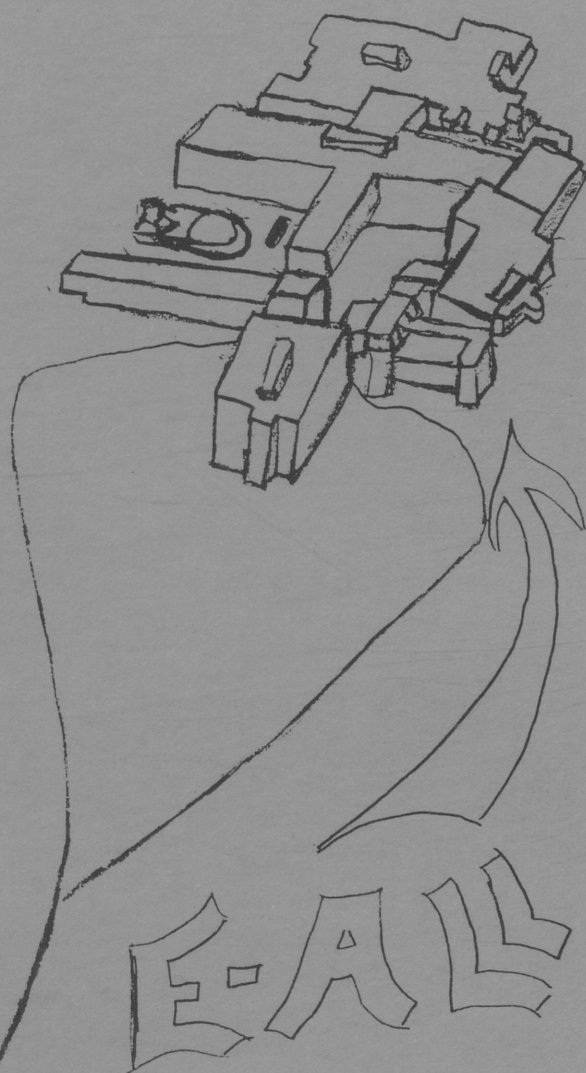
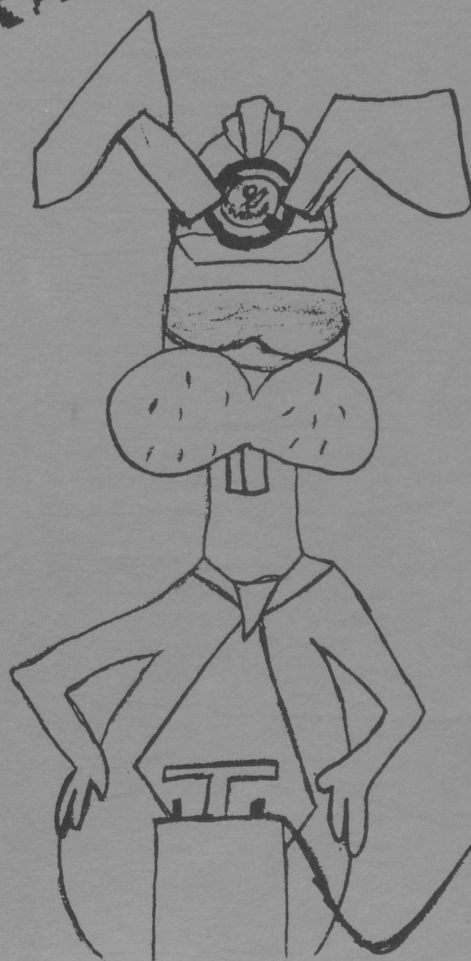


# math **NEWS**

Friday, 25 September, 1992

Volume 60 Number 1

**FRED THE MATH  
BUNNY GOES ON  
A RAMPAGE!**



- Other Brother Daryl  
(a.k.a. Quixotic Jedi).

## Look Ahead

mathNEWS	
October 5	Issue #2 production night 5:30pm, MathSoc (MC 3038)
October 9	Issue #2 hits the stands
October 26	Issue #3 production night 5:30pm, MathSoc (MC 3038)
October 30	Issue #3 hits the stands
Math Faculty	
September 25	Course Add / Section Change Deadline
October 9	Course Drop / Drop Out Deadline
MathSoc	
October 15	Oktoberfest
Co-op	
September 25	Want Ads available 11:00
September 28	Want Ads due 4:30
September 28	First Year Resumes due
October 19	Interviews begin
November 13	Interviews finish

## The CSC FLASH

Greetings! Calum our faithful chairbeing has been last seen attempting to start his amazing CANOE AROUND THE WORLD TOUR. The mighty Calum started off visiting the many Graduate students at UBC who are not here to be acclaimed to executive positions. Now that he's journeying north along the coast towards Alaska, we wish Calum well.

By the time this is printed, the Computer Science Club will have had its elections for the executive. Rest assured Democracy was served, and a fine group of people have been chosen as your representatives. Membership is only two dollars, which helps support book purchases, tea, doughnaughts, talks during the term, and many more things. You get the use of our wonderful library, and no guilt trips.

The term has many things planned already. A few of them include: an Othello program contest, the ACM programming contest, and possibly the viewing of the '92 Siggraph video. So come out, and have fun!

Beware of the Programming Contest. The local one will be held Saturday, October 3rd in the Descartes lab. The top-ranked people will be going to the East Central Regionals, held in Portsmouth Ohio, Saturday November 7, 1992. So, if you are interested, send mail to [csc@watmath](mailto:csc@watmath).

The Stopped Jobs Avenger,  
and his trusty sidekick Zonk!

P.S. The CSC is not a through-way for NON-members! And kill those jobs!



## Prez Sez

## Masthead

Well, it's another production night down. My first one, and things seem to be going quite nicely. Welcome to the frosh, and welcome back to those who are no longer among that pathetic breed. (Hee hee! And me a leader, yet!)

Thanks to everyone who came out to help, to offer encouragement, or just to hang out. It looks like a decent issue (although I've only seen it electronically at this point), and that is the fault and honour of all of you.

But who are these amazing people, you ask? And if you told them to suppose Planck's Constant were 3, and asked them to describe the consequences in 10 words or less, what would they say? Well, we fortunately asked them that very question. And here, along with their names, are their answers to that burning question: Stuart Pollock (Havoc, Wanton Chaos, and good Pizza); Marco Koechli (The consequences would be really big, so big in fact that ...); Jeff Stammmler (What the h\$!© is Planck's Constant? And don't say 3!); Steve Shaw (Hey, is there any beer left? Good.); Arsenyk Ustaris (What's this for?); Katrina Collmorgen (What's it supposed to be? Who the hell is Planck?); Shannon Mann ( $\pi$  would get upset and demand to be raised by  $10^{100^{100}}$  and be given units); Peter Johnson (...not to mention a general strike by the other irrationals for equal rights); Curtis Desjardins (I've been trying for hours to respond with something funny. I admit defeat); Colin Brace (Mu); Leon Hsu (Free beer at the Bomber. See ya there!); John Tucker (Women would be attracted to me more than other males as I have more mass); Andre Chang (What's mathNEWS? What am I doing here?); Ian Goldberg (The laws of physics would cease to apply — Engineers would become good at math; mathNEWS would be done on time; Village food would be edible (nah, that's completely impossible) :-)).

And thanks to the forgotten Mitch Felley who figures the Ultimate Answer would be 176.

(Productionist's note: 10 words? Oh, well, it didn't say what base. BTW, hopefully by the time you read this, pIATAmN will be smoothly up and running in its sleek new format. See you next time!)

Kivi Shapiro (What do you mean? Isn't it already?)

## Orientation '92

### *Evaluation of Frosh Week*

I can only wonder what the Frosh think of the University of Waterloo. They come to campus and join in Frosh week. The next thing you know, they are involved in Scavenger Hunts that require them to vandalize buildings and property and steal objects. Why do we engage in all of this criminal activity? Do we as Frosh Leaders get some perverse pleasure from getting the innocent Frosh to perform these deeds? I for one am ashamed of this past Orientation Week. I know I am not alone in this feeling, so don't write back saying I'm out in left field.

The University works long and hard to prepare the campus for the Frosh. They groom the grounds to their perfection, and we end up trashing the campus in the first few days! Do we realize what we are doing? We Mathies are at fault as much as the rest of the faculties. However, I was, for the first time, embarrassed to have an Engineering Faculty at this University. As many of us know, the Engineers tromped through MC and the DC leaving loads of mud everywhere. Not only did they upset the Math Frosh, they upset DCS, MFCF, and the Math Faculty. Of course, the Engineers did pay for the clean up, but that didn't seem to deter them. They expected to pay, and were quite willing to do so. Doesn't this seem a bit odd? It is rumoured that they budget for fines and bills and if so, doesn't that seem a little sad to you? Isn't that malicious intent? And to top things off, Leaders and Frosh from Math, Science, and Engineering responded physically to each other. Of course, the Engineering Faculty and EngSoc are being highly defensive about these issues. Why do we put up with this?

Is not Frosh Week intended to get the Frosh accustomed to University Life? Is this what it's all about? I certainly hope not! I don't see how the Engineers can be proud of what they did. Every time I see a yellow hard hat, I cringe.

I know I've focused on the Engineers, and I have justification to do so, but it's not just them. It seems the whole campus, every Faculty, and the entire student body needs to look at itself and examine exactly what we are trying to accomplish. I'm not asking for world peace. I just feel that the way Frosh Week was run this year was a disgrace. We don't need or even want barriers between the Faculties, or Student Societies.

You know, we had a lot of fun with our Frosh, and we did our little chants back and forth with the Science Frosh. But it lasted only five minutes or so, and then we just mingled and talked and found out who they were and what they were up to during the Week. I don't know why, but it seems that the Engineers cannot grasp this idea. I encountered many attitudes among the Engineer Frosh Leaders that was just short of being immature and obnoxious. I do not mean to imply all Engineers are like this. But a few bad apples (or tools - whatever tickles your fancy) can really screw things up for the rest of us. My roommate is a 3B Computer Engineering student, and he's one of the nicest people I know. After talking with him for a while, I can only conclude that attitudes are decreasing each year, and that this needs to be addressed by the students.

There needs to be a change, and it must come from the Students. Good luck U of W, and God bless!

Trezmania

## PMC&OC Happenings

Hey all ... we had a terrific meeting on Tuesday and elected a new executive. They all seem energetic and ready to take The Club to new heights. We also discussed plans for this term as well as next. We've already had one tremendously successful BBQ. Kudos to Dean and Leon for volunteering their place.

Other stuff you should know about the PMC&OC:

- Our office is located in the clubs hallway, in MC 3033.
- We are not just for Pure Math and C&O students. We are for anyone who enjoys mathematics or enjoys people who enjoy mathematics.
- We are not just for undergraduates. We welcome any and all people who would like to become part of our organization.
- We have a vast library of books that all members have access to.

Coming up this term ...

**Mathematics: A Historical Perspective** A series of talks sponsored jointly by the PMC&OC and the Faculty that will feature guest lecturers speaking about a particular field or person, with a historical bent.

**Flag Football and Soccer** Competitive league teams (in the wimpiest divisions) ... if you are a closet Joe Montana or Pele, let us know! We still need more bodies.

**Volleyball** Unfortunately, we were the 101<sup>st</sup> Co-Rec team, so this term we likely won't be playing volleyball, although we could play some beach volleyball at the Bomber sometime.

**Ultimate Frisbee** Actually there isn't a PMC&OC ultimate team or anything, but I like playing, so anyone else who does can drop me a line (lchsuc@cayley, 747-3525) and I'll let you know where the games are.

**Talks** There won't be many talks this term, since you'll all be busy going to the excellent series on the history of mathematics (see above). It would be great to have some student talks in between them.

**BBQs** We've already had one, hopefully the weather will permit more. Stay tuned for details.

**MOVIES** We sometimes have movie nights and such things ... if you are interested, let us know.

**PARTIES** Occasionally there is a wild party during the term. Paul and Dan, our two great PARTY DUDES are away at Grad School, so we need to find a new victim (er ... host).

**PUTNAM** The first PUTNAM meeting was Tuesday. There are practice sessions for both frosh and upper year students. Everyone is welcome to either. For times and locations of these sessions, check with Prof. Chris Small or Dorothy Chapman. Or you can drop by the Office and someone will know.

**OTHER STUFF** We are always open to new and exciting ideas, so let us know if you have any.

Well, that's all for me ...

Leon  
Ex-president-for-life

## Soc Toc

The Math Society is off to a (not so) great start this term! On behalf of MathSoc ... WELCOME FROSH! All Frosh are encouraged to come and be a part of MathSoc. What can I do you ask? Well! You better hurry down to the MathSoc office (MC 3038) to find out which positions are still available.

We have new information stored on "GOPHER". Just type "mathsoc/mathsoc" on any undergrad machine, and you're laughing! Read about upcoming events, who's doing what, or even read our constitution (for those that will undoubtedly take me up on this, do not be too disappointed ... we're working on it!).

I'd like to bid former MathSoc President Markus Baumann adieu, as he attempts to stabilize his "academic uncertainty". Don't forget, you're holding the end-of-term party Markus!

I wish I could tell you all of the wonderful things that will be happening this term, but we do not have a Social Director yet (hint, hint - see Paragraph 1). I wish I could tell you how the past events have gone, but we haven't had any yet! (For those Engineers out there reading this, this is because school has just started.)

Look for the next issue. I hope to have much much more.

Trezmania

## Treasure Chest

Welcome back from your summer vacation! Vacation, work term ... what's the difference? (Except us co-ops get \$\$\$!) I hope everyone enjoyed getting their work reports in on time this year? I know I sure did!

Well, before I get to the nitty gritty, let me just thank those who have made my summer what it was. Thanks to Jeff Shaw (did someone say ... water?), to Jackie Ralph (Ya did a good job!), to Julia Oh-my-god-she's-wearing-a-dress Humar, to my wonderful roommates who weren't around (Hi Chris & James!), and of course to PI@Mutual with special thanks to Anthony Sore-Toe Silvestro (still on vacation last week there, Anthony?) Sorry for rambling, but those people will think this was funny.

C+D

WARNING: Due to the inability to kick the cashier out, the C+D will be open until 10:00 p.m. weekdays until the end of the term. You may have already noticed since it has been this past week already!

If anyone wants to know more information on how to get on the "Tasting Board" for the Math C+D, please drop me a note in the Treasurer's mailbox in the MathSoc office (MC3038).

MathSoc

This is a small but important reminder to all Clubs, Boards, Committees, Groups, and greedy individuals that budgets are due Friday. Um, I guess that means TODAY!!! If this deadline cannot be met, please talk to me, otherwise funds will go to pay for a ski trip for the MathSoc executive ... NOT! Seriously though, the deadline is final. Have a great term people!!

Jeff (Trezmania) Stammler  
MathSoc Treasurer

## Faculty of Mathematics Dean's Honours List

In recognition of outstanding academic achievement throughout their undergraduate careers the following students will **GRADUATE ON THE DEAN'S HONOURS LIST** at Fall Convocation, October 24, 1992 and have their names displayed in gold on the walls of the Faculty Colloquium Room (MC 5158).

GAMBLE Steven Todd	H C&O/CS
WAN Yuen Wai Christopher	H COMP SCI

In recognition of outstanding academic achievement throughout their undergraduate careers the following will **GRADUATE WITH DISTINCTION** at Fall Convocation, October 24, 1992.

BEINGESSNER Daphne Michelle	H MATH
CHAN Cheuk Wai Andrew	H COMP SCI
CHEUNG Shuk Man Annie	H COMP SCI
KWOK Chi Wai William	H C&O/CS
LEUNG Kwok-Wai Joe	H C&O/CS

In recognition of outstanding academic achievement during the Spring 1992 term, the following students qualified for the Dean's Honours List.

ANDO Seiji	ANDRESS Margaret C.	BAIRD Warren James
BART Bradley Stephen	CHAN Kit Yee	CHAN Sse Sse Ada
CHIU David Tuen Wai	CHUGHTAI Qafa	CHUI Bo Yue Janis
DANTOWITZ David J.	DRUERY Jeffrey D.	ELLIS Katherine Anne
ENNS Albert Nicholas	ESTEY Paul	FARRELL Alana Christina
FONG James	FRASER Stephen D.	FUNG Anthony Roger
GAMBLE Stephen T.	GAMMAGE Simon	GIGNAC Lesley Ann
HAMMOND Michael	HASKINS John Charles	HO Jackie Cheukkin
HO Kai Fai	HSU Ada Yee Hang	HUBER Barbara Marie
HUI Wai-Ho Joshua	HWANG Robert	KAPUR Rishi
KHERAJ Naheed	KO King Lim	KWOK Raymond Y. W.
LAM Kit Kan Eric	LAPENSEE Roxanne	LAU Tin Chi
LEE Betty B.	LEUNG Eric Sse Yin	LEUNG Kung Fa Steven
LEUNG Peggy	LEUNG Teresa Yan Pui	LEUNG Yollie Y. Y.
LING Chi Hung Alan	LIPPERT Robert Eric	LUI Jonathan
LUK Paul K. S.	MACLELLAN Paul A.	MAENHAUT Barbara M.
MAGUIRE Andrew C.	MAN Vince Jing Ping	MARRIN Clarke Ernest
MCCARTNEY Donald	MEHTA Atul Kishor	MOSCA Michele
MULLIGAN Marc E.	ORCHARD Jeff J.	PARSONS Kimberley Joy
PATCHETT Mark E.	PEJCHA Dennis	POON Stanley Ka Hung
PRIEKSAITIS George	PROOS John A.	ROONEY Monica L.
SHEN Ann	SILGARDO Sebastian F.	SIMMONS Jeffrey A.
SZE Channing	TAYLOR Scott Douglas	TESSIER Joelle Florence
THURSTON Lisa N.	TRINH Van Tai	TSANG Frankie Sai Lok
VANBELLE Theodore	VANDERPOST Gerald P.	VENHUIS Theresa Anne
VENIR Sabrina	WONG Victor	YANG Peter Shawn
YAP-CHUNG Nicola G.	ZHANG Qi Xiang	ZHANG Yang
ZINIUK Carly Cheryl		

In recognition of outstanding academic achievement throughout their undergraduate career, the following students also **GRADUATED WITH DISTINCTION** at the Spring Convocation, May 30, 1992.

SHRINER Jeffrey Allan	HC COMP SCI
RUSSELL James V.	G MATH-3

Are You a 3rd Year Math, Science or Engineering Student?

**Procter & Gamble Inc.**  
**Employer Information Session**  
**and Career Fair '92**

Wednesday, September 30, 1992

Careers/Work Terms in: **Product Supply**  
 - Engineering  
 - Buying and Distributing  
 - Manufacturing  
**Management Systems**  
**Product Development**

Career Fair '92  
 PAC Main Gym 10 am to 3 pm

Information Session  
 Davis Centre 5:30 pm Room 1302

## Join the Warriors Band

*A Proud Musical Tradition For 26 Years*

The UW Warriors Band is looking for enthusiastic quasi-musical types to help add a somewhat off-key note (or two) to our various performances in the upcoming season. Our primary purpose is to have fun while promoting a healthy spirit amongst UW sports fans by playing at football and basketball games. We go to away games as well - sometimes a long way away! The University also regularly calls upon us to lend a festive air to various parades, building openings, tree plantings, and the like.

Yes, the Warriors Band does actually rehearse, and yes, we use real music, and yes, there are some very talented people in the band. We encourage musical talent, but it is by no means essential. Neither is owning an instrument. We have a vast stock of much-loved instruments which can be used if you are without one. If you can't attend every event because there's only 168 hours in a week, that's fine too.

What the Warriors Band needs the most is you. If you can play the telephone, the shoehorn, or any other musical instrument, or even the saxophone, you're just the person we're seeking. Our membership is a little down these days due to convocations and Co-op, so we are looking for new members in all sections.

If you're a sports fan, or simply enjoy playing vaguely familiar tunes at high speed and even occasionally performing some real pieces with dynamics, key changes, and everything, come on out! Joining is easy - just come out to practices, which are held Thursdays from 5:30 to 6:30 pm, in PAC 2012 (Blue North). Or simply show up ready to play at any Warrior football game this coming term. Watch for our posters advertising upcoming concerts. For more information, call Chris Jacob at 746-0364.

Remember - if you don't join the Warriors Band, you won't be a member.

## Vapid Fire

In an attempt to get better constitutional opinions, pollsters have taken to the road. Their latest stop has been here at the University of Waterloo. Of the 1000 UW students surveyed whether or not they will vote 'Yes' or 'No,' 55% said "OUI".

Ross Perot, the 'on again off again' U.S. presidential candidate is on the ballot for good this time. When asked why he changed his mind and decided to run again he said, "I thought I had a better chance of running for Prime Minister of Canada; they'll vote for anybody without a facial defect, but I didn't want to change my name to Pierre Elliot Perot." The Plastics Surgeons Guild of Ottawa, the same people who gave Mulroney a chin enlargement, McLaughlin an overbite, Chretien's distinctive aural slant and Joe Clark's double chin and radar ears, said, "Studies show that politicians with facial defects are what the Canadian public wants. We have a lovely idea for a nose eyebrow combination for Mr. Ross Perot, should he want to successfully campaign up here in Canada."

Should you have missed it, Polkaroo and friends performed at the UW Humanities Theatre in "Polka Dot Door Live, with the Funland Band." Polkaroo was originally scheduled to play POETS Pub, a lively at best, on-campus engineer hangout. Due to a double booking with Sesame Street's Mr. Snuffleupagus. A 3<sup>rd</sup> year mechanical engineer was quoted, "... sniff ... and I stayed up all night painting nice happy polka dots onto my hard hat just for the great one ... sniff ... sniff ..." Polkaroo plans to return to POETS next year with a star-studded show headline with himself, the incomparable Humpty, Dumpty, Bear and Marigold.

The Hedonist

## Quotes from the past — mathNEwSTen Years Ago

Friday May 28, 1982

"Accommodation is available in V2 this summer. Rates single \$19, twin \$15.50 / person + PST. Rates include complementary breakfast."

"The MathSoc Office is ready for business. The office hours are 9:30 to 10:30 a.m. Monday to Friday."

"The Math C+D Stand is once again operational."

"The friendly folks at Kitchener Transit have installed Telerider, a computerized voice announcement system that indicates the time local buses arrive ... Convenient? Yes and no, depending on how far away the nearest telephone is and whether buses are running on time."

"Despite popular opinion "Dungeons and Dragons" is not the only non-drinking game in the world."

"It certainly may be the social atmosphere [at U(W)]. The few bad people have no doubt been weeded out by whatever screening process is used to select Village residents."

[from a frosh] "The first class was certainly an eye-opener. A tall, well-dressed athletic man leapt onto the main platform. He and the class acknowledged each other's presence, and when he started to erase the blackboard, I assumed he was a member of the faculty. He turned out to be a janitor."

"If anybody is interested, they are welcome to drop in and participate in this phenomenon (I assure you, this is not a cult!)."

"Looks like a fish, moves like a fish, steers like a cow."

Stadtler

## Ideas...

*I sure need them*

Yoohoo, it's me again. And sadly to say, I have no topic for this article. You see, I've been sitting here for about an hour trying to think up another idea and ... nothing. Nada, zip, zilch, zero. Which is not good. Not good at all. For you see, whilst I can easily write up an article that will leave you howling in laughter, it do need a subject. Indeedy it do. So, I am asking for your help. For those times (hopefully rare) when I have no subject matter on which to hone my literary skills, please provide me with one. Please, please, please, please, puh-leeze! I will gladly share credit with whomsoever provides me with an award-winning pondering (or a suitable pseudonym if you so choose). Just drop me a line via the BLACK BOX. That's all you have to do to earn my everlasting gratitude. And please, feel free to submit articles on your own. (You can, you know. Same place. BLACK BOX). Hell, it'd make my job easier. Thanx-a-lot.

Brayne Dhed

## Things to Be

*An introduction*

Howdy! It's good to see you this fine Friday morning. I, myself, am new to both U(W) and mathNEWS, and as of yet haven't settled into the routine of writing articles for this newspaper. And with it being a new term, most of you are probably wondering, what will mathNEWS be like now? Will it once again be chock full of the witty reparté and insightful discussions that you all know and love, or will it really bite?

Well, let me set your fears at ease. I fully intend to do my part to maintain mathNEWS as the best newspaper on campus, even if there is no real competition. Ah, I know what you're all thinking. Is he/she funny? Not to worry dearies, back home I was called ... well, a lot of things I can't mention here. But my pen was mighty indeed. Nerves were sent aquiver whenever I would flick my Bic. I could write a scathing satire that was known far and wide to be both truly scathing and highly satirical. And just get me started about bodily fluids and secretions. Yes indeed, the creative Force flows strongly through me.

Yeah, so, anyway, don't hesitate to pick up a copy of mathNEWS for fear of it being dull. It won't be. It'll be funny. Very funny. Honest. You'll laugh, and laugh, and fall over laughing. You can trust me, I'm smiling.

Brayne Dhed

## Course Drop Policy

The Faculty of Mathematics permits students to drop a course up to the end of the first four weeks of a term. *This policy is being strictly enforced.* When you enroll in a course, you accept responsibility for completing the course once the drop deadline has passed. Concern about failing a course is not considered, in itself, sufficient grounds for allowing you to drop a course after the Faculty deadline.

The purpose of this policy is to give students four weeks to assess whether they are adequately prepared for a course and whether they will have sufficient time to fulfill the requirements of the course. *If you have doubts about either of these points, we urge you to discuss the situation with your instructor before the drop deadline.*

The drop deadline for the Fall term is Friday, October 9, 1992.

Andre and the Friendly Fifth Floor Folks

## Prof Quotes : Summer '92

*The best darn quotes this side of Toronto, fella*

While some of us were slaving the summer away, others were frolicking here at U(W). Some folks even took time out from their busy schedule of tanning and drinking beer to go to class. As usual, instead of taking notes, they thought it would be better if they wrote down everything the prof said that didn't make that much sense. The following quotes were culled from the best of the summer's issues of mathNEWS. Share and enjoy.

"Pure mathematicians never lie, because we are PURE!"

Dickey, PMATH 334

"In order to prove this, I'd have to define a lot of high level algebra which I know you don't want since this is supposed to be a Mickey Mouse course."

Moskal, PMATH 330

"Infinity is determinate - bloody large!"

Lipschitz, MATH 138

"One of the reasons I became a philosopher was because I wasn't good at anything!"

Pullman, STV 100

"I'm a complete failure. I should have become a truck driver. You just drive along and every once in a while stop for a coffee. And at night, a hooker comes along."

McKiernan, AM 333

"I teach in three different rooms on the fourth floor, so the way I find the right room is to look for the one without a prof."

Li, CS 340

"Well, this is what was on the exam, so we won't worry if it really, truly corresponds with reality or not."

Becker, CS 241

"I only drink to make my friends seem interesting."

Lawrence, MTHEL 100

"You can tell it's a work of art because when you first look at it, you say 'What's that?'"

Dickey, PM 360

"Best just to write the damn equation down and solve it."

Isenor, PHYS 234

"When I was an undergrad I didn't realize there were all kinds of bird courses in Psychology I could take."

Moskal, MATH 235

"It's a compiler that compiles... compilers."

Labahn, CS 132

"Here, let me interrupt you for a few hours."

Corning, PSYCH 101

"Don't try to integrate this at home, kids."

Enos, MATH 138

"The more people you have in place, the more they're making more people."

Enos, MATH 138

"I'm just going to sit down in the back and see if this makes sense."

Lewis, C&O 350

"At my age I have oral sex all the time... I talk about it."

Lawrence, MTHEL 100

"After three and a half or four years we've locked out any desire to learn. The Faculty's good at that."

MacKay, STAT 430

"For the time being, let us avoid all mathematics."

McKiernan, AM 333

"I never know how I'm going to weight things because I never know how badly you're going to do during the term."

McKiernan, AM 333

"Burn the textbook. It's no good anyway."

Hewitt, MATH 138

"There are three series you should know or you'll fail the course: geometric, harmonic; and there's probably one more... I fail."

Hewitt, MATH 138

"I'm not out to finish your careers as students."

Moskal, MATH 235

## Mathematics: A Historical Perspective

This year the PMC&OC and the Faculty of Mathematics are jointly holding a series of eight lectures on the history of mathematics. The purpose of this series of talks is to increase awareness of this often neglected aspect of mathematics amongst both students and faculty.

For this term we have 4 outstanding mathematicians speaking:

- Dr. H.S.M. Coxeter: Non-Euclidean Geometry
- Dr. Jerold Marsden: Classical Mechanics
- Dr. David Sprott: Statistics
- Dr. Vladimir Platonov: Group Theory and Number Theory

These talks should be of interest to everyone from the lowliest undergrad to the most revered Professor, as they will not be overly technical. For most, this will be a once in a lifetime opportunity to hear such great mathematicians give insightful but non-technical talks.

This series of talks will begin next week with Dr. Coxeter's talk, entitled Parallel Lines, on Thursday, October 1st, at 1:30 pm in DC 1302.

Leon  
Ex-president-for-life of the PMC&OC

## Math, the Universe, and Everything

### *Everything You Wanted To Know About Alcohol but Were Too Drunk to Remember*

For many of us, alcohol forms an important part of our lives. Yet many of us go through life drinking more and more without ever asking the questions that are important in life. Rather, we ask the questions, but we do not answer them. Or we answer, but are so drunk that we forget to write down the answers. Or we do write down the answers, but puke on them in the morning.

These questions do exist, though. Questions that, up until now, haven't had answers. After several hours of soul-searching, research, and a complete drunken stupor, I've come up with these answers. Enjoy them, folks, and have one for me. Hell, buy one for me. I'm the guy lying on the floor of the bar.

#### Why Do I Drink?

There are as many reasons for this as there are stars in the sky. Really. I'll have a drink for Alpha Centauri, one for Proxima... you get the picture. My personal reason for drinking is that I like it. If you're not sure why you drink, choose one from my list below.

- "It makes me feel good."
- "Girls / guys like me more when I drink."
- "It makes your breath fresh and minty."
- "What else is there to do?"
- "I just need a beer to get me going in the morning."
- "Jeez, I'm depressed."
- "I killed someone the last time I was drunk."

#### Where Should I Drink?

Again, there are many answers to this age-old dilemma. Some of the most common answers are listed here.

- **The Bombshelter:** A cool cool place to drink. Lots of people to drink with, lots of atmosphere, and a handy patio in case you have to puke.
- **Federation Hall:** Fed Hall, Fred's Mall, call it what you will, it still looks like a damned high school gymnasium to me. But they serve beer of all sorts, so it can't be all bad.
- **Oktoberfest:** Wow. Fun till your head falls off. Plan to attend as many Fest events as you can, just to see the funny clothes and to drink beer till you forget that you're in an arena. Just like Fed Hall.
- **Your Closet:** Boy, do you ever have problems.

#### Who Should I Drink With?

Your room mates are a good start. Some of my greatest bonding (not to mention bondage) experiences happened when I went out drinking with the boys: the time we got arrested, the time we burnt that house down, and the time we accidentally killed that fellow. Great fun.

Your parents are two good people to drink with. Until one of them starts hitting on you.

Your boyfriend or girlfriend is another fun person to drink with, especially if you don't want to remember any experiments that involve hamsters, rubber gloves and a home enema kit.

#### What Should I Drink?

Perhaps the best proof for the existence of a Supreme Being is the sheer diversity of foods native to Earth that can be distilled, fermented, or otherwise transformed into liquids that induce a state of drunkenness. Celebrate the diversity of our planet: get hammered. Here are a few suggestions for the discriminating alcoholic.

- **Beer:** My personal favourite. Breakfast just isn't complete without it. *Advantages:* much like the girls at the school down the road, it's cheap and easy to get. *Disadvantages:* you must have strong bladder control to truly enjoy it.
- **American Beer:** *Advantages:* even cheaper than normal beer. *Disadvantages:* need even stronger bladder control, doesn't really get you drunk.
- **Rum:** *Advantages:* some people get extremely horny after drinking rum. *Disadvantages:* drinking rum straight is like hitting yourself in the head with a sledge hammer: you're going to black out, and wake up with a big headache.
- **Tequila:** *Advantages:* proves you're tough. *Disadvantages:* proves you can puke.
- **Rye:** *Advantages:* yum yum. *Disadvantages:* tastes so good you'll drink yourself into a coma without noticing it, and wake up with one of the Village ducks in your bed (or even worse, one of the Village dons).
- **Gin:** *Advantages:* panty remover. *Disadvantages:* who cares?
- **Shooters:** *Advantages:* a few of these will have anyone dancing on tables, throwing their bra around. *Disadvantages:* if you're a guy, you might not want to end up throwing your bra around. A night of shooters will also cost you next term's tuition (but it's not like you're going to pass, anyway).

#### A Final Word

There may be a time when you are told by a loved one that you're drinking too much. Chances are, they're right. Chances are, you don't have a chance of ever overcoming your addiction. Relax, enjoy it. Have a beer. See ya on Skid Row, brother.

Flipper



## Andy Rooney Speaks

The vegetable population of the planet earth has gone out of control, and we must find new ways to contain this problem that is bound to overrun us all.

But what can we do? To eat them all would be a cruel waste of such elegance, while just letting them rot in the fields would be even more of an invegetanity. Clothing has been done before, and it was found there were many problems with using vegetables as umbrellas.

I am proposing a new use for our friends under our feet that would not only save the planet, but also allow us to save enormous amounts of money. It would also start to ease up on some of the landfill problems that are occurring in many metropolitan areas.

We should use vegetables as a fuel for our cars.

Such a simple yet elegant idea. I am surprised that no one else has come up with such a brainstorm. Consider — gas prices would come down, as long as we used appropriately cheap fruits. There would not be as much waste to throw away, as we could use it in our engines. And if we really need a snack, just open up the engine and pour out a quart of your favourite juice.

Think about the possibility. It may change the world we live in.

I'm Andy Rooney



## Prof vs. Student

*The Debate Continues*

Well, the same old thing is happening again this term as has happened in previous terms. The student body, most notably frosh, are not going to their professors for help with their assignments, and other matters.

There is a barrier that exists between mathies and profs that must be broken down if we are to produce a larger and more successful graduating class. But to do this, we must first look at why this barrier exists.

There are many reasons for this wall, of which I will try to name a few. First there is the intimidation factor. Many students just coming out of high school are still in awe of those teachers, and find it difficult to deal with the fact that many profs will go out of their way to help their students.

Second is the atmosphere. Many profs in the first week of lectures decide that they are going to try a new approach to a course, either through the actual material or through the atmosphere of the class. While it is commendable that these people are trying something new, in some cases it is not working. The atmosphere of a university lecture hall should not be that of a grade 3 class room with everyone holding their name tags finding buddies to do their work with. It also should not be a lofty place where the prof talks to no-one, and leaves as soon as the class is finished. A nice, relaxed place where there is a good mixture of talking, writing, thinking in every class is one that will attract students. One that makes people feel impersonal will only serve to drive the students away.

Finally, there is the understandability of the professor. I am not singling out foreigners with this statement because there are many of them that speak better english than I do. I am referring to those professors that either do not have a firm grasp of the english language and are hard to comprehend, or profs that have habits that get in the way of a lecture. I was a guest at a conference a couple of years ago, and they had this American talking on polynomials, and his favourite variable was  $k$ . He also had this habit of always checking whether the class was up to speed by saying OK, which he would shorten to just 'K'. A typical sentence in this class went 'Take the variable  $k$ .  $K$ ? Now if we raise  $k$  to the  $n$ .  $K$ ? we will find that it is  $y$ .  $K$ ?' It was annoying to say the least.

So there are some suggestions for the guys upstairs for what they could do. As for you guys, don't be afraid to go up and talk with them. You would be surprised how interesting some of our faculty people are! And don't worry about being called a keener. If being a keener is a sin, then may I be the worst sinner in all of history.

RESt. It's early

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## Confessions of a Homesick Froshie

Alas. After only two weeks of Village Life, I have come to a terrible realization: this is not home. As most other students, I've been waiting to get away from my parents' scrutiny since I hit the teenage years. But no amount of planning could ever have prepared me for life in residence. It is here that the thought of home starts to fade like a dream. A dream of a comfortable bed, free laundry, a loaded fridge, and HOME COOKED MEALS!! A dream of sympathy and chicken noodle soup served in bed when you're sick. Those days are over! This is University. Residence! Rubber mattresses, public washrooms, and garbage cans heaping with "food" in the caf. This is the place that when you're sick, so is everyone else because you either got it from them, or you gave it to them. In three weeks, I get to go home. And I'm sure that Thanksgiving will have a whole new meaning for me ...

Katrina

## How to Date a Mathie

### A Self-help Guide

Due to an uncanny *set* of circumstances, I have dated three mathies, well maybe more, say,  $\pi$  mathies. (What can I say — I just love those pink ties.) I can attribute my experience only to a depraved joke of God's or to strange genetic mutations in my DNA. At any rate, I have learned much from my experience and I hope that others may benefit from my confusion. Mathies, read this page! Hand it to your boyfriends and girlfriends, and to your prospective dates. Better yet, *simply* pin it to a visible portion of your clothing as a warning label.

#### DO

1. Carry paper at all times. If mathies don't have paper, then who knows what they'll write on!
2. Carry a compass and a *map* (Need I say more ...).
3. Familiarize yourself with the literature influential to moulding the mathie's psyche: the Hitchhikers Guide to the Galaxy trilogy (you can skip the fourth book in the series — the one about love), some Monty Python movies and Flying Circuses and Star Trek — movies and shows.
4. Learn some math buzz words and how they are *grouped* together. The actual mathematical concepts are irrelevant; the purpose of knowing this is to get the mathie's jokes. Here is a starter kit: [whole, natural, rational, irrational, complex], [complex, imaginary, real, i], [set, union, subset, intersection].
5. Try to avoid any references to the *real* world <sup>TM</sup>. This will only confuse your mathie.
6. *Go to parties* and movies and other fun stuff. Mathies aren't nerds contrary to popular belief.
7. Ask for help with your math courses. This is a *prime* fringe benefit of dating a mathie. Don't miss out! (However, when being helped never say, "I just want to know how to do it. Don't tell me what it means.")
8. Learn how to play Euchre (and bridge). This is probably what the mathie had in mind when s/he asked you if you wanted to be partners.
9. Make sure to inform your mathie that your idea of fine dining is not the math C+D.
10. Remember where the car is parked. I suggest the method of carrying around a Polaroid camera and photographing the car in *relation* to the parking lot.
11. When your mathie invites you to a gathering of other mathies be prepared to not understand a single word that they are saying, even if they are all English words — welcome to mathese. (For example all the italicised words in this article may be misinterpreted by a mathie.)

#### DO NOT

1. Announce, "Puns are the *lowest form* of humour".
2. Go shopping for food (especially without a calculator). The mathie will ensure that you save that indispensable extra 3.33 cents by buying the Super-JUMBO box of baking powder, even if it takes 3.33 hours to figure it out (and 3.33 years to use up that much).

3. Go out to dinner with a huge *group* of people and upon arrival of the bill ask the mathie to figure out who owes what to whom. Otherwise lots of money will have changed hands, the restaurant will be *closing* and you will be further away from solving the problem than when you began. (In fact, to be on the safe side, do not *even* let your mathie see the bill. You don't need a manual check of the computer of cash register's arithmetic abilities.)
4. Say, "Well, you are kind of cute, but I always thought engineers were better looking."
5. Allow the mathie to bring his/her laptop on a date with you. You + mathie = company (fun). You + mathie + laptop = disaster date!
6. Get an email address. If you have one, don't tell the mathie what it is. Otherwise, you may never receive a telephone call, letter or card from the mathie ever again. Somehow, "I love you" just doesn't have the same *resonance* on a computer screen.
7. Be impressed by your mathie's knowledge of greek letters. *Chances* are s/he doesn't speak a word of it.
8. Confuse the mathie's vocabulary with your vocabulary. HP does not mean steak sauce to a mathie, chips do not go with fish, and reading the news has nothing to do with the Globe & Mail.
9. Ask the mathie, "So what are you going to do with a *degree* in math?" For some reason this question *tends* to annoy them.
10. Ask the mathie to divide a cake or other non-parallelogram-shaped food. Assuredly all pieces will be even, but you won't want to serve guests the bizarrely shaped creations.
11. Expect your mathie to add, subtract multiply, divide, or count with any speed or accuracy. (If this really bothers you, go out with a nice dependable HP calculator.)

Good Luck!

Yes You!, U of T, 9T4

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Editor: Kivi "Who, Me?" Shapiro

## REQUISITION FOR SUPPLIES FROM PHYSICS STORES

Qty	Size	Description
1	4 moles	ideal gas
1	4 L	vacuum
3	2 m	massless, perfectly unstretchable strings
2	20 cm	perfect spheres
1	1 m x 1 m	frictionless surface
2		positive point charges
2		negative point charges
5		neutrinos
1		black cat
1	1.00·10 <sup>75</sup> kg	naked singularity or black hole

Newt

## We Need You!

*How to Win Friends, Influence People, and Have Kivi Tell You What to Do*

Are you feeling depressed and bloated? Probably a good laxative will clear that up. But after that, why not come on out to a mathNEWS production night? We need people of all talents: writers, artists, productionists, and typists. Well, typing isn't really a talent, but you get the picture.

I can hear you saying, but what's in it for me, you little freak? Well, not much. I mean, plenty! mathNEWS writers get tons of perks, such as free airplane tickets, all you can drink during production night, and the phone number of Winona Ryder, one of those guys from 90210, or Lassie, depending on your sex and/or sexual preference. Also, you get to hang around with those guys who sit quietly in your math classes picking their noses! And free, this term only, you get to work for the mighty leader Kivi, the best darned editor of mathNEWS this term. (Have you ever noticed that Kivi contains the word "vi", which is also another good editor?)

So come on out. It can't hurt, unless we start playing Razorblades again, but that's not very likely. Even if you're as creative and funny as a calf's bladder, that's better off than me. And I've known some pretty funny calf bladders. (I was kidding about the airline tickets, though. And the drinking. It's like Fed Hall: do your drinking before you leave home. The part about the phone numbers was a lie too. But there's usually pizza.)

Flipper

## Prof Quotes

"If that is disturbing anybody ... too bad."

Vrscy, MATH 137

"As  $x$  tends to  $a$ , what is it that  $x$  tends to?"

Vrscy, MATH 137

"Unfortunately I erased what I know and I forgot what I know so if you could tell me what I know ..."

Willard, MATH 135

"I don't understand why it is when you stand up in front of one of these [blackboards] your brains disappear."

Bish, ACC 121

"I do it in a public place ... usually standing up."

Jackson, MATH 235

"If you're one of those people who like to do it horizontally ..."

Jackson, MATH 235

"And you want to get the rubber duck as the answer."

Jackson, MATH 235

"Anyone handing in a late assignment will be machine-gunned."

Jackson, MATH 235

"So, there are exactly zero engineers in here. That's a good number."

Ross, PSYCH 101

"Mass spectrometry is like hunting caribou with a mortar: some of the caribou die but don't fall apart."

Chieh, CHEM 464

"This is all bullshit, right?"

Cunningham, C&amp;O 350

"How do I know? Because I know a lot of stuff that you don't know! ... But you can guess."

Cunningham, C&amp;O 350

"There are scads and scads more reals [than integers]."

Hare, PM 351

"You can live by the space bar and you can die by the space bar."

Buhr, CS 242

"Don't send messages about alt.sex to rec.woodworking."

Buhr, CS 242

"What if I get really close here [to the boundary]? Can I still do it? Yes, I'll just have to get thinner chalk."

Hare, PM 351

"Whenever you have more freedom, you have also more troubles."

Forte, MATH 247

"You'll know when it's 11:30. Students are wonderful at rustling."

Lefcourt, PSYCH 355

"Little children have always found their genitals easily ... just an arm length away."

Lefcourt, PSYCH 355

"Do not choose a topic about normal children. This is a course about abnor. ... uh, *exceptional* children."

Seim, PSYCH 213

## Life in Waterloo

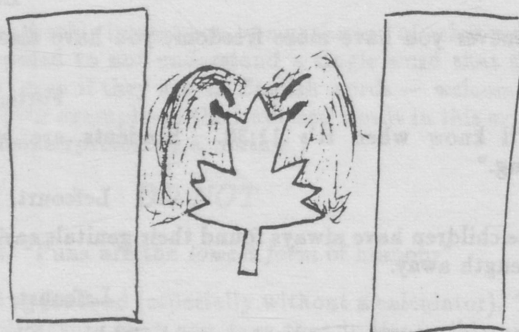
*Could you imagine a month?*

I can't. I've been here two weeks already and I'm still waiting for culture shock to set in. I actually haven't missed my previous lifestyle (if you could call it that). So if some of you out there don't miss Mom and Pop just yet, you're not alone. If you are actually enjoying getting away from everybody that you know, join the club. As for making friends here, let's just say that I'm still working on that. (I guess being real quiet and aloof doesn't help, huh?). As for classes, everybody always told me that university classes would be one hell of a lot different than high school. Well, except for size, I haven't noticed any major differences yet. I mean, the classes are still boring (still got the odd teacher that's an exception to the rule), the seats still give you butt cramps, you still get homework, and I still put it off until the last minute (not a good idea, I've found out). One question. Is it safe to eat on campus? Haven't actually tried that one yet.

Some more questions. Do you ever get classes in the same building, or must you always run the 4 minute mile? Are there any aids to help stay awake in class? Do books always weight eighty pounds? Does everybody have only one class on Thursdays? Does this article appear as half-baked to you as it does to me? (Thought so). Where is the pink tie? More importantly, where is the TOOL? Why was Alf ever popular? (Same for Webster). Am I using too many brackets? [No way! (I use tons, myself (sometimes even nesting them!)) — Ed.] How much is that doggie in the window? How do they get the soft creamy caramel inside the Caramilk bar? Were those circles created by giant Reese peanut butter cups? And just exactly why do people think Elvis is still alive?

Well, I think this article has gotten just about lame enough. (Sorry, a lapse in the Force). Anyway, looking forward to seeing you, meeting you, putting my assignments off for another four days, and spending the next four years looking for the TOOL. Until next time (it'll be better, I promise), enjoy this issue and anxiously await the next. (By the way, check out the ISSN thingy this issue. We changed a word).

Brayne Dhed



and the constitution festers...

## Getting the Ace in a Hole

*Lotta Trouble*

The Bridge Ace scanned the comfy lounge looking for people that he knew. Jack was sitting in the corner with the Count telling him all about his wonderful successes all summer long that had brought him to the forefront of his local bridge club. Otto was sitting in the corner looking bored holding a deck of cards, definitely looking for something to happen. Andrea and Iona walked in gabbing about some boy with whom Didi had won a Flight B tournament and now they were playing steadily. Things had not changed at Hey University over the summer, and Ace was relieved.

He went over to Otto in the corner, and beckoned Jack and the Count to join in the first game of the term. Naturally, everyone was eager to play.

Ace held: ♣A ♦AK ♥AKQJxxxx ♠AK

"Playing for money, are we, gentlemen?," asked Ace nervously.

"Of course," was the reply from all of the others, sending Ace's heart skyward. This would be a great hand for his lunch money. "Stakes?"

"How about a penny a point? I know it's high, but what is life without a little adventure?"

Ace could not believe his ears ... \$15 on this hand alone ... he must be in heaven. He smiled and opened with 7♥, just to see the reaction of his opponents. But it went Double from Jack, and not to be outdone, Ace redoubled. But the fates did not smile on Ace, as Jack had all 5 outstanding hearts and the contract went down and Ace was out \$2 and his lunch money.

If you are interested in learning how to play bridge, and not have to use up your lunch money, sign up in the MathSoc office any time soon. Classes are 12:30 MWF or 4:00 R in the Comfy Lounge. Happy Carding!!

Ace Upmysleeve

## A Really Short Article

*But Important For CS Folk Big and Small*

The Canadian Information Processing Society has announced a student competition to promote student involvement in software engineering. Students are invited to submit papers on a software engineering topic of their choice, but preference will be given to papers that address either object-oriented technologies, software process improvement, or simulated sex. OK, I made that last one up.

Submit your papers (by 15 November!) to:  
 Informatics '93 Student Competition  
 c/o L. Wayne Bester, Program Chairman  
 525, 777 8th Ave SW,  
 Calgary, AB  
 T2P 7H7

For more information, contact the CSC.

## mathNEWSquiz #1

### Welcome Back!

Hi, everybody! The Squiz-Meister is back! I would like to take this opportunity to welcome all Math frosh and to tell everybody that not only do you answer Squiz questions for fun and enjoyment, but you can also win valuable prizes! Anyway, I hope you all had a great work term, and here are the questions!

### Greek Mythology

1. Who or what was created from Medusa's blood when Perseus beheaded her?
2. Who was tied to the main mast of his ship by his crew when he wished to hear the Sirens?
3. Of what nationality was Heracles' mother?
4. Who is the Goddess of the Hunt?

### Computer Adventure Games

1. Name the monkey in the bar on Scabb Island in "The Secret of Monkey Island 2: Le Chuck's Revenge?"
2. What is the profession of the widow in "Conquests of the Longbow: the Legend of Robin Hood?"
3. Who is the bandit leader in "Quest for Glory I: So You Want to be a Hero?"
4. Who tells you ultimately how to defeat Exodus in "Ultima III?"

### Looney Tunes

1. On which character in what book is the Yeti based (both the character and book are needed for a point)?
2. What company does Wile E. Coyote usually order items from?
3. Why does Bugs Bunny rarely fall, for example, when he walks off a cliff?
4. Name Bugs Bunny's poker nemesis.

### Fantasy & Science Fiction

1. Who wrote the short story "On the Uses of Torture"?
2. Name the writer of "Stories" about "Farslayer" and "Woundhealer."
3. Which non-Arthurian fantasy series features the character Bors?
4. What is Belgarion's son's name in the series "The Malloreon"?

### Women

1. On what day of the year are all of Anne Rice's novels officially released?
2. Former Pittsburgh Steeler Terry Bradshaw married Jo-Jo Starbuck for a short time. What was Starbuck's occupation?
3. Kathy Whitmire is the highest paid mayor in the United States. What city is she mayor for?
4. What vivacious cartoon character retired in 1939, but returned for a cameo as a waitress in "Who Framed Roger Rabbit?"

### Movie Quotes (Name the movie)

1. "Over? Did you say 'Over'? Was it over when the Germans bombed Pearl Harbour?"
2. "He ruined my jacket... kill him a lot."

3. "Hey, are you in my class?"  
"I am today."
4. "Just be the ball, be the ball, be the ball. You're not being the ball, Danny."  
"It's kinda hard when you're talking like that."

Well, troopers, some of these are tough. I wish you luck, and hope you all do well. By the way, you can submit your answers in the BLACK BOX outside the Comfy Lounge.

Harry Organs  
Token Artsie

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8 pm



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## Conventional

### Across

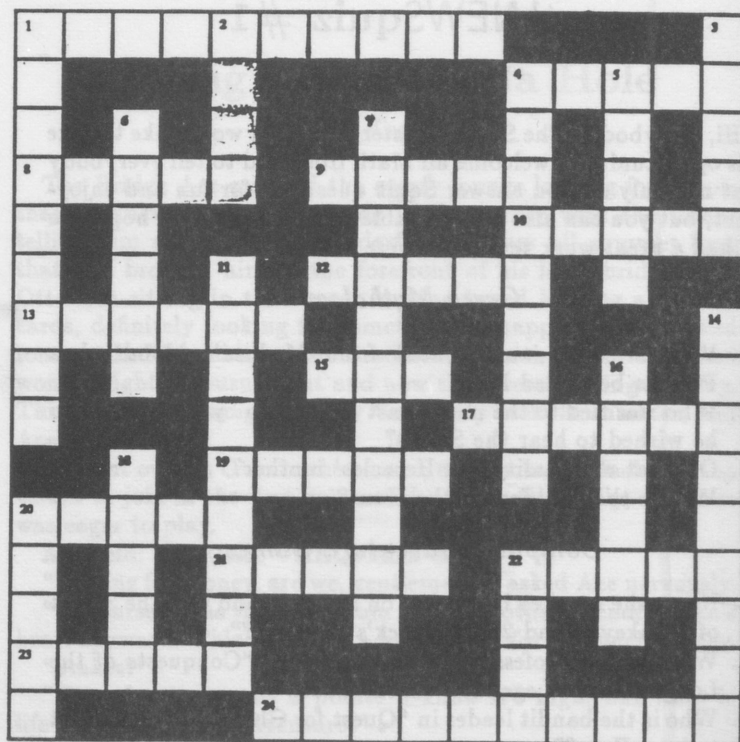
1. Result
4. Short
8. Teller
9. Put off
10. Intelligence
12. Away from land (2 wds)
13. Penetration
15. To and \_\_\_
17. University site
19. Lift
20. Farewell
21. 2,3,5,7,11
22. CH<sub>2</sub>CH<sub>3</sub> component
23. Combat
24. Never ending

### Down

1. Left, up, right, down
2. Chance
3. Frequent
4. Swartzenger character
5. Perfect
6. Check
7. Enjoys travelling
11. Times four
14. Attacker
16. Lack of feeling
18. Important
20. Author of THGTTG
22. Electric fish

Who are you?

What's your gridcomment?



## Cryptic

### Across

1. Con Peter if the situation is right (10)
4. Lori dealt the perfect hand (5)
8. Beg forgiveness from your relative (5)
9. Not quite loud (6)
10. Good topic but terrible speech (5)
12. Persistence of memory starts at dawn and lasts indefinitely (1,4)
13. Bridgette lost it over the water (6)
15. Take aim at your friend (3)
17. He sounds so full of misery (6)
19. Al won without help (5)
20. Visitor exists first into rush of wind (5)
21. Place the yearling inside (5)
22. The coder blended with the furnishings (5)
23. The blow nearly ruined us (5)
24. Art, the referee, is fake (10)

### Down

1. Applause can appear correct (9)
2. Slip it into your briefcase (4)
3. Begin by reclaiming the glass (5)
4. Foreknowledge into Inuit customs (9)
5. Birth of the world lost all sting (5)
6. A sea tic will die in vinegar (6)
7. Money an intelligence are basic (11)
11. Age it at one temperature until mixed (9)
14. The dye fell on the picturesque painting (9)
16. When not on the ice, he works here (6)
18. The circle ends at the Devil's welcome home (5)
20. Gods leaving ocean began earth (5)
22. Half or Moore (4)