

Volume 57 Number 7

math **NEWS**

Tuesday, December 3, 1991



Fed Up

New stuff that you should know about...

Peter Hopkins' (aka Dean of Students, aka APSA) Campus Needs Committee sent its recommendation to Feds' Student Council that a referendum be held to solicit student votes on a student needs centre. Based on your returned surveys and general discussion I did vote in favour of the committee's recommendation. Fed council will be meeting in the new year and will at that time consider the Campus Needs Committee's recommendation and decide whether or not to go to a referendum.

Free Fed concerts in January? Maybe. Show your support for free concerts by camp outs, protests, and riots, or simply tell Steve in the Fed office.

Currently MathSoc is given two pub nights a term for Fed Hall and the Shelter. Feds are considering allowing only one night a term for a pub. Agree or disagree or apathe. Tell MathSoc and/or Feds what you think of this.

And what could be more exciting than a Feds general meeting! In the past, free beer has been available at these meetings but due to cutbacks we had to settle for door prizes. Changes to the Women's Issues Board and the proposed deletion of the International Students Board were the only hot topics of the night. And I must thank everyone who organized the meeting as it was the shortest general meeting I'd ever been to.

Be sure to have a great time doing that Christmas thing, eh!

Mike Ab

CRO Report

The Spring 1992 MathSoc executive has been chosen.

The results were as follows:

| | | |
|----------------|------------------------|-----|
| President | Eric Sutherland | 77 |
| | Mike Reade | 74 |
| | Dale Wick | 23 |
| | spoiled | 10 |
| Vice-President | Elaine Ooi | 110 |
| | Erich Jacoby | 36 |
| | Mike Melvin | 29 |
| | spoiled | 9 |
| Treasurer | Barb Torner | 115 |
| | Erick Homier | 61 |
| | spoiled | 9 |

The voter turnout was 7.0% of eligible voters. Thanks to all for a good campaign and congratulations and good luck to the summer exec.

Jerome Nantel, CRO

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Editor: Curtis Desjardins and Christina Caldarelli

Club Stat

Wow! End of classes are here. Hard to believe. We've sort of missed the last few deadlines, which is the reason you haven't heard from us for a while.

On Tuesday, November 12 we had two Waterloo Alumni speak on Industrial Problem Solving: Greg Carriere from the Quality Resource Centre at General Motors in Oshawa and Murray Pyle, manager, Statistical Methods B/D platform at General Motors in Warren, Michigan. Both did an excellent job in opening eyes towards possible careers and opportunities in statistics.

Our end of term party was...well...enjoyable! for those that attended. Watch for a sellout in the summer.

We have one more thing happening before Christmas.

- MEMBERS ONLY EXAM REVIEW SESSION
STAT 230: Wednesday December 4th, 7-9 p.m. MC5158
STAT 231: Monday December 9th, 7-9 p.m. MC5158

An excellent way to help you study.

Have an awesome holiday and a great work term. See you at Club Stat when we return.

THE EXECUTIVE!

ATTENTION GRADS!!

Well guys, it's been a great term! Yuk Yuk's was definitely memorable! We want to express a special thanks to all those who helped out - we wouldn't have been able to do it without all of you!! And to those who spent extra-long hours and were consistently there, we've got our top five volunteers: Kevin Denstedt, Ken McKay, Dave Smith, Teresa Lee, and Jeff Shiner.

Last minute notes:

- "UW Band." rings have arrived. If you missed the pick-up date yesterday, we will be contacting you directly. Or you can leave a note in the MGC office or MathSoc for Anne Hastings to arrange a pick-up time. The "crested" rings will be in at a later date - you will be contacted directly.
- If you're leaving this term - be sure to fill out your intent to Graduate form. (They can be found at Needles Hall.) And leave a forwarding address with MGC.
- Don't forget to hand-in those yearbook blurbs. Remember: if we don't have one for you, your blurb is at the mercy of our yearbook staff! (Oh no!!)
- We are starting our search for pictures to be used in a slide show at our MGB! So look for those pictures of memorable events and people from throughout your years here. While you're at it - we are always ready to accept new pictures for the yearbook!

See you next term!

Angie Wong
MGC chairperson

P.S. To welcome back everyone, we've planned an event on January 16. So watch for details and come out to meet the "other half" of our graduating class!

Excuses, Excuses

Trials and tribulations of a former mathie

This is a serious article. I don't take my education lightly any more.

Last fall I started at U(W) in co-op honours math. I assumed that I would do fairly well, and basically cruise through university to my degree. Well, I will eventually get there, but not without some major hurdles.

Distractions can be fatal to a first-year student. I knew in 1A that my marks weren't going to be anything spectacular, but nothing could have prepared me for the marks report I got in January. Out of 5.5 courses, I failed 5. Not exactly a good position to be in, but with perseverance, it would have been possible to pull through until fourth year without dropping out.

Coming back in spring 91 from my work term, I was determined to do better. So, I resolved to actually do my assignments, and keep working throughout the term. Yah, right. Summer? Distractions galore, and I wasn't able to apply myself enough to my studies. I failed another 2 courses that term, bringing the total in 2 consecutive terms to 7. If you fail 6 in two consecutive terms, it's up to the faculty. In my case, I was 'required to withdraw.'

I looked into transferring into another faculty, but due to the recession and such, all faculties were full. Even Arts wouldn't look at me. Which brings me to where I am now. I'm taking the requisite 2 terms off school before the math faculty will look at me. I'm doing the 3 pre-university math correspondence courses on my own, and I'm taking study skills counselling at Needles Hall. Coming out of high school with a decent average, I never dreamed I'd be stuck in this position. Now, if all goes well, I'll be re-accepted into math in spring 92, and return to a degree program that fall. If I don't pull it off this time, I may end up in a retail sales position somewhere, basically a dead-end job. I've learned my lesson the hard way. Hopefully, someone reading this will learn from my mistakes. You can continue making excuses to yourself until you're blue in the face, but you have to answer up to yourself. I did, and I'm really kicking myself for it now. In 6 years from now, I intend to have a university degree and a good progressive job.

$\frac{d}{dx}$

CSC Flash

Keep the tea kettles boiling

It is with great sadness that I, Calum T. Dalek, chairbeing, and mentor of the Computer Science Club, acknowledge that the End Of Term (or control-D) Dinner has come, and gone. The term has been a productive one, and my executive has served the club well. I know that exams loom in the near future for the dedicated members, and I hope they will drop by the club and say "Hi" to a friendly office staffer. They, for a change, could use your help in their studies, but of course are still willing to help you out as well.

The most recent activities were very successful. The talk on Cryptology was decrypted, and was enjoyed by those who attended. Also, the talk by Prof. Cormack went well. Also, the 8th annual Othello Tournament successfully pit some of the best programs against each other. This year the winner was Steve Scott's "Harold", which is his third win in a row. Colin Springer also entered himself as an unofficial human player, and unofficially came in second.

I look forward to seeing you in the next term, and until then, I'm off to my yacht in the Mediterranean, so may all of your tomorrows be full of sunshine.

Calum T. Dalek

feedBACH

To Mike Reade and Betty-Jo Hill, Editors, *mathNEWS*

I was really disappointed to see the cover of the most recent issue of *mathNEWS* (Friday, November 8, 1991). I found the cartoon to be in very poor taste; it hardly conveys the kind of image of the Faculty of Mathematics that either you or I would think of as appropriate.

I hope that you will review your editorial policies.

Jack Kalbfleisch
Dean of Mathematics

Colouring Contest Results

Well, we had a lot of entries in the n^{th} official *mathNEWS* Colouring Contest (23 if you want to be precise), and choosing a winner was tough. Almost everyone managed to locate the pink tie, but some entries were more... well, individual than others. After extended deliberation, and a few fistfights, the *mathNEWS* staff decided that the entry with green Martians all over it was just strange enough to win.

The winner is S.C.C.Y. (Artsie "wanna be" mathie, or is it... mathie "wanna be" artsie?) You can pick up your prize in MathSoc (if you show up when they're open), or you can slip your name and phone number under the *mathNEWS* door, and we'll contact you about meeting you and handing over the prize. Congratulations.

GINO'S PIZZA

Try a little bite of Italy

747-9888

The Official Pizza of *math NEWS*

160 University Ave. W.
Waterloo



Free 6 Pack of Coke
with
2 MEDIUM PIZZAS
(5 toppings)

\$12.99 Gino's
Pizza

Offer expires Dec 31 1991

Free 6 Pack of Coke
with
2 LARGE PIZZAS
(5 toppings)

\$15.99 Gino's
Pizza

Offer expires Dec 31 1991

Spike Muldoon: In Search of Humor

The morning was not a regular one for Spike. Mind you, not many mornings were regular for Spike, but this one was especially irregular. The confusing part was that it had started off just like all the rest. He stared at his door, if it could be called a door any more. The closest comparison at this point would have been the kind of mirrors that you find in department stores so that you can see, but can't be seen from the other side. From within the office, his door pretended to be like it had every other time he had looked at it. Clearly across the frosted glass could be read in the usual backwards print: Spike Muldoon, Private Eye. In fact, if he watched carefully, he could see his secretary wander about the waiting room, oblivious to his problem.

Spike got up from from his desk, walked over to the door, and for the third time that morning opened it to be confronted by a mysterious brick wall which completely closed off what used to be his doorway. He shut the door with the utter frustration that comes with the knowledge that your day is definitely not going to end up how you'd planned it.

He glanced backwards at his desk, but it only shrugged back at him as if to say, "You're on your own this time."

<The author wishes to note that the desk has seldom offered Spike any constructive solutions although it has been the object of intense observation on several occasions>

Spike returned his thoughts to the strange man who had visited just before the first incident with the door. The man, whose name he now remembered to be Mike, was not different in any physical respect. It was more to do with the surprising request he had made of Spike.

"I want you to find my sense of humor," asked Mike plainly enough.

In all Spike's years as a Private Investigator, he had never been asked to find something as unusual as a sense of humor, although the incident with the Cheese Wiz was a close second.

Spike sat back down at his desk and looked at the strange magazine the visitor had left him. On the front, amidst the lewd pictures of chickens could be seen the title "Algebraic Tidings". He scanned a few of the articles. Among them were some interesting quotes and a very strange serial to do with a "Captain Screw-up". It was all very entertaining and some of it was even funny.

Spike activated the intercom that sat innocently on his desk. "Miss McLamford, do you remember when Mike said he'd be back?" he asked.

Miss McLamford opened the door a small crack, ducked her head in the room and responded, "Any minute now. He said he just had run out to get some pizza from Guido's or something..."

Spike was just about to ask her how she had managed to open the door with that silly brick wall in the way when she left, closing the door behind her. Spike ran to the door, ripping it open only to discover a brick wall in the same place it shouldn't be. He sent several kicks at the door followed by a barrage of insults after which he limped back to his desk to sit down.

He was just about to try something devious like asking his secretary to come in and hold the door for him when Mike wandered back in to his office, accidentally spilling a bottle of liquid on the floor. He looked at Mike with a puzzled expression. Mike returned his gaze with a look that said something like, "I dunno, wasn't it here when I came in?"

Spike decided to let it pass and instead concentrated on the appointed task of locating the missing sense of humor. "Well," began Spike. "I looked at the magazine you left me, and frankly I have no idea why you even left it here." said Spike.

"Well, it's who I work for, you see," he explained. "It's just

that everyone else who works there has a sense of humor, except me."

"What makes you so sure you don't have a sense of humor?" Spike asked.

"Well, nobody laughs at anything I do... I mean even the stupid things. I think that someone has stolen my sense of humor."

"Whoa, wait a sec," said Spike as he mentally recalled the number for the Psych ward at the hospital. (He'd had a few occasions to use it.)

"Which one of these articles did you write?"

"That's just it," said Mike. "I didn't. I'm the editor."

"Ahh, well... that explains everything," said Spike in the same tone used by doctors when they've just read an X-ray.

"What?", said Mike all excited.

"That's it. You're an editor," he said as if it explained everything.

"I don't get it," said Mike.

"Editors aren't meant to be funny. They just have to proof-read stuff," said Spike, looking over his shoulder making sure that nobody from the American Writers Guild had crept into the room while he wasn't looking.

"Oh" said Mike happily. "So there's nothing wrong with me?"

"Nothing that a five dollar haircut and braces wouldn't fix," mumbled Spike.

"Huh?"

"Oh nothing," said Spike. "Case solved."

"Wow, thanks!" said Mike as he skipped happily from the room.

Spike dove for the door, trying to catch it before it closed. Unfortunately, he fell short. More specifically, he fell. Spike got up and was about kick his desk as punishment for trying to trip him, but he remembered the incident with the brick wall and decided that he'd take care of his desk later. (When his foot had had time to heal.)

He opened the door a crack. There at her desk staring back at him was Miss McLamford.

"Somthin' I can do for ya, Mr. Muldoon?"

"No! Yes! I mean I'm not too sure," said Spike.

"Yes," said Spike, finally making up his mind. "Take a letter, address it to God. Tell him to cut it out!"

The Bitsnatcher



Christmas Gift Ideas for the Politically Correct

Cabbage Patch Vegetarian Talking Kid

These wonderful little kids will cry "Meat is murder" when fed non-vegetarian pabulum. They also prefer mother's milk over cow's milk. Rechargeable batteries included.

G.I. Guy and Friends Action Set

Guy and his posse of feminists, homosexuals, and ethnic groups are on a mission to defeat the oppressive Cobra (who is in the likeness of a white male). Each figure comes with its own refillable pen and recycled paper. All warfare is done by writing to the Master Editor.

Beetlejuice, Jr.

Ok, ok, so the old man was a lunatic. But Junior has his own mission, which is to rid the civilized world of all forms of traditional religion. In their place he's instituting spiritualism and witchcraft. Toy doll comes with new age crystals, wiccan manual, and a Bob Dobbs tape.

Rainbow Warrior Model Schooner

Sail the streams with this realistic wind-powered schooner! Endorsed by Greenpeace, this model promises to stick its bow into every other ship's business.

Johnny Loves Frankie Playset (Dance Club)

Unlike any other action figure, these come with special joints for maximum flexibility - the number of postures are innumerable! Dress them right, and they'll avoid any fistfights. Samples of cologne included.

Sea Rescuers (video, animated)

Join these vigilante mice on their crusade to free marine animals from "showcase" captivity, while dodging white male oppressors.

Colour-Me Paint-by-numbers Set

This faces-of-the-world edition will come with fleshtone paints so you can bring them to life in vivid colour. Ivory colour not included.

Who Are You? Board Game

Make appeals by writing to Master Editor for ethnic distinction. The best appeal wins the player special attention and endless privileges for the rest of his life. The remaining contestants continue to play until everybody has won. This game is an excellent choice for losers.

1984 (video, movie)

Based on the novel by George Orwell, this movie sets an excellent example on how to enforce Politically Correct viewpoints on society. Long-live the Thought Police!

Beaches

Yes, They Know It's Finals

*Sung to "Do They Know It's Christmas"
With Apologies to Midge Ure and Bob Geldof*

(This song originally appeared in the Dec. 2, 1988 issue of mathNEWS)

It's finals time
There's good reason to be afraid
At finals time
We solve for x and differentiate
And with our load of textbooks we can moan a sigh of grief
Cram all night and rack your brains at finals time

And say a prayer
Pray hard that you will pass
Then find a desk
Open a book and sit on your ass
This one covers forty chapters, so sit tight, don't hit the roof
'Cause all you have to do now is learn about a million proofs
And as we head into December, we're all prepared for certain doom
And the profs laugh 'cause it's not them, instead it's you

No, they won't be partying in Waterloo at finals time
They greatest mark they'll get this year ain't nice
Where IQ's never grow
No thoughts, no brainwaves flow
Yes, they know it's finals time again

Here's to you, let's hope it's not too severe
Here's to them, take it all over next year
Yes, they know it's finals time again

(Hit the books) Get no sleep, it's finals time again

The Medieval Gladiator

25th Anniversary Celebration needs YOUR help

As part of the 25th Anniversary Celebrations of the Faculty of Mathematics in 1992, the Faculty is considering naming MC2065 and 2066 lecture halls after two mathematicians. The 25th Anniversary Committee is soliciting feedback from administration, faculty and students on this idea. What do you think?

I like the idea on naming the lecture halls after mathematicians. (Circle) Yes or No

Why or why not?

My suggestions for names:

Please return this form to MathSOC (MC3038) by December 2, 1991. Additional comments on this proposal can be directed to Betty-Jo Hill or Eric Sutherland at MathSOC.

Prof Quotes

Let's all take a moment to think about how much we will miss our professors' rambling over the winter (for those lucky enough to be heading out to a work term) or over the Christmas holidays. Now that that's over with, get set to enjoy the last of the prof quotes for this term.

"Oh, you're not copying this crap down, are you?"

Roberts, Earth 121

"Back when men were men and women were glad of it... we didn't have calculators, just wet clay."

R. Brown, ActSci 363

"Why do middle class Canadians bend over and take it in the butt all the time?"

B. Scott, Econ 302

"If I finger myself, I should get some results."

A. Dyck, CS 131

"It gets up there but it's not ready yet so it falls... so it says to itself: I've gotta get up there because I'm continuous."

Scoins, Math 137

"We should get rid of these people... I did *not* say we should kill them."

Blake, MSci 211

"...and we all know how to wrestle kangaroos to the ground."

Jackson, C&O 230

"Just remember I'm doing this for your benefit, not for mine. I'm not going to enjoy this. This is what you're paying your tuition fees for."

Panjer, ActSci 332

"If I give you a basis, ... put your hand down. If I give you a basis, ... OK, what's your question?"

Limber, Math 235

Top Ten Things to do on a Work Term

10. Act busy (Read news, play games, etc.).
9. Take breaks.
8. Stock up on pens & paper for school.
7. Write a novel.
6. Make paper clip art.
5. Try to remember all the words to The Fall Guy theme song.
4. Hook up a stereo system throughout several offices.
3. Practise your juggling.
2. Learn to write your name so it reads the same upside-down as right-side-up.
1. Make up stupid top ten lists.

Mouse # 2

"Go get a life... get laid or something!"

Ferguson, Engl 208B

"Sex has been known to be much more fun when there is more than one person involved."

Rempel, Psych 253

"Now that you've done my evaluation, I can tell you I'm a dolt."

J. Graham, CS 230

"We assume that everyone is competent to do arithmetic—except the instructor at the front of the class."

Morrison, Phys 121

"This is not a proof by intimidation, rather one by persuasion."

Eastman, Sci 205

"What we have here is the largest toilet roll in the world, and later we will find out that it's also the fastest... It's a totally useless toilet roll because it's totally frictionless. What can you do with a frictionless toilet roll?"

Morrison, Phys 121

"Give me some negative points on the prof evaluation."

F. Zorzitto, Math 147

"Let me finish before I put you to sleep."

F. Zorzitto, Math 147

"It says, 'I'm going to infinity and you're coming with me.'"

F. Zorzitto, Math 147

"Forget base ten. Cut off your fingers."

F. Zorzitto, Math 147

"Anyone caught holding hands in my class will be married this afternoon."

F. Reynolds, Mthel 305A

Proof of the Week

To Prove: There are no uninteresting numbers.

Proof:

Assume there are uninteresting numbers.

We know 0 is interesting since it is the only non-positive and non-negative number. Moving from 0 in the positive or negative directions one must eventually encounter an uninteresting number since they exist. The first uninteresting number encountered will be the one closest to zero. Since this is the first uninteresting number, this makes it interesting. Contradiction.

Therefore, there are no uninteresting numbers.

MacGyver

mastHEAD

Well, it's the end of another fun-filled and exciting term here at *mathNEWS* and guess what? You have two new editors tonight. Curtis will be the editor for the winter term, and I'll be back for the summer.

After due and careful deliberation, I've come to the conclusion that the reason that I became an editor is because I couldn't write. Therefore, I am not going to write anything interesting or funny here, and in future I'm going to avoid the mastHEAD at all costs. Sorry. Anyway, here are all the people who came out to help tonight, together with their term, major and favourite thing they've accomplished this term:

Ian Goldberg (1N PMATH/CS, Learning how to survive without eating Village food), Eric Sutherland (2A C&O, Becoming a MathSoc love child), Barb Torner (3A Accounting, Walking through walls), Adam Benjamin (2A CS/Geek, Surviving with all my marbles), Betty-Jo Hill (3B Act Sci, Staying awake through Pensions), Mike Hammond (1A Math, Writing for *mathNEWS* (of course)), Jon Litchfield (1A (NOT), power sleeping), Stuart Pollock (1A, Passing (I Hope)), Brian Spencer (1A Math, Remaining Politically Incorrect), Caryn Babstock (3B CS/Bus, Getting a job!!), Dale Wick (2A Math, Getting *mathNEWS* pizza), Rob Del Mundo (3B CS/C&O, Accomplishments? We don't need any steenking accomplishments!), Mark Brockington (4A Physics, Telling Brent and Dee to be quiet), Bunter Williams (1A CS, ... ahh...err...let me think...hmm...), Phil Rittenhouse (3B CS/EEE, Passing ALL my midterms), Bill McEachern (3B CS, Making it to *mathNEWS* most of the time), Mike Reade (2B CS, Shortening the year by sleeping every second day), Kingsley Woodward (1A Math, Fixing the photocopier).

Thanks to everyone who showed up, and also to Gino's pizza and Marion at Graphics Services. We couldn't do it without you!

Christina Caldarelli (3B Act Sci, Getting to slightly more than half of my 8:30's)
Curtis Desjardins (4A Naps, Not sleeping through any of my classes this term)

Math Profs Wanted

Qualifications:

1. Can you talk for hours and not have anyone understand you?
2. Did you get your degree in a foreign country and in a foreign language?
3. Can you make university students scatter in fear at your exams and assignments?
4. Do you hate office hours and avoid them at all costs?
5. Does the thought of integrating a function of 6 variables give you a great big chub?

Then the University of Waterloo Math Faculty wants you!
(People who can write useful text books or notes need not apply.)

The Mad Stork
Spandex Man

Review of the Year

As the year draws to close, and this is the last issue of 1991, we feel that it is appropriate to give a review of this year almost past. This year was the second of a ten part series dubbed the nineties. It proved to anti-climactic after all the hoopla surrounding the first part, but nonetheless, was fairly well constructed. It contained the standard 365 days and 12 months, the layout of which was not too bad but nothing special. A little more symmetry between the length of the months could have been possible, but the differences were not all that significant.

Advance notice of next year's plan shows a little bit of an improvement in February, where the number of days has been increased to 29, but this improvement is marred by the rule-bending method used to accomplish it. The powers that be awarded another year of experience to everyone, noting that this is the 1991st time since the birth of Christ that they have been able to do so. On a side note, several well-known intellectuals have claimed that this cannot continue much longer, but rumour has it they are just jealous because they are on the brink of death from emptyheaditis.

Fortunately, we did not have such controversy this year. It was a banner year for clocks and watches everywhere as they had no irregularities to do deal with. The year was generally well accepted by the public, almost no complaints were voiced, except by a few movie stars who whined about their impending aging, but who really listens to what they say anyways?

So have a good one, keep Molson and Labatt's in business over Xmas if you so desire, and remain, at all times, at least 100 km from UW.

The Nihilistic Simpleton



LSD Reconsidered

It would seem to me that people today are no wiser than twenty, even one-hundred years ago. The type of propaganda that caused the German people to rally behind Hitler is working today to convince people of the terrible nature of drugs. I would like to discuss at this time the nature of a certain class of drugs termed "psychedelic."

The class of psychedelic drugs includes LSD, Magic Mushrooms, DMT, and a number of other more modern designer types. Herein I will refer to LSD although many of the comments apply also to other psychedelics. LSD has been under study since its effects on the psyche were discovered in the early forties. I have read more articles, books, studies, and reports than I could possibly remember or begin to recount. The point here is that they all lead to the same conclusion: LSD is safe. A number of scare stories have circulated since the sixties about LSD and other drugs. They turned out to be nothing but that — meaningless scare stories. LSD has been shown to have no effect on chromosomes, has not been shown to cause brain damage, and has not been linked to any other kind of direct or indirect harm to anyone.

The reader may wish to pick up a copy of a paper about psychedelics published by the Addiction Research Foundation available at Councelling Services. This publication does its best to scare people away from these substances but it fails in that it must exaggerate remote possibilities. It mentions the possibility of "flash-backs", a recurrence of the drug induced state without having done the drug. Having done immense amounts myself on numerous occasions and knowing a great many others who have done it all without ever experiencing a flash-back, I must question whether such a phenomenon really exists. Even if such a thing is possible, I question just how dangerous it could be. The LSD state of mind is not debilitating. Many times while under great doses I have had to argue strenuously with others the fact that I had taken some. It is very difficult for people to know you are on something when you take LSD.

Another issue raised in this pamphlet is the possibility of a bad trip. I have had one and have witnessed others. It was not a problem for myself or any other one I witnessed or heard about. Furthermore, the literature on the subject indicates something that coincides with my own view. The bad trip, while it is an unpleasant experience, leads to a better understanding of a problem you are having. The bad trip is caused by such problem and by facing it in such a dramatic and unrestricted way it is possible to resolve it immediately. For example, if you had repressed some dramatic experience in your life and it suddenly surfaced during an LSD "session", it can be handled without any defence mechanisms, dealt with and resolved. This, of course, presumes that you have some knowledge of psychology or a good friend nearby to speak to about what you are experiencing.

I can also begin here to state the many benefits reported by the literature. Studies indicate it is helpful in creative problem solving. Research by Dr. Humphry Osmond and others out in Saskatchewan during the early sixties convinced the provincial government that LSD was the only cure for alcoholism, and was considered so in a legal sense. Other studies have included curing schizophrenics and psychopaths, rehabilitating convicts in a prison, and even ESP experiments have been done. Most people who have been involved in experiments during the fifties and sixties have emphasized that LSD has made them a better person, they were glad they did it, and most showed no interest in doing it again (non-addictive!).

I would like the readers of *mathNEWS*, assumedly intelligent people, to reconsider their prejudices on drugs, their illegality, and potential for harm. Drugs are safer than we are told. In fact, the biggest thing to fear for a user is the law, not the drug.

For further information, visit a good library; you'd be surprised at how safe drugs are and how interesting their effects.

A Cost-Benefit Analysis of GreyhoundNet

In this article we will examine the various costs and benefits associated with certain means of passenger-structure transmission. There are a number of fare-based passenger-structure transmission nets which are public access. The most popular in Canada are GreyhoundNet, VIA Net, and AirNet. There are also some non-fare-based transmission nets, most notably AutoNet, which we will not discuss; although they often use the very same wires as GreyhoundNet, they are of limited use as they require the user to purchase a very expensive transmission device costing more than a typical personal computer, which has extremely high operating costs and depreciates rapidly.

For short distances, the cost of using GreyhoundNet or other bus-based nets is typically between 10 and 30 cents per passenger-structure-kilometre, which includes all transmission costs for baggage-structures although it does not include meals. However, as the fare structure is capped (above a certain distance, extra mileage is free), this rate decreases as the distance increases. For instance, a one-way ticket from Kitchener to Saskatoon, bought in advance, costs \$140, which works out to under 5 cents per kilometre (plus meals). Average propagation speed (including stops) is 75 km/h, and there are scheduled buses each way thrice daily.

VIA Net uses a completely different propagation system from GreyhoundNet, involving pairs of thick unshielded copper wires known as 'rails'. The propagation qualities of these are fascinating, but outside the scope of this article. This 'train-based' propagation technique attains an average speed of about 125 km/h, but it costs considerably more as the rails are not publicly maintained. Additionally, trains run less frequently than buses: using the Kitchener-to-Saskatoon example again, trains run but three times a week and cost \$240 plus meals.

AirNet uses yet another propagation system which results in extremely high transmission speeds as well as no need for a specifically constructed net, as the 'wireless' technology requires only a terminal at either end, with occasional signal-enhancing, or 'refueling', terminals if the propagation distance is very long. Surprisingly, the cost of transmission is comparable to that of VIA Net over a long distance. AirNet has a number of disadvantages, however, compared to its competitors: it has relatively few terminals which are generally located inconveniently far from the centre of a city, which results in extra propagation costs for the passenger-structure to complete the trip; and although meals are included, some passenger-structures are constructed so that they lose information when transmitted, in a process known as 'air sickness'.

Mr. Death

They Came From Outer Space

Billy Joe Bob aimed his shotgun at the bulbous head of the hideous creature approaching him. He could hardly believe the changes the world had witnessed in the past few weeks.

When the Goozles had first arrived, the world had been nervous but friendly. And when the aliens had announced via a global simulcast that they came to Earth on a humanitarian mission the people of Earth had breathed a collective sigh of relief. They had, of course, misunderstood. The Goozles had assumed that a humanitarian was akin to a vegetarian.

The galactic meat grinders had been churning out homoburgers ever since in a desperate attempt to satisfy the demand of the celestial fast food chains.

Would Billy Joe Bob have been so brave if he had known that he was the last human left on Earth ...

And now for something completely different.

This Week In Space

The space shuttle Atlantis had its November 19 launch scrubbed due to a problem with its cargo, a DSP satellite. The launch was successful November 24, at 6:44 pm. The Defence Support Program satellite was deployed on time to watch for missile launches. The crew performed experiments with lower body negative pressure to simulate a 1-g load on the lower limbs. The tests are aimed at determining inflight medical protocols to mitigate the adverse effects of prolonged stays in microgravity.

A three-man capsule is currently under-going testing prior to its planned non-stop, around-the-world balloon flight. The capsule, Earthwinds, will fly at 35,000 ft and carry, along with its international crew, three NASA atmospheric instruments to record ozone, pollution, and wind shear conditions throughout the flight. The balloon is scheduled to take off from Akron sometime between now and February 1992.

Canada's Spar Aerospace Ltd. reported earning \$6.835 million for its 3rd quarter, compared with last years \$1.623 million. The company's work on Space Station Freedom, MobileSat, and Radarsat are responsible for the improvement.

Biosphere 2, the self-contained 'world' which sealed itself off recently, has released its first monthly report. Linda Leigh, the botanist/biospherian, reports that the carbon dioxide levels inside the facility are higher than they are outside but pose no threat to the inhabitants.

A scanned image of the Gaspra asteroid returned by Galileo is available in GIF format on Descartes in the file /u/prittenhouse/bitmaps/gaspra.gif

ESA's largest satellite, Eureka, is now in the US preparing for a July, 1992 launch aboard the Space Shuttle Atlantis. Eureka (EUropean REtrievable CARRIER) is designed to take up to one tonne of experiments into orbit for approximately 10 months and return them, via the shuttle, to Earth. Being free of a crew allows Eureka to provide a microgravity environment with accelerations not exceeding 10^{-5} g's.

Caltech and JPL researchers, using Earth-based radar imaging, believe they have spotted huge sheets of ice at Mercury's north pole. The news is heartening to scientists who believe water ice might be found at the lunar poles.

Over 3 million kg of orbital debris currently circles the Earth, according to a report from NASA Johnson Space Center. Almost 95 percent of the tracked objects are non-functional; 39 percent are fragments.

MacGyver

The Pumping Lemma

...with Hans and Franz

I am Hans.

And I am Franz, and we're here to teach you the Pumping (clap) Lemma.

O.K. We have recently seen several proofs that were very flabby.

Yah. That's right Hans, when I see such a weak girly-man proof I just want to take it and pick it apart until its little tiny pieces are so stoopid a little child could see it's wrong.

Yah. And then I show them my amazing godlike proofs and they break down and cry like the little girly-men they are.

O.K. enough talk. We're here to teach you the Pumping (clap) Lemma.

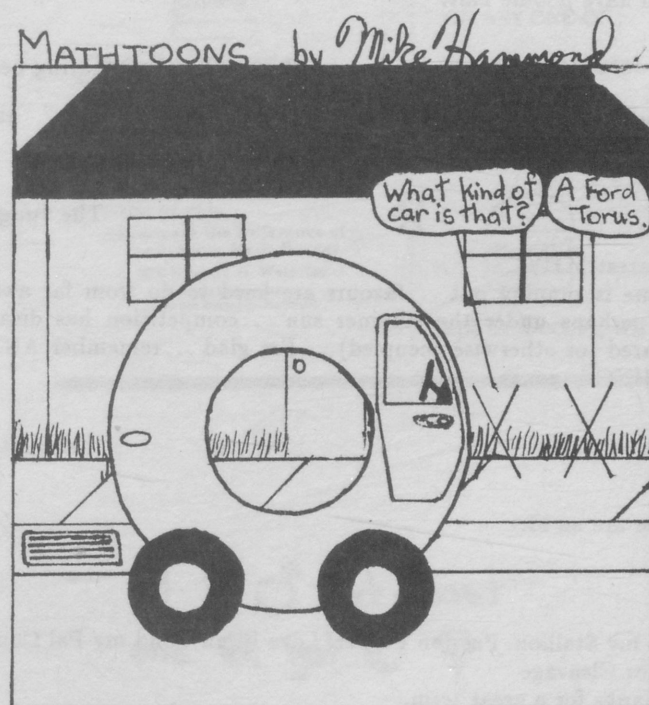
The Pumping Lemma is very powerful. So believe it now, and understand it later, and prove it next week. It was very popular with our cousin. Perhaps you've heard of him.

Turing!

O.K. O.K. That's all the time we have for this week so I'm Hans.

And I'm Franz, and we're here to teach you the Pumping (clap) Lemma.

MacGyver
Evilcoop



Ultra Classifieds

My Sexy Blond Teddy Bear:
Wanna come over some time and i) try the Teenage Mutant Ninja Turtle bubblebath? ii) find the figure #3?

Luv, the turkey who still mourns Spock's death in Start Trek II
To L.W.
Your feet are small. Your toes must be tiny.

Someone in Club 204

SEXY-SILLY-FUNNY
All the snow melted: (...it is no fun w/o you ...)
Miss you.

SOS

Skip
You SUCK!!!!

Lead

Murray,
How's the turtle? I hope it recovers from the battle with your nose.

All of Us

Michelle,
Meanie ... Meanie ... Meanie ...

Tyrant

Nir:
You have poodle hair!

Tired of wearing beer

Frosh Week Scavenger Hunt: "Unchained Melody" and Brunswick House tapes - claim 'em before we play 'em!

The Judges

Dearest MJW,
Time is running out ... favours are hard to do from far away ... perhaps under the summer sun ... competition has disappeared (or otherwise occupied) ... I'm glad ... remember ANYTHING is yours.

Sex Kitten

jP,
You are an ld.

t

To my Stallion, Passion Flower, Love Bunny, and my Pal Counselor Cleavage
Thanks for a great term.

Lots of Hugs + Smiles
The Little Fraggle

Homer,
Go for the long bomb, start behaving in CS class!

QB

Skip
I like the lemon.

WOTWDB

L-N
I always knew you were a Hulkamaniac.

Your Ex

Romy
Thanks, now Walter won't be alone.

Blond

Well, it's Gd and Mk:1, Ln, Cr, Shr:1. Sooo, what's next ... (this time without the newspaper)

Btsn

Curtis the St. Bernard:
You DIE!!!!!!!!!!!!

Not a Romulan Love Child

Bloodhound:
What a sexy voice.

Cocker Spaniel

IrishEC Setter:
Down boy! Down! Down!

The Two Original E's(L-N and E)

Brent the Doberman:
Stop spitting! By the way, do you want the phone number for the House of Masters?

The People You Spat On

Rapunzel the Maltese:
Get a haircut!

Julie the Chihuahua and
Buttercup the Bulldog

Golden Retriever:
Don't go to work ... don't go ...
Bloodhound:
Our potato salad sucks! Your fault, your fault ...
John the Mexican Hairless:
Love your bright orange scarf!

Chihuahua and Bulldog



Weeks of Research Reveal Secret Recipe

Colonel Lodges Court Appeal

As some of you may have noticed, I was absent from mathNEWS last week as I was doing some high-powered research for the Institute Investigating Subversive Vegetables, and other Stuff. The amazing, and rather surprising fact is that instead of the 11 herbs and spices advertised by a certain organization, that shall remain nameless, are in fact, all vegetable-synthesized substitutes for said herbs and spices

While this should not be of major concern, as the taste of the product is still comperable, and the safety factors are not THAT bad, so everything should be fine in the end. So go on out to that local fried chicken stand, and eat those vegetables to your hearts content.

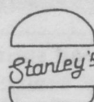
Andy Rooney

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If you would like to have a copy of mathNEWS mailed to your door, drop by the mathNEWS office some time. On the door you will find a little pouch with subscription forms in it. This form will ask you such question as your name and address. You will answer the little form. (In writing of course) You will then attach moneys in the amount stated on the form and put the completed package under the door. You will then be receiving mathNEWS for the winter term.

The Wiz.

The Stanley Burger Philosophy



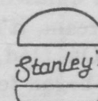
At Stanley's we believe that each customer deserves a great tasting, wholesome meal. Every item on our menu is prepared the olde-fashioned way using only fresh, nutritious ingredients. Our burgers are made with 100% pure beef, all-natural spices, no added preservatives and are served on bakery fresh buns. We take pride in putting only the best into everything we make.

Experience the Difference of a Fresh Home Made Burger
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(Across from WLU)
(Limit one coupon per purchase)

1/2 PRICE

ON ANY ONE OF:

- STANLEY BURGER
- DOUBLE BURGER
- SUPER STAN



Expires Dec. 31, 91

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one ♀ yet ♂ ♀

A Nightmare On Ring Road

And you thought Freddy Kreuger was bad...

"Whatever you do, DON'T fall asleep." Or so went the advice of Dave's counsellor when Dave went to drop first-year calculus and transfer into MATH 133. In Dave's copy of the Undergrad Calendar, the course description of MATH 133 read, "A simpler version of MATH 137, primarily for engineers who need the credit but don't want to think. 0.5 CREDITS." So when he flunked the calculus midterm, he spotted this course and made the decision to transfer for an easy credit. Or so he thought.

Dave started the class the very next day. Of course, he had partied fairly hearty the night before, so he wasn't really with it. Not that he was *ever* with it; he was just more out of it than usual this particular morning. He actually got to the class a little early for once, and staggered to the front, where Professor Freddy Booger sat.

"Hi, Professor Booger," Dave mumbled. "I'm going to be transferring into your class if I could just get you to sign this form..." Dave broke off when he noticed the glove on Booger's right hand, with long, sharp blades protruding from the fingers.

"Ah, you like my glove?" Booger said in an eerie, booming, deep voice. "I use it to wake up sleeping students by scraping it on the chalkboard. Personally, I think I should sue Edward Scissorhands for stealing my idea."

Dave blanched and stumbled to the rear of the classroom amid Booger's mocking laughter. Booger then stood up, and began his lecture. Despite Dave's disconcertion about the glove, he found Booger's lecture BO-RING and, forgetting his counsellor's advice, soon began to nod off. He spiralled down into a deeeeeep sleeeeeeep.

Suddenly, the room exploded in noise. Windows shattered. Huge pinnacles of rock pushed through the floor, which was odd, because they were on the third floor. Booger's laughter filled the room, drowning out all other noise. Dave jerked his head up, terrified.

Blood began to seep out of the overhead sprinkler system and pooled on the floor, tables, and empty chairs: empty because Dave and Booger were the only ones in the room. Blue sparks shot out of the electrical outlets and the overhead projector exploded, sending shrapnel spraying through the whole room. Miraculously, Dave wasn't touched, but the top of Booger's skull was torn off, revealing the mathematical brain below. Yet Booger was unfazed by it.

"It's a dream, it's all gotta be a whacked-out dream!" Dave thought. "Oh, God, what is going ON?" Dave started to panic, for Booger began to advance towards him.

"Now you can see how much of a *brain* I really am." quipped Booger. "By my going *topless*, you now know that profs are not as *brainless* as you may have thought. I hope you don't *mind* that I seem to have *flipped my lid*. As you may have guessed, I am a homicidal *brainiac* with little *thought* for others. Since a *mind is a terrible thing to waste*, how about you give me your head? After all, *two heads are better than one*."

Dave began to shudder under this mindless onslaught of prof humour, not noticing that Booger approached him steadily. "NO!" he screamed. "I can't take any more bad puns! This is even worse than Mathtoons! Somebody...anybody...HELP!!!" Suddenly, Booger was directly in front of Dave's face. Booger raised his arm and slashed his glove directly at Dave's throat. Dave had enough time to scream before he felt the glove's claws pressing at his throat...

With a jerk, Dave opened his eyes, giving him an unobstructed view of Booger staring down at him, glove in hand. Dave sat up and looked wildly around him. The last few people in his class

were packing up and leaving, and Booger had his coat and hat on.

"Welcome back to the land of the living," said Booger as the last student exited the room. "I hope you enjoyed your little nap." "Professor Booger, I'm really sorry for falling asleep in your class," said Dave. "I paid for it with my dreams, though."

"That's perfectly all right," assured Booger. He took off his hat, revealing his exposed brain. "But what makes you think you were dreaming?" Dave screamed, and the terror began anew.

AUTHOR'S NOTE* The Dave in the above story is not meant to represent any Dave that's slow at Hearts, has a messy room, and is a friend of the author. Any resemblance to the above Dave and any other Dave is purely coincidental. So don't sic Andrew on me, okay, Dave?

Sledge Hammer!

A User's Guide to the Course Calendar

Ok. I was looking through the academic calendar looking for decent courses (i.e. birdwatching) when it became apparent that there are many ambiguous course names. Now, it should be fairly clear what they are supposed to be about, but I feel the alternates are much more interesting...

- SCI 261 Models in Science (not)
- PMATH 445 Ring Theory (... and so I conclude that it must go on this finger)
- PMATH 334 Rings and Fields (Circle Research, Occult and Reese's Peanut Butter Cups)
- PMATH 331 Real Analysis (5 bucks, man, I swear it's real)
- PLAN 256A Environmental Design (OK, put a mountain here...)
- KIN 357 Motor Learning (Turn that key...)
- REC 453 People in Natural Areas (Do Martians count?)
- SOC 226 Juvenile Justice (I'm gonna tell Mommy on you.)
- STAT 443 Forecasting (... and expect freezing rain overnight)
- EARTH 359 Flow Through Porous Media (AACK! Empty-headed CBC reporters!)
- ENG 208A Forms of Fantasy (Sexual? Lotto 6/49? Graduation?)
- GEOG 353 Marketing Geography (I'll buy it.)
- PHIL 331 Aesthetics (if it looks good, it must be true...)
- SOC 415 Social Networks (computer dating?)
- SY DE 364 Manufacturing Science (how to get a Ph.D.)
- SY DE 372 Introduction to Pattern Recognition (well, 2+2 was 4 yesterday... hmmm, I wonder.)
- ANTH 261 Primate Behaviour (How bishops act?)
- ARCH 142 Iconography 1: Conventions (science of normal Macintoshes)
- C+O 430 Algebraic Enumeration (How to register people to vote such that no one will understand.)
- M E 351 Fluid Mechanics (Yessirree, ya got a rusted out tailpipe on this here water particle.)

Excuse me now as I go and try to track down an advisor, pay him large amounts of money, and beg him to extend his office hours to two minutes so I can get him to sign my add/drop sheet so I can take CIV E 499 Underwater Welding and M SCI 666 Methods of Murder.

The Nihilistic Simpleton

Major Booboo

The Final Degradation

As we tuned out last week, a cleaver wielded by a crazed chef in Village 2 (a chef? in Village 2?) was rapidly descending towards Booboo's neck. What will our hero do? How will he survive? Do we know? Do we care? If this is the last episode, does that mean he could actually die?

"You just became Pate de Thursday!" shouted the Crazed Cannibal Cook, an old Booboo villain who managed to get a job cooking village food. Booboo executed a karate duck (the ASPCA is still after him for that) and the razor-sharp cleaver hit his head and bounced off, wrecking yet another Eversharp©Blade (you can even cut a tin can with it, but you wouldn't want to). Believing it to be just a case of mistaken identity, Booboo turned around and grabbed a hunk of faintly glowing fungus, which he offered to the chef.

"Here you go, I think that this is what you were looking for." The chef again advanced, the cleaver held high, when he was suddenly struck down by a strange orange beam which the fungus emitted in self-defense.

As the chef hit the floor in several small pieces (destined to become next week's beef stew), Booboo left the kitchen and began exploring. Unknown to him, hidden cameras watched his every move.

In his darkened office, the malevolent Dr. XOR gently caressed a button on his desk as he pushed the cat. The giant screen in front of him changed from Family Feud to a view of Booboo running down a hallway. "I'll get you yet, Booboo," he growled.

Booboo, after exploring a bit, decided he had had enough of Village 2. He wandered a bit and his thoughts drifted (he finds it difficult to do two things at the same time, such as walk and chew gum). As he was about to walk into a locked door, a green man with a nasty hunch in his back opened it for him. Not noticing that he had just stumbled into a long and dark hallway, Booboo continued mindlessly on...

Unbeknownst to our hero (?), he was still being watched like a Gilligan's Island re-run. "Ha haaaa! You are now wandering into my trap, Booboo!" exclaimed the downright nasty Dr. XOR. "I shall soon wreak revenge upon you, or die trying ... but not both!!!"

After walking for some time, Booboo saw a light at the end of the tunnel. Going through the open doorway, Booboo noticed someone chained to the far wall, beside yet another door. The door behind him slammed shut.

"Booboo, it's you!!!" cried the previously unidentified person on the far wall. Looking closely he noticed that this person was none other than his love interest, Minor Error! "Error! It's you!" he exclaimed.

"Booboo, you've come to save me from the unfeeling and insane Dr. XOR, haven't you?" she asked.

"Are you saying that he kidnapped you?" stated Booboo (rather than asked) in a flash of brilliance.

"Yes! And this was all a trap to lure you here, Major Booboo of CSIS!!!" a voice in his mind told him. Dr. XOR promptly strode through the door in front of him.

"Dr. XOR! What are you doing in Village 2?" queried Booboo.

"You are no longer in the protection of those fools! With my newly improved device, I can control your mind with more power than an HP48SX," thought XOR.

Walking towards the destructive Dr. XOR, Booboo tripped over what could only be a power cord. Lacking power to his helmet, Dr. XOR's thoughts promptly exited Booboo's mind, making Booboo as bright as a dead firefly at night.

Noticing what was happening a Deus Ex Machina, which just happened to be passing by, marched in on the historic meeting of the two arch-nemeses.

"I'll take it from here, Booboo," stated the Machina. After saying this, the Deus Ex Machina cuffed the helpless Dr. XOR and towed him away. "You might need these, Booboo," said the Machina, tossing Booboo a set of keys from Dr. XOR's pocket.

"I'll get you next time Booboo, next time!" screamed Dr. XOR, quoting a favourite intellectual show of Booboo's.

After fumbling for a few hours with each lock, trying to figure out which end of the key to insert, Booboo finally freed his girlfriend.

"I knew you'd save me, Booboo!" exclaimed Minor Error as she plastered our undeserving hero with kisses.

And so ends our first season of Major Booboo, Agent of CSIS.

Fuzzy
Dances with Mind
Harry Organs

Tired of Writing Exams?

If you are fed up with this unfair, totalitarianistic exam thing, join the Brothers United for Lesser Load of Schoolwork Here In Town's boycott of this term's finals. Your support is needed for any change to come to this institution.

NOT!

Faculty Definitions for Mathies

