

## COMMENT: CS/CA Double/Joint Honours?

In the last few issues of Mathnews published in the spring there has been some rather hot discussions about the merits of CS vs CA. The general impression was that both are useful and frequently complement each other. The next logical step then is to ask for a double and/or joint honour program(s) in those fields. There are many advantages to these programs:

1) Such a program will allow students more flexibility. Under present conditions, if a CS student wants to have more business-oriented exposure, he can take CS330 and CS331; however not only will he not receive credit for these but the first time he passes CS340 (a requirement for a CS major) he would have the unpleasant surprise of finding that his CS340 and CS330 marks are recorded as "repeat" courses. This of course is misleading and hurtful to the student who wants to go the extra mile.

2) Such a program would provide more impetus toward having more business oriented computer courses. We do have some at the present time and the math faculty is going to add one more this winter but they are still far too few and furthermore they are not offered frequently enough.

3) Now a student can try to satisfy all the requirements for CA and CS majors but then he will have to choose which one is going to be on his transcript. One of the reasons given was that we do not have such a double honour yet. Why not? After all the sacrifices you have been through during eight terms, missing pubs and so on, I guess it is just human nature to desire to have both names appear on your transcript.

Also many CA students are interested in taking courses in statistics. A joint honour in those fields would give them better guidelines in selecting courses. There seems to be a sort of dichotomy developing in our faculty with, on one side CS and more mathematically minded people and on the other, CA's and other business-oriented students wondering what they are doing in the faculty of math. We should, in my opinion, find or, if need be, invent more courses with a business content using mathematics as a tool. For instance finance courses could be taught with a heavier emphasis on computer and statistical techniques. It has been said that mathematics is the "Queen and Servant of Sciences". Let us prove it.

twan tu

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# math NEWS

## Federation of Students to Fund Non-Academic Drama

The Federation of Students has made funds available for extra-curricular drama this fall, it was learned last week. Marc Quinn, a UW drama student who was administrator of the government sponsored Twin Cities Youtheatre this past summer, will be directing "The Shadow Box" by Michael Cristofer. Auditions will be held on September 27, 28, 29 from 4 to 8 p.m. in the Campus Centre, Room 113. Four men and five women are required. Everyone is welcome. Anyone interested in technical work on this production should contact Marc at ext. 3457. The play will be presented in the Theatre of the Arts in early November.

## Financial Assistance Offered On Actuarial Exams

Have you ever thought of becoming an actuary?

What is an actuary? An actuary is an executive professionally trained in the science of mathematical probabilities. He uses mathematical skills to define, analyze and solve complex business and social problems. He designs insurance and pension programmes which meet the public's needs and desires, and which are financially sound. He forecasts probabilities and he commits his company or his client to long-range financial obligations for a generation or more.

To become an actuary, you must pass a series of nine exams. Part I is a

General Mathematics exam and corresponds nicely to the first-year honours math programme here at Waterloo. Part II covers Probability and Statistics and corresponds fairly well to Stats 230, 231.

The Faculty of Mathematics has set aside a small amount of money to help students trying actuarial exams. If you are a first or second year student and you successfully pass Part I or Part II on the first try, you will have the registration fee of \$15 per exam refunded to you.

For more information and application forms see F. Reynolds in MC 6092B. Application forms must be in the mail before September 25.



## ETAOIN SHRDLU

I suppose I should start off by telling you (a) what this column is going to be all about and (b) explaining what the title means. But I'm not going to do that, because (a) I'm not sure yet, and (b) that's my secret. What I am going to do, though, is give you some idea of how many grains of salt to accept my future mumblings with by presenting my very own 'Best and Worst of Everything of All Time List, Concise Revised Edition'. Enjoy.

**MOVIE:** The best movie I've ever seen is *2001: A Space Odyssey*, although I'd also go out of my way to see any Woody Allen, Marx Bros., or Charlie Chaplin movie, or any other Stanley Kubrick movie. You couldn't pay me to go see *Barbarella*, *Andy Warhol's Frankenstein*, *If You Don't Stop It, You'll Go Blind*, or *Survive*, though. Once was quite enough.

**NOVEL:** If you haven't read Tolkien's *The Lord Of The Rings* yet, don't wait any longer. In a couple of months, the movie will be out, everybody will be reading the book, and it won't be a cult item any longer. If you have read it, you might try *Dhalgren* by Samuel R. Delaney, or *A Clockwork Orange*, by Anthony Burgess (see if you can find a copy of the British edition). Whatever you do, don't read any of John Norman's *Counter-Earth* novels. Volume 7 of the series, *Captive Of Gor*, is easily the single worst novel I've ever read.

**SHORT STORY:** This is a difficult choice, but I'll settle for any one of 'The Frost Giant's Daughter', by Robert E. Howard, 'I Have No Mouth, And I Must Scream', by Harlan Ellison, or 'Miss Temptation', by Kurt Vonnegut, Jr. As far as worst is concerned, I haven't a clue. Mercifully, the bad ones are quickly forgotten.

**TV SHOW (SINGLE EPISODE):** The final episodes of both *The Mary Tyler Moore Show* and *The Prisoner* and 'The City On The Edge Of Forever' from *Star Trek* all had more artistic merit than the whole run of most other series. The worst single episode of any series I can remember is 'Spock's Brain', also from *Star Trek*. The worst special was *Evel Kneivel's Death Defiers*, the single most tasteless hour and a half of TV I have ever suffered through.

**COMIC STRIP:** Why can't we have more intelligent (and funny) comic strips, like *Doonesbury*, and *The Wizard Of Id*, instead of mindless (and insulting) ones like *Nancy* and *Andy Capp*?

**FM STATION:** CFNY-FM, 102.1 in Brampton, is the best FM station I've encountered so far. The now defunct Radio Western was almost as good, as is CHEZ 106 in Ottawa. The worst is our very own CKMS, which I will admit is a lot better than it was (which isn't saying much).

### SHERLOCK HOLMES STORY:

I've been reading these for years, and even though I've read them all twice, I still enjoy rereading them. My favorite is 'The Red-Headed League', with *The Hound Of The Baskervilles* the best novel. The worst of the stories is probably 'The Mazarin Stone'.

**MUSIC CRITIC:** Despite the fact that *Stereo Review's* equipment test reports aren't worth the paper they're printed on, their music reviews are the best around, thanks mainly to Steve Simels, their most opiated critic. The worst music reviews I have read are in *Audio* (which has excellent equipment reports, by the way).

### MUSICIAN/MUSICAL GROUP:

The Beatles, naturally, although Bruce (The Boss) Springsteen deserves all the acclaim they had, and more. (So do The Rolling Stones, and The Who). At the other end of the scale, we have Grand Funk Railroad, proof positive that 10 million record buyers can be wrong.

**ALBUM:** *Abbey Road*, *Dark Side Of The Moon*, and *Born To Run* all seem to sound better every time I play them, which is often. On the other hand, if you want slightly used copies of *Moving Waves* by Focus, *Mardi Gras* by CCR or *Autobahn* by Kraftwerk, just let me know.

**SONG:** I could listen to Billy Joel sing 'Piano Man', or The Who hammer out 'Won't Get Fooled Again', for a long time without getting tired of them. Every time I hear David Bowie's 'Fame' though, I make a dive for the on-off switch.

**TV SERIES:** It's been 10 years since *The Prisoner* made its debut, and I have yet to see another series in the same league as that one, although *The Mary Tyler Moore Show*, *M\*A\*S\*H*, *The Avengers/New Avengers*, and *The Muppet Show* come close. For every good series, there are 10 rotten ones though, and some of the rottenest are

*continued on page 11*

## The Merely Mediocre Trivia Test

Dedicated to the INFAMOUS GREAT JPSIRETT

1. What is the name of the lady on the Enginews Banner?
2. How many official members are there in the NOVA Hacks Association?
3. How many places can you buy "food" on campus (not counting C and D stands or Vending Machines)?
4. How many "seats" are there in MC4001?
5. Name the first two "perfect numbers".
6. What phone number is the "Mathsoc Hot Line"?
7. What company holds the University towing contract?
8. How many official guardians does the "Ridgid Tool" have when on parade?
9. What is the address of "Hammar House"?
10. What room number is the Math Faculty Lounge?

Answers located elsewhere in this issue.

## Quotes of the Week

This week's quotes come from an anonymous (and rightly so) person who sent us these little jewels:

What was the Sadist's reply to the Masochist's question?

"No!"

Or, for a really good quote:

What do you get when you cross an ignorant n'juneer and an apathetic mathie?

You get someone who doesn't know and doesn't care!

There you have it fans! Bigger and better quotes will be coming as long as you people keep sending them in!

resident pre-frosh

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-- \* --

Hermann Bondi  
Chief Scientist, U.K. Department of  
Energy  
will speak on

A mathematician's view of  
ENERGY POLICY

at 2:30 pm

Room 113 Arts Lecture Building  
University of Waterloo  
Friday 22 September 1978

After the lecture there will be a discussion on the organization of mathematics in Canada. Sir Hermann Bondi and Professor G. A. Barnard are past presidents of the Institute of Mathematics and its Applications. Both will be present to speak briefly and answer questions on the I.M.A. All interested mathematicians and users of mathematics, staff and students are welcome to attend.



## That Was A Car Rally?

Last Sunday (inspite of the very wet weather) saw a good turnout for the Mathsoc Orientation Car Rally.

Out of the 19 cars entered, five of them did not finish before the last checkpoint closed. This can be quite understandable considering the strange rally instructions included a section with measurements & directions calculated as if the car was travelling in reverse all the way and an encrypted message which said "IGNORE SECTION #4".

The teams finished as follows:

*The TROPHY winners were:*

1st Place: Car #9 (Doug Robb-math, Lee Mattice-math)

2nd Place: Car #10 (Paul Harding-math, Al Goodenough-math)

3rd Place: Car #12 (Gary Dryden-math, Neil Clark-arts)

*The folling finished the rally:*

Car #1 (Jerry Nieuwesteeg-math, Janice Tessman-chem)

Car #11 (Louis Lavoie-math, Barb Gallina-math)

Car #14 (Wilf Betke-math, Sephen Parker-math)

Car #2 (Neil Wilson-math, Greg Franks-eng)

Car #19 (Pamela Low-???, Stephen Lamb-math)

Car #17 (Leanne Mackinnon-math, Josh Boretsky-math)

Car #6 (Stuart Cross-math, George Cross-math)

Car #8 (David Devlin-math, Barb Poirier-math)

Car #3 (Hanna Derek-eng, Robertson-eng)

Car #5 (James Deviney-sci, Mike Garrah-sci)

Car #16 (Dolores Halbert-eng, Stephen Naor-math)

*And Last but not least:*

Those poor souls who couldn't finish on time. Daniel Korcook, Peter Ridgen, Steve Wilson, Steve Mak, Steve Takacs, Steve Bertollo, Kathy Kuhn, Carolyn Kapron, Michael Gardhouse and John Hudson.

## Zap!

Being a column which reviews various and sundry types of books.

**Inferno**, by Larry Niven and Jerry Pournelle (Pocket). This novel is a pleasant excursion into fantasy by two hard core sf writers whose *The Mote in God's Eye*, and the more recent *Lucifer's Hammer*, treated the classic themes of "first contact," and "after the holocaust" in exemplary fashion. The premise in *Inferno* is that Dante's conception of hell is real, and that people who die go there to suffer eternal punishments of varying severity, depending on their sins. The hero of the book is one such, a science fiction writer himself, who croaks while performing a dangerous stunt at a convention. The story is a chronicle of his adventures in Infernoland, and of his attempts to escape it. I will always remember this book for the startlingly realistic images it evoked. Pictures of fire falling from the sky, of people dying in the lake of boiling blood and of bodies instantly regenerating themselves, still stick in my mind.

**The Book of Skulls**, by Robert Silverberg (Signet). The gimmick here is the quest for immortality, but the theme is a more serious one. Four roommates, students at a New York university, discover an ancient manuscript entitled "The Book of Skulls," which directs them to a group of monks on the west coast, who, apparantly, know the secret of eternal life. The catch is that out of any group of four, two only are allowed to live forever, while the other two must die. Silverberg takes the students (a mixed group comprising an intellectual, a homosexual, a stoic and a sceptic) to the monastery, reveals their darkest sins, and then asks the question, which of them deserves to die? His answer

will surprise you. The book is a fascinating character study, and highly recommended.

**Stand On Zanzibar**, by John Brunner (Ballantine). At six hundred and fifty pages, this is Brunner's longest book, and the one which marked him as a major sf writer. Employing a number of unconventional literary techniques, it has a complex structure which absolutely defies synopsis. It's enough to say that it is a sweeping look at a near future earth choked by over population and contains everything: political intrigue, poetry, violence, insanity, love, humour, death and, of course, Chad C. Mulligan, philosopher and social commentator. Brunner tried to portray the character of an entire world, and therefore the result is not a novel in the usual or strictest sense.

**The Cyberiad**, by Stanislaw Lem (Avon). Lem is a Polish writer whose works have been appearing in the west for a number of years. *The Cyberiad* is a collection of short stories subtitled "Fables for the Cybernetic Age," and features two delightful characters named Trurl and Klapaucius. These two "constructors" have god-like powers and are friendly rivals in their profession. They spend their time building marvellous and not so marvellous machines, setting misguided civilizations straight and otherwise amusing both themselves and the reader. The book reads like a collection of fairy tales meant for children, but there is deadly seriousness underlying its surface. It is that rarity, a book which makes you think while causing you to laugh out loud.

mnmilosevic

Dear mathNEWS

Why have a Duplicate Bridge Tournament? Isn't one enough?

jrgross

A special thank-you goes to all those who helped in checkpointing, etc. A complete list of scores is posted on the math-lounge window.

Our rally master is looking for someone who would like to work with him in organizing rallies during his "off" terms. Please leave your name with kgdykes in the mathsoc office if you are interested.

## ANSWERS to MMTT

1. Connie Lingus
2. Six
3. Ten
4. Three
5. 6 and 28
6. 886 0510
7. Active Towing
8. Two
9. 139 University West
10. MC5136

CREDITS: jrbakker and acpatel take full blame for any errors, misconceptions or libellous statements.

## BAKKER'S DOZEN

(views expressed herein are those of the author.)

The first week of classes has passed us by; and if this was elementary school, we'd already have written our "What I Did On My Summer Vacation" essays. However, since we are in University, they are known as "Co-op Work Reports". Of course, since I'm in regular, I don't have to write them. Are there any more of you around?? I've met only 2 and they're going into Teaching Option next year. Why am I so unique??

I noticed a "Quote of the Week" in last week's issue and decided to do one of my own. Here it is. *Fighting for peace is like fucking for virginity.*

A course to sign up for when you get the chance is ENV S 111. (A Study of the Future.) It's extremely interesting, and doesn't seem too hard (at this point). There is a limit to how many can take it though. (limit equals 60.) *editor's note: the class is full, but you should consider it for future years.*

A rumour is going around that almost a quarter of the people in my Algebra class last winter failed. (including me) I recognize at least six faces from the few times that I did show up for class in the class this term. I won't mention the prof's name in print; but, I can be convinced to reveal his identity to anyone who asks me personally.

### EPITAPH OF THE WEEK

*Here lies John Timothy Snow  
Who died fighting for a lady's  
honour.  
She wanted to keep it.*



Dear mathNEWS:  
Apathy is alive and well!

Mathsoc recently had its first meeting of the term, and they didn't even make quorum! Quorum is eight voting members, and only three showed up! The three that showed up were: 1)myself (3rd yr reg rep); 2)kgdykes (2nd yr reg rep) and; 3)kekropp (administrator). We also had a few non-voting members, one (klmacneil—co-assistant manager for the c&d) who was there at the beginning of the meeting, and one

There has been a small debate going on on the blackboard in the smoking lounge on the third floor about the relative merits of Mathsoc and whether fees should be taken back. In my opinion, they should be left in simply because the advantages of Mathsoc things (like C and D, cards for relaxing with, music piped into the lounge, lockers (which are all gone), and assorted pubs and parties) far outweigh the imagined disadvantages.

I have been informed that I am going to be COACH/assistant captain of the Math Sea-Horses inner-tube water polo team. If you are interested and haven't signed the list yet, come to the Mathsoc office and ask to see me (my name is jim and I don't bite). Games are on Sunday nights and times will be posted. (I won't say that it's "good clean fun", but it is.) The more the merrier.

A little puzzle for the train trip home this weekend. Take eight squares arranged as follows. Then number them 1 to 8 so that no number lies in a square that is adjacent to a number either immediately preceding it or following it. Diagonals count as adjacent. A gold plated no-prize will be given for all correct answers received.

I think I've rambled enough for this week so I'll stop here. I thrive on feedback; so, if you have any bits of information or nonsense that you would like to send... Send it to *jrbakker* care of mathNEWS.

-keep smiling  
jr

(dpdebruyn—manager of the c&d) who showed up after the meeting was adjourned because quorum was not present.

I only have one question:  
**Where the Hell was everybody??**  
The meeting was called by the Mathsoc Prez and he called it at a time that he was going to be working on a part-time job. The V. P. couldn't make because he was working too. Why wasn't the meeting called at a time that the Prez or even the V. Prez could make it??

As for the others, why didn't they show up? If they couldn't, why didn't they let somebody on the council know? If they didn't feel like it, why don't they quit and let somebody who feels like it take their seat???

**Apathy is not dead here at U of W**  
(Mathsoc specifically!).

eamacneil

My dragon and I roam these silent streets at midnight, the dilapidated old hotel-keeper and his fragile home, trying not to cringe at the eyes, malevolent, rising out of the dark to haunt with their multicoloured afterimages. In vain I clutch the wheel tighter and feel the ribbed plastic splinter, threatening to disgorge its non-existent contents onto my lap. I feel the powdery wall against my back, leather cold through two layers of cloth, and the dragon takes over and guides me in solemnity through the crystal memories lying shattered on the floor.

When I open the door she is sleeping, damn her ephemeral soul, and the violent lambent fire in her eyes that never shines for me is extinguished beneath the cloak of Morpheus. It is left for me to turn off the light in a weltering echo of *deja vu* and glide smoothly to the left, feeling the unseen fingers pull me across the black pebbled surface in vain, as my dragon slides back under me and purrs at my call. The parquet floors numb me in their five-five intensity as the random pretzels rise up and swing their red beacons in front of me, carrots in this never-ending game we play with the meager possessions I now kneel and gather up, before the dull thumping bass can sympathize with my hear washing the strains of a primeval sea through the tubes fuelling my dragon, who breathes brilliant flames of turquoise and brings me safe to rest where it is as good as anywhere.

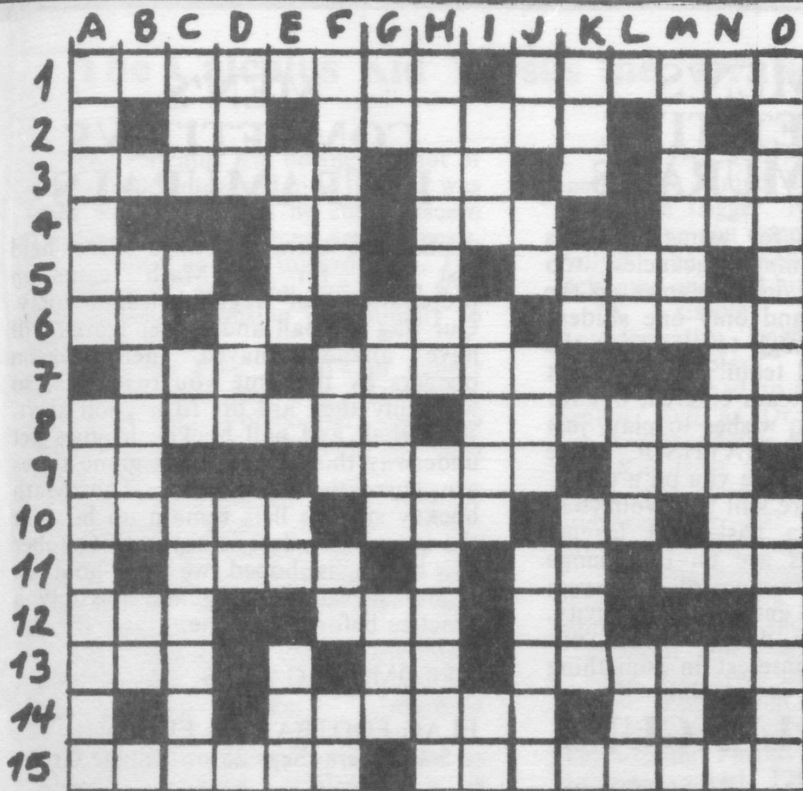
As a reward it is allowed to go mercifully to sleep while the chill wind stirs my cloak and ruffles my hair in unmotherly embrace, clucking at that part of me continually dying, dying while the giddy dance goes on without me.

## Math Faculty Deadlines

1) Adding or changing courses 1) You have until closing time on September 22nd to **add** or **drop** fall courses.

2) You have until October 20th to **drop** courses. This is also the deadline for dropping out of the faculty with out academic penalty.





This is the second gridword of the term, and the first that I have written as the the new gridword editor. Please address all comments and suggestions to Andrew Malton c/o mathNEWS or ajmalton on TSS. I also need puzzles themselves. Puzzles submitted should have at least 200 squares and at least 60% white ones. They should also have at least one axis of symmetry. You can win a T-shirt if either a) a gridword submitted by you is printed or b) a solution submitted by you is chosen at random. The winners of the frosh-issue gridword were Lee Mattice and Janet Byrd, a joint effort. They can come in any time (that Mathsoc is open) and pick up the T-shirt, which they will have to share...

**ACROSS CLUES**

- 1a This
- 1j Three times
- 2c Old English
- 2f Characteristic of the universe.
- 3a Hot and humid
- 3h Amun
- 3m Caress a cat
- 4e Two circles
- 4h For its sake
- 4m Boxer
- 5a Several conditions
- 5e Hit someone for the answer to this clue
- 5j Eastern country
- 6a An option
- 6d Dictionary crossreference
- 6g Precursor of the bird
- 6k Nathalie Wood in 'West Side Story'
- 7b French horn
- 7f Crowd of boats
- 7n Street or saint
- 8a Homeland of Roman enemies
- 8i Stage begun with an article
- 9a Definitely not
- 9f Follow
- 9l Snake has nothing in arts degree
- 10a The main one is beaten
- 10g The Dalmatian Provincial Police
- 10k Exist
- 10n Earth goddess
- 11c Yellow and white horse
- 11j Shriek
- 11m Like Methusela
- 12a Music to breathe
- 12f Two-handed scull
- 12j Not French
- 13a Direction
- 13g Strontium
- 13j Mobilising
- 14e Reflexive
- 14l Alan's head
- 15a Fats and oils
- 15h Here

**DOWN CLUES**

- a1 New system
- a8 Hypnotise the door
- b5 Divisor
- b12 Preposition
- c1 German gate
- c7 Disjunction
- c10 Stop with relaxing sound
- d1 She's in the objective case
- d6 French vinyard
- d10 Company
- e3 Oddfellows initials
- e10 Soul
- e13 For Latin
- f1 Donate
- f7 Expressing contempt
- f11 Nobelium
- f14 Computer Science
- g1 Waterloo animals
- g6 Antelope
- g12 Burnt tree
- h1 Odd
- h9 Bird of contention in Monty Python
- i2 Egyptian initials
- i6 Arise and dress
- i14 Imperialist Alliance
- j1 Tear
- j4 Consumption
- j7 Article
- j11 Legislate
- k1 Curse that number system!
- k5 English for *sum* (Lat.)
- k10 Made badly by the Americans and superlatively by the British
- 15 The French
- 18 Sarah's pet name for her husband
- 113 Damage caused by battering ram
- k1 K10 does it to your driving
- m8 Toronto
- m13 What eaters of village food are
- n3 Hebrew god
- n6 Jacob's new name
- o1 Guess
- o10 At ease at the piano

*continued from page 8*

*Gilligan's Island, The Monkees, Laverne and Shirley, and The Gong Show.*

**AUTHOR:** Kurt Vonnegut is the run-away winner in this category. The runners-up, Edgar Rice Burroughs, Ian Fleming, and Arthur Conan Doyle, aren't even close. The two worst authors I know of are John Norman (see above) and Donald (Matt Helm) Hamilton. Actually, they deserve some sort of award. Most people couldn't write as poorly as these two 'authors' do if they tried.

**JAMES BOND STORY:** Yes, I know that Ian Fleming's James Bond novels are not great literature, but I like them anyway. The best of the lot is one of *Goldfinger, Dr No, or From Russia, With Love*. The poorest is beyond a doubt *The Spy Who Loved Me*.

**FM JOCK:** Dave Marsden is one of the reasons I like CFNY so much, although Peter Griffin on CHUM-FM (formerly of Pete and Geets fame) isn't bad. CKCU-FM in Ottawa was at one time blessed with two excellent DJ's, Jim (The Hammer) Hurcomb, and Steve Caldwell (now with CHEZ-106). The only FM DJ that actually caused me to change stations every time I heard him was Al Thaws, who used to have the Sunday night slot on CKCU-FM (Radio Carleton).

And on that note, I'll call it quits for this week. Tune in next week, same page, same paper, and I'll bend your ears again.

Jim Pattison



## MATHLETICS

The U of W's Intramural Program is underway for the Fall term. Team sign-up lists are being submitted as the entry dates arrive, team organizational meetings are being attempted, schedules are being planned, and team captains are being chosen, all in an attempt to allow you to have some fun and participate in the intramural sports program. If you have already put your name on one (or more) of the team lists posted on the Math Lounge window, please keep watch for any notices pertaining to your sport. **All Math team sports notices should be placed on bulletin board #32** (the one across from the stairway doors in the middle of the third floor foyer).

If you have not heard anything about your team then just make an inquiry in the MATHSOC Office (3038). Whenever possible a team meeting will be called to get everything organized before league activity starts. Meetings have already been held for Men's ball hockey, soccer, and flag football. Unfortunately nothing could be arranged for the Men's basketball or Co-rec volleyball and innertube waterpolo before the intramural rules and scheduling meeting, so if you signed one of those lists expect to be contacted soon.

There are some people on team lists who cannot be contacted for various reasons. If you are on a team which is scheduled to play, then you will have to contact your team by finding the MATHLETICS director or your team captain.

Anyone wishing to join a Math team which is already competing should contact either of the above people. If our team rosters are full then we will attempt to place you on another team.

### MEN'S

#### BALL HOCKEY

A TEAM.....STEVE CHOVAZ  
B TEAM.....TOM KUNTZ

#### SOCCER

A TEAM.....PUI LING CHAN  
DOUG McKAY

B TEAM.....RAY DIGBY  
STAN MIKOLUK

#### FLAG FOOTBALL

B TEAM.....KEN LYNCH

#### BASKETBALL

A TEAM.....DOUG DUKE  
B TEAM.....OPEN

### CO-REC

#### VOLLEYBALL

TEAM #1.....FRANK WELSMAN  
TEAM #2.....OPEN

#### INNERTUBE

WATERPOLO.....JIM BAKKER

## WOMEN'S COMPETITIVE INTRAMURALS

The team lists for women's events continue to have many vacancies....too many. There were only 3 names on the flag football list and only one student was interested enough to sign with the slow pitch softball team. Neither event will have a Math team entered, but for any individual who wishes to play, just let us know in the MATHSOC office and we will try to place you on a team.

In October there will be a volleyball tournament and a basketball league. Team sign-up lists are on the lounge windows, but a minimum of 12 players will be needed to enter either activity. There must be a dozen women out there with some interest in something other than algebra or calculus.

## CO-REC LEAGUES

Lots of people signed for the recreational leagues. There were enough to fill two volleyball teams and an extra-large innertube waterpolo group. Broomball lists continue to overflow, but that won't start play until mid-October, along with the Rec hockey leagues. Schedules were made up this week for both volleyball and waterpolo, so expect some game action soon!

### WATCH FOR:

WOMEN'S VOLLEYBALL  
TOURNEY

8TH ANNUAL BICYCLE RACE  
ENGINEERING CHALLENGE RUN

## Official Staff Members:

Under the new mathNEWS constitution, shortly to be revised, the following people are staff members: Rob Collins, Ted MacNeil, Ruth Harris, Mike Webster, Prabhakar Ragde, Kandry Mutheardy, Jim Bakker, John J. Long, Doug McInroy, Wil Macaulay, Ruth L. Morrison, Mariette P. Proulx, Dave R. Newell, Linda C. Carson, Robert L. Biddle, Kate R. Cross, Dean Edmonds, and Phillip Kelly. If anyone else feels their name should be on this list, please contact Prabhakar Ragde c/o mathNEWS or Mathsoc. The people listed above are eligible to vote in the upcoming election for editor.

## MEN'S COMPETITIVE INTRAMURALS

Several team meetings were held last week for the Math teams in preparation for regular league play. Our flag football and soccer teams will have already played their season openers by the time you read this, so hopefully they are off to a good start. Basketball and ball hockey leagues get underway this weekend but game times are currently unavailable. The Math hockey sign-up lists remain up because the team entry date is not until October 11, but it is hoped we can hold an organizational meeting and possibly a practice before that time.

### UPCOMING GAMES:

FLAG FOOTBALL vs FUBAR  
5:45 Thurs. Sept 28 on Village Green

A SOCCER vs CHINESE  
STUDENTS ASSOC.  
4:45 Thurs. Sept 28 on Columbia #4

B SOCCER vs 3B CHEM ENG  
5:45 Tues. Sept 26 on Columbia #1

## SEASON TICKETS

There's still time to get your Athletic Season Ticket. The ticket is a free pass to watch the Warriors in action. It's available free of charge at the PAC receptionist's desk and could save you a fortune if you plan on watching OUAA football, basketball or hockey.

# unclassifiable ADS

EDITORS All those who wish to bid on the 2 x-mathNEWS editors and have not, please see rfcollins. Bidding on Monday!

ONCE AGAIN! The Countess says hi to all those who know and love her. Anyone wishing to send her mail can do it via bjgregory or rfcollins.



## The Calculus Kid Versus the 'Irrationals'

The Calculus Kid downed a shot of cheap-grade Integrand gin. The bar was filled with smoke but he could discern the figure of his former arch-nemesis, Mr. Infinity, coming towards him. The lumbering oaf sat down and spoke with a gruff voice, pausing occasionally to adjust his arials.

"Kid, the Free World's in danger again. We need your help. Remember the evil Dr. Polynomial and his half-witted Polar Co-Ordinate assistant, Trapezoid?"

The Kid grimaced. Too well he remembered these friends whose diabolical Helix Inflector Machine had almost proved a match for the Kid. "What's he up to now?" he asked, shuddering.

"He's planning to corrupt the moral fibre of the nation with..." Infinity lowered his voice "...Improper Fractions!"

Calculus swallowed an ice cube as Infinity continued. "Calculus, it is absolutely Implicit that you stop him."

"Any instructions from Q?"

"None. But he told me to tell you that quote: 'If you pull this off, Kid, I'll personally insure that your food Rational will be doubled.' He also said (choke); good luck."

The Kid had left Mr. Infinity barely an hour before, and was deriving home in his Calculusmobile with the attractively curvilinear bucket seats, when disaster struck. The car swerved uncontrollably, then seemed to be following a Hyperbolic trajectory towards a grove of Algebraic Approximations. The Kid loaded his Derivative — a type of Dis-integrator gun — and prepared for action.

The car slowed down until its velocity approached zero. The Kid jumped out. He crept stealthily towards the Algebraic Approximations. A horrendous sight met his gaze. An army of Irrationals were practising drill. They goosestepped backwards in perfect unison, and as they marched they sang an old Polar refrain:

Tramp! Tramp! Tramp! Smash  
and Stomp!

Onward! Onward! March to the  
Poles!

The square root of two forever  
and

Irrationalized derivatives are our  
goals!

It didn't have much of a tune but to the Kid it seemed terrifying.

"Enjoying the view? (snigger, snigger)" came a voice from behind the Kid. He spun round on his moment of inertia.

"Ah! Dr. Polynomial! We meet again." He aimed his Derivative and pulled the trigger. Nothing happened. "What have you done to my Derivative, Polly?" he asked, knowing the nickname annoyed him.

"A simple Wave Modular Anti-derivative Logarithm Generator. Nothing complex."

The Kid had to admit that he was beaten. Evil as Dr. Polynomial was, one had to admire his Homogenous. The Kid tried a bluff. "I'll have you know that at this moment, there are approximately 100  $\frac{3}{4}$ ! Co-efficients surrounding this encampment."

"At this moment' you say. Let's be relativistic. Surely you know that simultaneity is inconsistent in this continuum. Don't be naive."

The Kid tried to make a bargain. "Listen, Polynomial. If you let me go I'll give you my complete collection of Third-Order Partial Derivatives — no questions asked. I'll even throw in a Simple Harmonic Increment for Trapezoid."

"Nuts and Double Nuts exponentially extrapolated!" replied Polynomial angrily.

Suddenly, the Kid remembered his Utility Belt. With a deft motion, he extracted an Abelian Ring - somewhat resembling a hula-hoop - and dropped it over Polynomial's head, pinning his arms.

"Sorry, Polynomial, but your evil plot will have to be Interpolated Indefinitely. In a word, your Hamiltonian's tangential. old bean."

"I don't know how you did it, Kid, but congratulations."

"It was nothing, Infinity. Polynomial was clever but he forgot one thing."

"What was that?" asked Mr. Infinity, taking a bit of chocolate covered torus.

"He underestimated Calculus. Thought he could create a perfect society using only Analytical Geometry and Finite Chromatic Probability Curves. It's just one more example of the errors of totalitarian regimes and non-Euclidean Parameters."

"Ah..." grinned Infinity, "...you're a philosopher, I see."

Calculus merely smiled and muttered, "No. It just goes to show that Isomorphism will out no matter what the Nilpotent." He pushed a dish towards him. "Have a matrix - on me."

And so, once again, the Free World was safe. The Cartesian-Polar war was drawing to a close, after economic sanctions by the King of Argand were withdrawn. Peace reigned supreme over Cartesian. The Calculus Kid had done it again.

## INNER TUBE WATER POLO

The Math Sea Horses play their first game of the season on Sunday September 24th, at the PAC pool at 7:45 p.m. If you signed the list, please be there. Even if you didn't and would like to play, show up.

jrbakker

Honourary Coach

*Faster than an electric toothbrush, more powerful than tooth decay, able to leap a bi-cuspid in a single bound. Look sitting on the dentist's chair, it's a drill! No, it's a novacaine shot! No, it's ...*

## Supermouth!!

*Yes ladies and gentlemen, it's Supermouth, who as a wisdom tooth, was extracted from his home planet Molar, when it became impacted.*

*Now, as mild-mannered Clark Cuspid for the Daily Denture, is able to fight for Tooth, Dental Floss, and the Ultra-Bright Way!!!*

It was an average day, in the average city of Molartropolis. Everything was peaceful ... until..

Perry Brush was briefing his staff of bright(?), young cuspidors on their next assignment, when (*Drum Roll*) suddenly an unexpected news flash came over the radio:

*"Unexpected News Flash:*

*Buck Tooth has just managed to rob the City Bank, and foil the police while making his get-away. It seems that he stops cops with a special net made out of Waxed Johnson & Johnson Dental Floss. The case keeps slipping out of their fingers!"*

Brush to his staff: "I want you to get right out there and find us a story! This looks like something you can really sink your teeth into!!"

"But Perry", Cried Lois Macleanes, "every time we get into a case that looks dangerous Clark Cuspid, runs away and hides. If he didn't look so down in the mouth, all the time, I would begin to think he was supermouth!"

*(Oh oh, gasps the crowd. Suspicion rears it's not-so-ugly head!!!)*

"But Lois!!", protests Clark Cuspid, "You know I detest violence"

*Yes but does he mind a good Cello Concerto??*

"Lois you're just jealous", snapped Jimmy Floss—up-and-coming cub cuspidor.

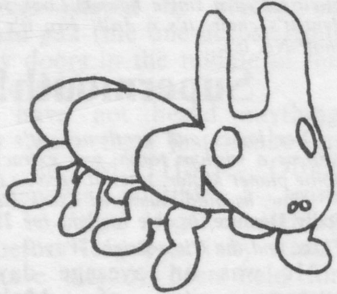
Oh well, time's up for today. Stay tuned for our next episode, when we answer the great unanswered question such as:

- 1) Will Buck Tooth get away with robbing the bank or will he rot in jail?
- 1) Will Clark Cuspid finally notice Lois Macleanes's new Hairdo?
- 1) Will Mickey Rooney finally get elevator shoes under his pillow instead of the money the tooth fairy's been leaving all these past years?



## MATH CAREERS DAY

*Wednesday, September 27, 1978*

10:30 a.m.	MC 1050 <b>STATISTICS</b>  G. Stein	MC 2065 <b>OPERATIONS RESEARCH</b>  R. Burns University of Waterloo	MC 1052 <b>BANKING</b>  D. Anderson Toronto-Dominion Bank
11:30 a.m.		MC1050 <b>TEACHING (High School)</b>  P. Atkinson Elmira D. H. S.	MC 2065 <b>COMPUTER SCIENCE</b>  M. Asner Gellman, Hayward & Partners
1:30 p.m.	MC 1050 <b>INSURANCE/ACTUARIAL SCIENCE</b>  D. Horman Dominion Life Assurance Co.	MC 2066 <b>CHARTERED ACCOUNTING (CA)</b>	MC 2065 <b>COMPUTER SCIENCE</b>  M. Asner Gellman, Hayward & Partners
2:30 p.m.	MC 2065 <b>APPLIED MATH</b>  I. M'Gee University of Waterloo	MC 2066 <b>MANAGEMENT ACCOUNTING (RIA)</b>	MC 3009 <b>MARKETING</b>  R. Sadler IBM Canada Ltd.

masthead: this is your devoted pseudo-editor setting some kind of world record by starting this TYPED masthead at 9:35 PM on Tuesday...if you haven't heard, the deadline for submissions is now Tuesday noon (1:30 if you type it in yourself); it's amazing how an issue can appear out of nowhere! Contributors this week were jim haller, andrew malton, ted macneil, mmilosevic, ken dykes, jim pattison, and jan gray...phil kelly and doug mcinroy did a lot of layout and pastedown... ashok patel and kevin martin did most of the photoning (damn thing worked this week) applicants wanted for the position of johann george, apply c/o the CSC office... a special hello to noreen the descartes scholar, drop in and chat sometime. Erin nevell and barbara (may she never stop it) need did...our userid is mathnews, drop us a line on the 'bun, or in the grey mailbox on the third floor...you too can write a Zap! or a letter to feedback or nardcia mathie; maybe do a TAKITI prize of the week. Where are S.H., Puffar, ruth harris and mike velster? we miss you... this is prabhakar ragde signing off (much too early says I) but he's a reactionary) I would say BSIG here but I promised I wouldn't. Do things I wouldn't do.

p.s: can anyone explain "talking heads '77" to me?