
(SEE OUR ADVERTISEMENT PAGE 465)

Dear Yellow Pages,

Some of my friends and I are planning on going to a formal dinner next weekend. We were all planning on taking our girlfriends with us, but I just broke up with mine last week. I still want to go to the event, but I don't want to be the only one without a date. What should I do?

-Dateless in Dallas

Dear Dateless,

### HOT DATE ESCORT SERVICES

- 24-hour Service
- Credit, debit, cash accepted
- Discretion assured; no questions asked

Call HOT-DATE for a good time! ————— 468-3283

Eigenvector

## How to Write a Proof

*New TV Commercial*

"Honey, how do I write a proof?"  
"First you take some eggs. Then you take a big ass ham."  
*Proofs. They're that simple.*

Aaron Klotz

## Other Names for the Matrix Reloaded

- Matrix 2 — Hermitian (Things get really complex.)
- Matrix 2 — Identity (Everyone is on the line.)
- Matrix 2 — Zero (Nothing really happens.)
- Matrix 2 — Invertible (Everything is reversible.)
- Matrix 2 — NonComplex (We keep it real.)
- Matrix 2 — Sparse (The matrix becomes compressed.)

Marvin the Manic Mouse

## Last Issue's Grid Solutions

*Cryptic*

1	C	H	2	I	G	3	N	O	4	N	5	V	6	O	D	K	7	A
	L		N		O		I		A		R		B					
8	A	N	A	L	R	E	T	E	N	T	I	V	E					
	N		P		T		W				L		L					
9	K	I	P		10	H	O	I	P	11	O	L	L	O	I			
			R		E		T		B		S		A					
12	O	D	O	U	R	S		13	A	S	T	E	R	N				
	P		P		L		14	L		T		R						
15	P	A	R	T	Y	L	I	N	E		16	G	I	G		17		
	O		I				C		T		E		R					
18	S	P	A	N	19	I	S	H	A	R	M	A	D	A				
	E		T		L		E		I		N		P					
20	D	W	E	L	L		21	N	E	C	K	T	I	E				

*Conventional*

1	C	O	2	S	S	3	A	C	4	K	5	S	T	6	E	N	7	O
	I		E		L		R		K		N		D					
8	V	U	L	N	E	R	A	B	I	L	I	T	Y					
	I		F		X		K				G		S					
9	L	E	I		10	A	T	O	M	11	B	O	M	B	S			
			M		N		W		A		A		E					
12	I	M	P	E	D		13	S	C	O	T	T	Y					
	M		O		E		14	C		K		I						
15	P	O	R	T	R	A	Y	E	D		16	C	U	E		17		
	A		T				P		A		A		N					
18	S	P	A	C	E	S	H	U	T	T	L	E	S					
	S		N		E		E		E		L		U					
20	E	X	T	O	L		21	R	E	S	T	Y	L	E				

## Only

Dr. John Ridpath came to our campus on June 4 to argue the thesis that the capitalistic moral social system is the only one for human beings to live in. Upon listening to his arguments, it struck me that he was ending his logical progression when it suited his thesis and left fundamental questions unanswered. I considered the answer to the question of the value to life in the system he presented and came to understand the nature of the morality he argued for.

While discussing the morality of capitalism, different moral systems were measured by their ultimate value. Specifically it was argued that the ultimate value of other moral systems are irrational. The ultimate value of god, in the case of Judeo-Christian morality, or the state, in the case of communist morality, were argued to be mythical irrational dogma which had no bearing for rational conceptual humans. The ultimate value in the moral system of capitalism was suggested to be life. The only rational ultimate value to hold which does not depend on believing any dogma is life. This assertion that life is the only rational highest moral value fueled the claim that this morality was the only one for humans. Specifically, humans are rational, and if you act irrationally you aren't being human, and we should all be more human.

But why live? Why not just shoot yourself in the morning? Because you have chosen to live and become successful. Whenever life was discussed in terms of this capitalistic morality the concept of success was soon to follow. Thus it can be easily seen that life is a means to success. If success is the measure of value of living, then success is a higher conceptual value. Thus success is the ultimate value of the morality of capitalism, not life. Claiming that life is the ultimate value leaves the one of the most

significant questions: what is the value of life?

So if success is in fact the highest value in this morality, to properly measure it against other moralities in the same context success must be measured for rationality. What is success? One view could be the societal view of success but this has been seen to change over time. An example would be the shift from owning land to owning capital being a measure of success. If success depends on the culture, then success is as much dogma as the concept of god. Alternatively you might consider an individualistic measure of success. Then success can be whatever one believes it to be. It could be, for example, living a very religious life. We then see that the morality of capitalism doesn't preclude any other morality; in fact it could encompass them all. This leads to it becoming meaningless in a discussion of the only morality for humans.

In either case it is clear to see the morality of capitalism is not distinct from the other types and is not the only one for humans, rational or otherwise. It is simply another dogma-based ideal that you can just as validly choose to subscribe to or not. I do gain satisfaction in this logical progression. Perhaps it is merely an emotional flaw, but I always hope any argument which instructs one not to consider other ideas for any reason is false. Notice that I do not suggest any other moral system is the only one for all humans.

I am glad I am not irrational simply for deciding that my life is about the journey, not about the success. I am also glad that whatever you choose to make your life about, it is your choice. If it is about the social definition of success, that is good, and it happens to be about something else entirely, then you are not automatically failing to be human.

Albert O'Connor

## Co-op Employees Vs. Regular Employees

*A look at the difference between full-time employees and hired co-op students*

- Regular employees wear suits. Co-op employees wear suits... with sneakers.
- Regular employees understand the jokes in Dilbert comic strips all the time. Co-op employees pretend they get the jokes in Dilbert most of the time. [Co-op is the joke most of the time — KreasEd]
- Regular employees might eventually get sick of making those "intern" jokes. Co-op employees might eventually get used to hearing those jokes all the time.
- Regular employees do work that they don't like. Co-op employees do the work that regular employees dislike the most so that the latter won't be disgruntled enough to burn down the office building.
- Regular employees consider their cubicles smaller versions of prison cells. Co-op employees, if they have them, think of their cubicles as their own personal ego-inflating status symbols.
- Regular employees know that the electronic devices that they are given make them nothing more than commodities of the company. Co-op employees are too busy playing the games that come with those cell phones and PDAs to notice or care.
- Regular employees waste time by playing games like Minesweeper. Co-op employees waste time by playing games like Unreal Tournament.
- Regular employees drink as much of the coffee that they can get. Co-op employees... oh, nevermind.
- Regular employees sometimes find it hard to keep up with changes in their field. Co-op employees might actually know what the message "PC LOAD LETTER" means when a printer displays it and they might not want to smash the printer up when that message is displayed.
- Regular employees refer to their superiors as "pointy-haired bosses." Co-op employees refer to regular employees as "pointy-headed employees."



April & May - 003 : Welcome to the Tutorial Centre!

By Dan Kim ([www.clone-army.org](http://www.clone-army.org))



## Psychic Predicts Future

For this issue, the writers of *mathNEWS* have recruited the aid of renowned psychic Disquo the Profound in order to take advantage of his knowledge of future events. Rather than use this special knowledge to benefit from sports gambling schemes or to discover the plot of the next Harry Potter novel, we have decided to ask Disquo for the answers to the Squiz and Gridword that will appear in the next issue of *mathNEWS*.

### Squiz Answers:

1. Cromulent.
2. Toward a New Hermeneutics of Quantum Gravity.
3. None. It was a trick question. The last vampire lair in MC was destroyed in 1998.
4. Clatu veraata nictu.
5. 42.
6. They all have syphilis. Alternate answer: they are all current or former production managers of *mathNEWS*.
7. The hierarchy is: PMATH, AMATH, C&O, CS, STAT.
8. Ham, eggs, bacon, and spam.
9. A gerbil, a lighter, a plastic tube, and a lot of lubricant
10. Missionary, legionnaire, and reverse cowboy
11. Fiddleheads
12. They all starred in movies with Mr. T. Alternate answer: they are all professors in the faculty of mathematics at the University of Waterloo.
13. An Inanimate Tragedy, by Ogdred Weary.
14. According to our editors, the following ratio should work: one part Viagra to two parts X-lax to five parts Beefeater gin.
15. Jean-Claude van Damme. Alternate answer: Mary, Queen of Scots.

### grid WORD Answers:

Across	Down
1. narcotrafficker	1. fianchettoed
2. homonoculus	2. polysemousness
3. manicheanism	3. coniferousness
4. intertextual	4. lestrygonian
5. judiciary	5. archaeopteryx
6. dialectical	6. testimonial
7. versification	7. kleptomania
8. unequivocal	

When it was pointed out to him that the words "fianchettoed" and "narcotrafficker," his answers for 1 down and 1 across respectively, did not begin with the same letter, Disquo only scoffed. "The spirits have spoken," he said. "The spirits care not for the rules of your Gridword."

Check out next week's Gridword and Squiz to see if Disquo's predictions are correct.

Greg Maloney

## Cool Ways to Waste MEF Funding

- |   |                               |
|---|-------------------------------|
| 1. Bike valet for the MC.                           | 7. Cages, think about it.     |
| 2. PA system for classes.                           | 8. A bar.                     |
| 3. Hookers.   | 9. A co-op system that works. |
| 4. Gravity boots.                                   | and finally...                |
| 5. Our tuition.                                     | 10. More hookers.             |
| 6. Bring back the three stooges (all five of them.) |                               |

## The STAT 230 Paradox:

### *An Exploration of the Futility of Trying to Get Ahead*

The question that we are going to explore today is this: "Is it possible to take a core course during a co-op term in an attempt to fast-track, and, in doing so, actually end up further behind in your course sequence than you would have been if you had decided not to take a course at all?"

We will consider the STAT 230/STAT 231 sequence as an example, since most Math majors are required to suffer through these two courses. Now, let us suppose that you decide to take STAT 230 during a co-op term so that you can take STAT 231 in your next school term and be done with university-level statistics forever. Let us also suppose that the final exam for the STAT 230 section that you are taking is comparable in difficulty to the MIT graduate school entrance exam, as was the case in the Winter 2003 offering of STAT 230.

Now, assuming that a notice of failure is not received until after the exam period is over, and that enrollment for the STAT 230 section of the next term is limited, there is a good chance that it will be impossible for you to enroll in the offering of the course during your school term. Thus, in taking STAT 230 during co-op, you have effectively *delayed* your acquisition of the statistics sequence credits by a full term.

Thus, we have shown that it is indeed possible to fall behind in your course sequence by attempting to take a course during a co-op term.

Make sure to join us next week, when we will be discussing how enrollment in a co-op program can actually *decrease* your likelihood of acquiring post-graduation employment.

*PS: To all of the folks in the PMC that are scoffing at the notion that statistics could possibly be challenging for anyone ... you might want to think about the effect that all of that cheap pop is having on your libido.*

Debo

## *mathPERSONALS*

### *The Names Are Made Up, But The Problems Are Real*

MATH girl seeking tall Italian. Must own motorcycle ( $\geq 600cc$ ) and have a shoe size greater than 10. Small loop earring is an asset. Must cook too.

IRON Warrior seeking spell checker that knows how to spell "completely" so that the editor-in-chief can properly spell in his editorial. [iwarrior@engmail.uwaterloo.ca](mailto:iwarrior@engmail.uwaterloo.ca) [Sorry Fish, you did spell it 'completley' — iED]

MATH girl seeking smart guy who does not smell and cuts hair regularly. Comfy lounge inhabitants need not apply.

FOOTBALL player wanted. Must be tall, arrogant and ride motorcycles. Tattoos preferred, and must be a good dancer. Extensive tie collection also an asset. Multiple regression is an asset.

*mathNEWS* writer seeking a hot piece of pizza (filtered by pLaT4mN).

The Champ

## Crypto-Madness Correction

After attempting to crack my own codes over the weekend, I discovered that the first code was not encrypted correctly. It was supposed to decrypt to

*"Nearly all men can stand up to adversity but if you really want to test a man's character give him power. A Lincoln"*

Somehow this got mixed up to

*"Nearly all men can stand up to adversity but if you really give him pover a lincoln"*

Sorry for all the confusion.

The other two ciphers were correct though.

Kelly John Rose

## Home Renovation

Summer is upon us and the smell of sawdust is in the air. Whether you're installing a patio, or tearing down walls to fit another 8 students in your basement, we've put together a list of useful tips.

- Any two objects can be reduced to at most one with finite time and energy. Corollary: Any N items can be reduced to at most 1 in finite time
- Generally speaking, walls should meet at  $\pi/2$ . To keep your system consistent, try to make all lengths transcendental numbers too.
- Most people plan ahead on paper. These people aren't serious. Serious designers do it in their heads.
- Any homes constructed in the suburbs should be abelian, as you will likely need to commute.
- To move large piles of bricks, divide them into horizontal slices and erect three poles, one in the pile and one where you'd like them to go. You've now reduced it to an already solved problem.
- Well, go ahead if you have to, but trust me, a natural log cabin just isn't really that clever.
- Professional home designers suggest that mirrors can give the illusion of a room being twice as big. They are on crack -- it might fool birds, but most of your visitors will notice that they're already in that room.
- Allot at least two days to comparing the relative merits of wiring your rooms with Firewire, USB 2.0 or boring old Ethernet. I expect that's what most people do.
- I can't stress this enough: Thou shalt work in three dimensions, no more, no less. Three shalt be the dimensions thou shalt use, and the dimensions of the counting shalt be three. Four shalt thou not use, neither use thou two, excepting that thou then extend to three. Five is right out.

No, I wasn't referring to the Sims Online, but I guess it's kind of an honour knowing the guy who's been playing it.

David Hayes

## Crypto-Madness Answers

As mentioned in the correction, the first cipher was incorrect, but the last 2 ciphers were valid.

The 2nd cipher used a simple transposition cipher, where if it were written in rows of three, the text would be readable along the columns. Thus giving "The strongest man in the world is the man who stands alone T.H. Huxley."

The 3rd cipher was a genetic cipher with a constantly changing key. There were two ways to decipher this cipher. The first would be to write the first number down and then add the second number mod 25, subtract the third number mod 26. and so on. Then you convert these numbers to their letter equivalents (1=A, 2=B, and so on. This was the original method of deciphering I had planned.

In the process of cracking my own ciphers though (to verify that they are not OTP equivalents) I discovered a far easier method. If you take the final number and convert it to its letter equivalent, you get the correct letter (Y), then you subtract the previous number to get the second last letter (E), then you add the previous number to the number for E (5+7) to get the next letter, L, and so on.

Thus you get the plaintext: "Facts do not cease to exist because they are ignored A. HUXLEY"

Kelly John Rose

## More Crypto-Madness!!!

Since I haven't actually written ciphers this week, I thought I would instead direct interested people to good cryptography sources.

*The Code Book*, by Simon Singh

Not a very mathematical book, but very good at explaining how modern codebreaking developed and discusses cryptography all the way up to modern quantum cryptography.

*Applied Cryptography*, by Bruce Schneier

Supposedly this is the same book the people at the NSA use. This book is very detailed and technical, but provides information on most modern crypto-schemes. Includes public key and private key cryptography. An excellent book for any serious cryptographer's library. As well provides straightforward C code for quick programming on a computer

*Handbook of Applied Cryptography*, by Alfred J. Menezes, Paul C. van Oorschot, Scott A. Vanstone

This book, co-written by professors from the University of Waterloo, is one of the primary books that I have taken most of my crypto knowledge from. Very mathematical treatment of cryptography with information on how schemes have been developed and how they are determined to be secure.

Another great source for crypto knowledge is not a book, but a newsletter: The Crypto-Gram - <http://www.counterpane.com/crypto-gram.html> This free e-mail newsletter provides a monthly update as to what is going on in the world of cryptography. In general this is an excellent source for people wanting to know what is happening in crypto and security research.

That's it. I promise I will get some ciphers for the next issue.

Kelly John Rose

## Debunking Objectivism

The University of Waterloo received a lesson in morality on Wednesday, June 4. Dr. John Ridpath, a retired York University professor, gave a lecture on "The Morality of Capitalism." Organized by the UW Objectivist Club, the event featured Ridpath's attempt to prove that "Capitalism is the only moral social system for all human beings to live in."

Ridpath's argument began with a premise about human nature: that humans have a "conceptual consciousness" that allows them to organize information about the world we experience. Through the process of living, we acquire concepts. He argued that this kind of reason is humanity's "survival mechanism," and that the ultimate goal of an individual's action is to ensure that individual's life.

Taking a teleological viewpoint, Ridpath argued that with life as our ultimate goal, we must define our values accordingly. This code of values will form a moral system. He argues that the only moral system that is consistent with preservation of one's own life as the ultimate goal is rational self-interest — that is, each person must look only after his or her own life.

With any social system is associated a system of philosophical ideas, which are affirmed by that system. Ridpath argued that the only social system which is compatible with his ideas of human nature and morality is *laissez-faire* capitalism. Specifically, he argued that the social system must leave everyone alone to pursue their self-interest, and that the rights of life, liberty and property must be protected.

Due to space constraints, I will dispute Ridpath's argument along only two lines of criticism, one philosophical and one practical. First, I will challenge the claim that the morality he describes is an objective truth and question the relevancy of moral arguments to political issues. Second, I will dispute the effectiveness of rights-based politics in terms of securing freedom.

### *The Subjectivity of Objectivism*

Despite its pretensions of being a universal truth, the philosophy of objectivism is just as subjective and socially contingent as any other political philosophy. Ridpath argued that humans acquire concepts throughout their life. However, people do not grow up in a vacuum, but rather, within a particular society that affirms a particular morality and epistemology. As a result, a person's ideas of what constitutes "the good" and "the truth" are dependent on the society in which that person lives. (In anticipation of a potential counter-argument to this claim, I should point out that it is also futile to consider humans "in a state of nature" outside society, as such humans would simply develop a morality appropriate to living outside society.)

In light of this, the rational egoist morality — and its assumption that *one's own* life is the ultimate end of all human action — proposed by Ridpath is seen not as an eternal, universal and objective truth, but rather as a product of the *laissez-faire* aspects of the society in which we currently live. The objectivist morality is merely an incorrect universalization of certain aspects of morality that arise from our particular social system. From an epistemological standpoint, the particular kind of reason described by Ridpath is also seen to be socially contingent — for it is within society that we learn to reason. The philosophy of objectivism, as a product of society, is as subjective as any other philosophy.

Looking at things more generally, one begins to see that it is futile to make moral arguments in order to justify any social system. It should come as little surprise that when affirming the moral system which develops under capitalism, one concludes that capitalism is a moral system — it's a circular argument. (This is a caveat not only for objectivists, but also for those who would argue against capitalism based on its "immorality." Affirming a non-capitalist morality will certainly lead one to conclude that capitalism is immoral in an equally trivial argument.) From a political standpoint, morality is irrelevant. Since ideas of morality develop within social systems, one cannot use moral arguments to justify a social structure.

### *The Dangers of "Rights" Politics*

My second objection to the objectivists is practical, rather than philosophical. Specifically, the focus on using the concept of "rights" to secure freedom is ultimately ineffective and may even be counterproductive to that goal. Rights, as they are currently conceived in political discourse, are seen as limits only on the actions of the state: the state must never infringe on rights (Ridpath's favourites are life, liberty and property) and must act to ensure that they are generally secure. The problem with this conception of rights is that its scope is too limited. It supposes that the only source of unfreedom in our society is the state, while ignoring the effects other institutions have in terms of reducing freedom. Out of the entire apparatus of social domination, the state-based conception of rights addresses only one of many mechanisms, while ignoring others.

Consider the following example. The state may recognize an individual's liberty to speak freely and express opinions. However, suppose that individual is employed by a corporation that supports views contrary to those of the employee. As the corporation is not bound to respect the employee's right of liberty, the employee may be afraid to speak publicly for fear of economic retribution. Moreover, in such a case, the state would be unable to interfere to protect the employee's free speech rights, for to do so would violate the corporation's property rights.

As this example demonstrates, apart from relations between the individual and state, there are other power relations in society that are damaging to human freedom. A state-based conception of rights is counterproductive in two ways. First, as the previous example shows, the rights extended to institutions such as corporations may prevent the state from ensuring the rights of individuals. Second, a rights-based political system may cause complacency among the general population and discourage critical examination of abuses of freedom perpetuated by non-state institutions. What I mean by this is that if people believe they have rights, and constantly hear about how they have rights, they will be less likely to notice that in almost all situations involving power relations (i.e. all power relations *not* involving the state), they in fact have no rights. Possible solutions to this dilemma could include either an expansion of the notion of rights to encompass all social relations, or an abandonment of a rights-based political strategy in favour of a systematic examination and reconstitution of societal power relations damaging to freedom — but this is an entirely different discussion altogether.

Craig Sloss

## mathNEWSquiz

Before we get to this week's Squiz, let's give you the answers from last week's. **Classic SNES Villains** 1) Lavos / *Chrono Trigger* 2) M. Bison / *Street Fighter* 3) Kefka / *Final Fantasy 3* (or 6) 4) King Bowser Koopa / *Super Mario World* **Movie 3-Cycle** 1) Hugo Weaving 2) Elrond 3) Christopher Lee 4) Count Dooku (or Darth Tyrannus) 5) Elan Sleazebaggano 6) Mouse **Hidden Connection** 1) Stirred 2) Post hoc, ergo propter hoc 3) Posse Comitatus 4) All are *West Wing* episode titles **Song Lyrics** 1) *A Slight Attack* / Tea Party 2) *Sweet Dreams* / Eurythmics 3) *She's on Time* / Barenaked Ladies 4) *Gollum's Song* / Howard Shore and Emiliana Torrini.

The answer to last issue's bonus round is "All that glitters is not gold", from *The Real Folk Blues*, performed by Mai Yamane and the Seatbelts. This is the closing theme of *Cowboy Bebop*.

We had a record turnout of six squiz submissions from the last squiz. Out of a possible 26 points, the scores were as follows: (in ascending order, just because it's more dramatic):

- Amanda (11)
- Thierry Lam (16)
- Lauren Bridges (18)
- Mike "I killed your baby today" DiBernardo (21)
- Greba (23) (Kudos for drawing the movie 3-cycle)
- At the front of the pack, however, is our current reigning champion, Lino "π" Demasi, with a perfect score of 26 points. (Although he can't spell "Chrono Trigger.")

Congratulations, Lino! You can pick up your \$5 C&D gift certificate in the MathSoc office. Thanks to everyone who submitted answers to the Squiz! You can enter again next week by submitting your answers to the BLACK BOX

So, the format if this week's squiz is one-liners. Merely identify the *original* source for the point. Specificity is good for bonus points, too. Remember, all of these are quotations from a variety of sources, and looking things up is not nearly as much fun as being honest about it.

### Easy — 1 point

1. I kinda ran over his dog, but replace the word "kinda" with "repeatedly" and the word "dog" with "son."
2. You have no chance to survive make your time.
3. The same thing we try to do every night...try to take over the world!
4. If everyone's a little queer, can't she be a little straight?
5. Forget you guys! I'll make my own theme park! With blackjack! And hookers! In fact, forget the blackjack. And the theme park...

### Medium — 2 points

1. You accidentally slept with a prostitute? Accidentally? I don't understand; did you trip over something?
2. When your name is evil, that is good, or so you think, but you're so very wrong. It's evil. But being wrong is right, so then you're good again, which is the vilest thing of all.
3. Allow, if you're still alive, six to eight years to arrive.
4. I've gotta give thanks to that big guy up in the clouds — this one's for you, Lando.
5. Help! Help! I'm being repressed!

### Hard — 3 points

1. Cudgel thy brain no more about it, for your dull ass will not mend his pace with beating.
2. It's a long way down to the place where we started from.
3. I don't watch movies, I had to use the parts from my VCR to build my space robot.
4. Eat any good books lately?
5. I think it's time to blow this scene, get everybody and the stuff together...OK, 3, 2, 1, let's jam

### Impossible — 5 points

1. Throughout this book 'z' is pronounced 'zed.'
2. To be fair, you were also trying to steal purses.
3. Hail to the apostle whose letters to the Corinthians were lost in the mail!

Your Squizmasters, Eric and Craig

## Bioweapons Lab Discovered on UW Campus!

### Chemistry Lab Deemed Capable of Bioweapons Production

American intelligence authorities revealed yesterday the existence of facilities on the University of Waterloo campus that could potentially be used for the production of biological weapons, including anthrax, SARS, mad cow disease, and herpes. The facilities contain equipment for the incubation, refrigeration, and sterilization of bacteria, as well as a centrifuge, which is essential to the production of bioweapons. Intelligence officials were warned this kind of equipment is commonly found in university chemistry laboratories across the country, and have expanded their investigations to include other Canadian universities as well.

When confronted with questions from *mathNEWS* reporters who expressed doubts that the mere presence of a chemistry lab constituted a "smoking gun," an American State Department official said "there's really nothing else that the equipment could conceivably be used for." The reporters were quick to follow up with comparisons to the current situation in Iraq—which the United States invaded in April for the expressed purpose of uncovering Saddam Hussein's Weapons of Mass Destruction™, none of which have subsequently been found—to which the official replied angrily: "look, we found two empty trucks; isn't that enough for you? Anyway, all of the Weapons of Mass Destruction™ in Iraq must have been moved to Syria, or Iran, or North Korea, depending on who we decide to attack next. Maybe they've been moved to the University of Waterloo," he concluded with a sinister glare. After this, the *mathNEWS* reporters wisely backed off.

## How to Get People to Hate You

If you want to make someone instantly dislike you, tell them you are good at math.

If you want them to hate you, tell them you do math for a living.

If you want them to hit you, tell them you also do statistics.

## gridCOMMENTS

Last week I used an old grid, so anyone who perused the *mathNEWS* archives would have free access to the answers... Yet we got even fewer submissions than last issue!

SJU Crew caught on and got perfect 24/24 scores for both conventional and cryptic grids; our only other submission was Ryan&Jason with 18/24 on the conventional. SJU Crew can pick up their prizes in the MathSoc Office (MC 3038).

How about we up the prize a bit - everyone who submits a grid solution to the BLACK BOX by **Monday, June 23<sup>rd</sup>, at 6:30 pm** gets a **free *mathNEWS* issue**. And if that's not enough, winners will also get a \$5 Gift Certificate for the C&D, where you can buy ice cream, or an ice cold coke, or donuts...mmmm.... - or whatever your little blood-pumping-receptacle (5) desires.

Krease



## Cryptic Clues

### Across

- 8 Relative said "Place your bets!" (4)
- 9 What goes on cake, honey? (5,5)
- 10 Flyer confused image with quiet (6)
- 11 Giving up supplying (8)
- 12 Satellite daydream (4)
- 13 Tossed coin in font? True story (10)
- 17 Plant in broccoli, Lyle (4)
- 18 Nipples taste bad (5)
- 19 Shellfish returns with head of malcontent (4)
- 20 Stresses that he misses pa badly (10)
- 22 First place among seeded entrants (4)
- 23 Candy mishandled zap in arm (8)
- 27 Look forward except by mistake (6)
- 28 Heard a shiny garret looks colourless (10)
- 29 Number seen in Ecuador (4)

### Down

- 1 Onanist mag provoked hostility (10)
- 2 We folded apron, pony-tail, arms (8)
- 3 Breathes in, out, sleeps late (10)
- 4 Where to find slickers (4)
- 5 Progressive insider is giant (4)
- 6 Expert quarry and German hiding (6)
- 7 Hurt in repainting (4)
- 14 Approaches saner resolution (5)
- 15 Urging sin entices wickedly (10)
- 16 Pearly ring, faded perfume (10)
- 19 Discounts pecans he broke (8)
- 21 Danger of hard-to-swallow mid-sized article (6)
- 24 Beginning for building ancient islands (4)
- 25 Big cat? First person to be awake rises (4)
- 26 Record not East (4)

## Conventional Clues

### Across

- 8 Data structure (4)
- 9 Where to see wet tshirts (10)
- 10 Crackle (6)
- 11 Scanned (8)
- 12 Fly (4)
- 13 Rocketship (10)
- 17 Don't go (4)
- 18 Picture (5)
- 19 Forte (4)
- 20 Often (10)
- 22 Broad (4)
- 23 Witness (8)
- 27 Wellbeing (6)
- 28 Antique printer (10)
- 29 Omit (4)

### Down

- 1 Angler's tool (10)
- 2 Intellectually (8)
- 3 Serial (10)
- 4 Tallies (4)
- 5 Killer critter (4)
- 6 It's a sign (6)
- 7 We have been shortened (4)
- 14 Isolated (5)
- 15 All over (10)
- 16 Groundwork (10)
- 19 Depressions (8)
- 21 Lines up (6)
- 24 Lads (4)
- 25 Deviate (4)
- 26 Value (4)

