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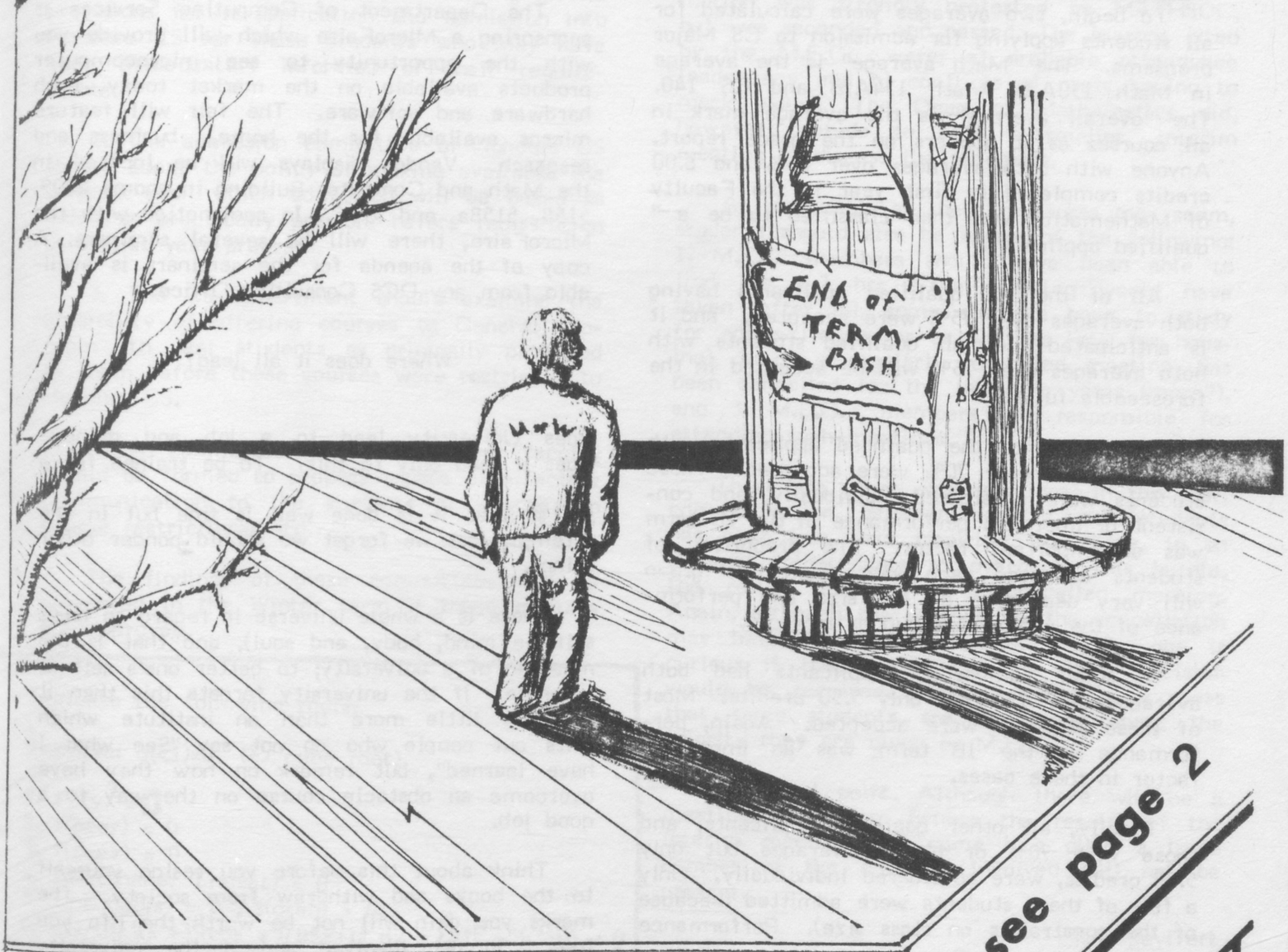
Friday Dec. 2 1983

math NEWS



Where does it all lead to?

see page 2

Summary of Admissions
to 2A Computer Science Major Programs
for Fall, 1983 and Winter, 1984

The procedures to be followed for considering admissions to a Computer Science Major program were outlined when they were approved last year by the Math Faculty Council and the University Senate. (A description is available on pages 33-37 of the 1983-84 edition of the booklet "How To Get Around In Mathematical Circles".) This is a summary of the admissions process as it actually occurred in the first two terms of implementation. The same standards were applied to the one Regular and two Co-op streams considered to date.

To begin, two averages were calculated for all students applying for admission to CS Major programs. The "Math average" is the average in Math 130A/B, Math 134A/B and CS 140. The "overall average" is the average mark in all courses as it appears on the grade report. Anyone with both averages over 65% and 6.00 credits completed in first year in the Faculty of Mathematics was then classified to be a " qualified applicant".

All of the 190 qualified applicants having both averages over 75% were accepted, and it is anticipated that all qualified students with both averages over 75% will be accepted in the foreseeable future.

Almost all of the qualified applicants with both averages over 70% were accepted. These students were considered individually, and consistent or improved performance in the 1B term was an important factor. The proportion of students accepted each year from this group will vary depending on the size and performance of the applicant group as a whole.

A small number of applicants had both averages over 75% but only 5.50 credits. Most of these students were accepted. Again, performance in the 1B term was an important factor in these cases.

Finally, all other qualified applicants, and those with 70% or higher averages but only 5.50 credits, were considered individually. Only a few of these students were admitted (because of the constraints on class size). Performance in the 1B term and the choice of electives were important factors in these decisions.

There is limited provision for admission to Computer Science Major programs at the start of the 3A term, but the admissions procedures have not been in effect long enough to have begun such considerations. The first such deliberations will apply to Regular students entering 3A in Fall, 1984 when there are expected to be a few openings available.

MicroFaire

December 1, 10:00 am - 8:00 pm
December 2, 10:00 am - 4:00 pm

The Department of Computing Services is sponsoring a MicroFaire which will provide you with the opportunity to see microcomputer products available on the market today, both hardware and software. The fair will feature micros available for the home, business and research. Vendor displays will be located in the Math and Computer Building in rooms 2009, 5158, 5158a, and 5136. In conjunction with the MicroFaire, there will be several seminars. A copy of the agenda for the seminars is available from any DCS Consulting Office.

Where does it all lead?

Does University lead to a job and money? Does it lead **only** to this? To be trained for a job so that it is done well is fine but in the attempt, lest we forget we should ponder other things.

There is a whole universe in regard to one's self (ie mind, body, and soul), and that is the meaning of a university; to better one's self as a whole. If the university forgets this then it becomes little more than an institute which spits out people who do not say "See what I have learned", but remark on how they have overcome an obstacle course on the way to a good job.

Think about this before you resign yourself to the books and withdraw from society. The marks you gain will not be worth the life you lose. So get involved and if the university expects only apathy and study, then it is nothing more than an institution devoid of culture. Don't let our university go down this road!

Stewart Melanson

Mathsoc Proposes 4 Motions

Following up on the general meeting held November 15 with 200+ students (see last ish), mathsoc proposed 4 motions to be debated with the math faculty November 22 at their monthly meeting. These motions were in response to various concerns aired at the general meeting by the students concerning items such as course restrictions and policy changes. Due to time limitations, these motions were postphoned and will be discussed in a private meeting this afternoon. The motions basically suggest the following:

1. The admission committee for Fall, 1982 should examine the possibility of making special provisions for re-application and admission into Honours CS for those students who may have been inadequately informed of their requirements.

2. The admission committee of Honours CS should adopt the policy of making available the criteria upon which admission will be based as much as practically possible before registration in a first year program.

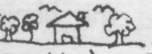
3. The CS department should examine the possibility of offering courses to General program 4th year students as originally promised to them before these courses were restricted to Honours CS.

4. A committee of students and faculty should be formed to propose means of effective communication to the students of changes in course restrictions, etc.

The findings of these committees will be presented in the Winter term if these motions are approved.

Evaluate the following roots:

example: g()=0 (=> cube root)

1. $F(y)^2 = 0$
2. f(beer) = 0
3. f(Suez) = 0
4. f(Kitchener Transit) = 0
5. f(cannabis) = 0 , f(crab) = 0
6. $f^2(g^{-1}(h[\int_{\text{Ω}}((x^2+3)(\cos x^2)/\ln(x+1)\ dx + \sum_{j=1}^{10}(\prod_{k=2}^{j+2} a^k b^j)])) = 0$
7. f() = 0
8. f(Gazette) = 0
9. evil($) = 0 , ∀ evil
10. f (O[per]) = 0

Answers: Page 11

'JUST' CANCELLATION or JUST CANCELLED

On Nov. 15, MATHSOC held a meeting so that students could voice their opinions on certain problems they faced. With attendance at 200 plus, it is safe to say that the problems discussed were not of a minor nature. At the Nov. Math Faculty Council meeting, MATHSOC'S pres. LAURA REDICAN, and vice-pres. KELLY MASTERSON, presented a 'STUDENT REPORT' which outlined these problems and proposed four motions. Yet, inspite of the gravity of the problems, it was moved that the Dec. M.F.C. meeting (where the proposals would have been taken up) be cancelled. The motion was strongly protested by MATHSOC, but was seconded and passed. The reasons cited by the M.F.C. were; a) probable attendance inadequacy and b) conflicts of profs having to mark exams. The Dean of Mathematics did, however, decide to hold a smaller, interim meeting to discuss the proposals.

As reasonable as these measures may seem, students should also be aware of the following; 1. M.F.C. members should have been able to find the 2-3 hrs. the meeting would have taken (after all, some students have to study for and write exams as well as look for housing), 2. it, a regularly scheduled meeting, has been cancelled for the last two years (more?), and 3. M.F.C. members are responsible for attending such meetings.

There are other considerations. In the past, communication between faculty and students has been less than inspiring. Yet here, in an attempt by students to overcome this hurdle, the result obtained is a cancelled meeting. Again, although the reasons for the cancellation may have been clear to the M.F.C., one is curious if they considered how their decision would be received. I would venture to guess that some students are concerned about the priority they are given by M.F.C.

One final point. Although there will be a meeting next term (where the results of the interim meeting will come into play) a large number of the students involved will not be present.

Chris Seyffert

Class Rep. First Year 4-Stream

EDITORIAL

This is **mathNEWS'** first editorial this term, in case you have not not read any of the ones that weren't. Why is this the first one, and why start now? Well, I feel that there has been no significant issue on which **mathNEWS** should take a stand and still claim to be representative of the Math students.

There is, however, something that I feel I must take a stand on: Imprint. This term, Imprint has been publishing the opinions of many of its staff members under the heading "Editorial". Funk & Wagnall's Standar Desk Dictionary defines the word as "An article in a newspaper, magazine, or the like, published as the periodical's official expression of opinion on some issue". In other words, if an Imprint editorial says "Mulroney is dumb!", this is Imprint's official point of view on Mulroney.

An editorial on campus food is right on target; this the type of issue Imprint should investigate and take a stand on. And yet, in the past month, Imprint's editorials have had titles such as, to name a few, "On averting nuclear war", "Peace in Lebanon", "Testing will prevent war" and "Mulroney is dumb!". Not only are some of these editorials contradictory, they are outside the scope of a campus newspaper. Could Imprint not editorialize on concerns directly relating to students, and avoid making definite statements on federal and world politics? There should be no shortage of material for such editorials: the last issue included articles on Math course changes, housing problems and Kitchener Transit service, not to mention Naismith and the Warriors. Should the editors find all the above topics unsuitable, the requirement to have an editorial in every issue is certainly not cast in stone.

We are not denying the Imprint staff's right to their opinions or their expression; rather, I $wish that they should not be implied to be Imprint's official opinions. They should be printed as "Opinion" or "Speeches", unless they truly do represent Imprint's position on these issues. Imprint should not take an official stand on federal or world politicas; we don't need a second newspaper "defending the basic interests of the students".

Tom Watts

Opinion

It's a sign of the times, I guess. Those pieces of plastic that literally destroy our lives have been a necessity of life. You do not officially exist unless you have one. It has become even more important than a chequing account.

I'm talking about credit cards, of course. Now that I've given you a summary of what I want to say, let me fill in the details.

Like the kind, considerate person I am supposed to be, I was downtown the other weekend purchasing items in one of the better chain stores, well prepared to sign over the rest of by bank account (or close to it) towards the cause of a few presents with my (up to now) reliable chequing account. As usual, I was asked to present identification.

Let me tell what I had on me. A studentJ card, a driver's license, a Social Insurance Card, an Age of Majority card, two Royal Bank client cards, an Employee Number card from my work terms and various other items of interest with either my name or photograph. That, however was not good enough. They also required a credit card, an employee card with a photograph on it, or a statement of car ownership. Since I think I am a typical student, I don't have the latter two, and it is against my principles to acquire the former. Thus my cheque was worthless.

Time now for my second point. Also being the kind, considerate person I am supposed to be, I paid my rent a couple of days early, since my landlady requires it for her mortage payment. Alas, my fine efforts were in vain, as her bank's policy is to hold a cheque for five days. Thus my cheque was once again temporarily useless.

So a merry Christmas to those people who have already broken down and realized one of life's lessons I am starting to learn. For the rest of us, it appears our only hope is cold cash to survive this year's festivities. Up to now, I have had a negative attitude towards those funny cards that supposedly delays one's bankruptcy another 30 days. However, theory cannot always hold up to practice, and I think that next Christmas, my trips to the banks just may be less frequent.

grmcfarl

THE MATHEMATICS COLUMN

Five Questions for Regular Readers

by Fraser Simpson

No new material this time; just a few problems for those who have been reading the column regularly this term. Answers will not be printed; usually the column on which the question is based will give enough information for the answer.

1. Show that Carl Theodore Heisel's "true" value of pi is equal to $(4/3)^4$

2. Describe the construction that will "double the hypercube". That is, given the length of a side of the hypercube, construct the length of the side of a hypercube with twice its volume. (The volume of a hypercube with side x is x^4 .)

3. Divide 30 by 10 the way an ancient Egyptian scribe would have done it. (Use Hindu-Arabic numerals for the calculations.)

4. Write 6534 in hieroglyphic writing.

5. Write 1666 and 50000 in Roman numerals.

In last issue's column, the reader was asked for the Roman numeral equivalent of 1444. It is MCDXLIV, using each letter exactly once. The silly Roman numeral given for interpretation was 600000, which could be properly written as $\overline{\text{VI}}$ or $\overline{\text{DC}}$. The reader was also asked to provide an explanation for the letter J's use as a variant of I at the end of a number in medical prescriptions. This helps indicate the end of a number, so that no confusion or changes will arise.

staph

This being the last issue of the term we thought we'd let everyone know about the great people who worked on **mathNEWS** this term. If your name is not on the list, try writing an article or dropping by a production night meeting (alternate Tuesdays) some week next term. If you are at least a touch insane, you will enjoy it (we did!). Nevertheless, here is our Fall/83 staff etc.

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- Glenn McFarlane
- Tom Watts

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- Fraser Simpson

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- Fraser Simpson
- Richard Tummers
- Tom Watts

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- dwarf
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- Saeed Khan
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- Graphic Services

Pizza
- Casa Rugantino
- Mother's

Computing Resources
- MFCF

Typesetting
- Imagen printer
- Multiwriter 3 terminal
- Xerox 2700 printer

Breakdowns
- Imagen printer
- Xerox 2700 printer

FeedBark

dear **mathNEWS:**

In the "Opinion" column in your Nov. 18 issue, you complained of a weight activated light at one (or more) of the intersections along University Avenue. These lights are not tied to anything as unreliable as a mechanical weight sensor, but rather to a simple (reliable and effective) radio transmitter-receiver type of interference detector. In very simple a terms, wire is imbedded in the road which emits a low level radio-type frequency. When a metal object (car) passes over the wire the metal causes an interference in the electrical pattern continuity which is detected by the "black box" at the roadside. These circuits are also supposed to be able to detect the interference caused by a bicycle tire rim. If this particular one is not that sensitive, you may still activate it by climbing off your bike and laying the bike down so that the top tube of the frame lies **along** the wire for about one second. Then you should also phone the city traffic department and ask them to adjust the sensitivity of the sensitivity of this device.

A student of physics

This Week's Theorem

$$e^{\int \frac{1}{2x}dx} \qquad e^{\int \frac{1}{2x}dx}$$

$$= e^{\frac{1}{2}\int \frac{1}{x}dx} \qquad = e^{\frac{1}{2}\ln 2x}$$

$$= e^{\frac{1}{2}\ln x} \qquad = e^{\ln(2x)^{\frac{1}{2}}}$$

$$= e^{\ln x^{\frac{1}{2}}} \qquad = \sqrt{2x}$$

$$= \sqrt{x}$$

$$\therefore \sqrt{x} = \sqrt{2x} \quad \text{since } x \neq 0$$

$$x = 2x$$

$$1 = 2$$

Real Programmers - Spare time

Real Programmers think better when playing ADVENTURE.

Real Programmers don't read Pournelle in BYTE.

Real Programmers enjoy getting CP/M to work on 370 machines and MVS on their ZX81s.

Real Programmers don't play tennis, or any other sport that requires you to change clothes.

Mountain climbing is OK, and Real Programmers wear their climbing boots to work, in case a mountain should suddenly spring up in the middle of the machine room.

Real Programmers don't read anything in BYTE --- except the ads.

Real Programmers don't read the "Wall Street Journal". They read dumps.

Real Programmers don't play video games. They write them.

Elsewhen

mathNEWS 10 years ago

-A petition concerning the inadequacies of the computer facilities is posted on the door of Mathsoc, M&C 3038. Although the petition fails to include first year students, such signatures will be taken into account when the petition is presented.

-Running a debug job became a nightmare this week as the turnaround crept from a barely tolerable thirty minutes to an unbelievable two and a half hours.

-Next term should see the birth of a new course Mthel 100. This course is designed to be to be an equivalent of ME100 but enrolment will be on a mathie first basis...The course is to be given by Barney Lawrence (who also teaches ME100) on Mondays from 1:30 to 3:30 p.m. The section is limited to 70 students.

-At this past Tuesday's mathsoc meeting, council again found itself in the familar position of having lots of money but being hesitant about using it.

Textbook Review

Over the past two weeks, industrious **mathNEWS** reporters have been passing around forms asking you, the students, to rank the three worst textbooks they have used here at Waterloo. In total, close to 250 responses were collected (thanks!). The results were then tabulated, giving each "worst" ranking 3 dp (demerit points), the second 2 dp, and the third 1 dp. The numbers were added up for each textbook, and below are the top (bottom?) six:

1. Taylor & Mann: Advanced Calculus (317 dp)
2. C&O 230 Course Notes (143 dp)
3. Ullman: Principles of Programming Systems (108 dp)
4. Gilbert: Classical Algebra (65 dp)
5. Leithold: The Calculus (58 dp)
6. Kalbfleisch: Probability and Statistical Inference (55 dp)

It should be admitted that the majority of the interviewees were in either 2nd or 3rd year. Frosh, however, have only been exposed to 6 courses by this time as compared to a possible 18 courses to the 2A's. Fourth year students were rather hard to locate, and in any case, most 4th year courses are only taken by small numbers of students, and we felt that this would not have a significant impact on the results. Please note that we do not claim statistical validity, though!

UltraMathies

Typical Id: Name: Linus Integral. Age: 18<x<24 Home: Dullsville Sex: Varies

Ultra Mathie Check List:

Jacket: loud plaid
Tie: standard Mathsoc issue
Shirt: Waterloo T-shirt (optimized for maximum clash)
Calculator: HP 41cv with real time clock, math module, and of course cardreader.(Note: no slide rule, too young for one)
Pencils: two: 1) carbon lead; 2) blue lead
Pens: Cross Black Classic (for signing work term contracts)
Eraser: two: 1) pen eraser; 2) one ordinary eraser
Other: erasing template (to make those notes just perfect)
Ruler: 30.85 cm drafting quality (just incase you have to do a graph
Reading material: a card deck with a numerical analysis program in FORTRAN for some exciting numerical analysis course or other
Glasses: unfortunately no horn rimmed glasses with tape on the arms and nose bridge were available (glasses are optional)
Kleenex: Keenex Kleenex.
Button: the pi button, of course (200 digits)

Behavioral Description:

Working habits: Enjoys gathering like terms when multipling or dividing infinite expansions of functions. Also known to enjoy matrix multiplication of 10*10 or larger matrices without the use of paper or his/her HP-41cv with math module (min. configuration). Believes that all this mental math will expand her/his consciousness to that of at least R-10.

Non-work habits: Few, likes to play mathematically/scientifically oriented games such as cards and Dungeons and Dragons.

Sleep: Not enough, anywhere anytime, completely oblivious to surroundings or company during power down cycle.

Social Aspect: See work habits. Knows other people, but only when useful, ie: people who know more math (to learn), people with less mathematical knowledge (ego tripping). There are a few more distinct models of courtier, these include units for unmathematical off time activities (if necessary).

Emotional: Activities, if they exist are utilitarian in nature and optimized for ease of use. Emotional thoughts make multiple integrations more difficult.

Intellectual: Very simil ar to VAX 11/730 with a floating point accelerator.

Personality: Narcissist.

Vocabulary: Knows how to say dy/dx, and the entire Greek and English alphabets. All other usage of any human language is limited. Doesn't acknowledge the existance of the word facetious, as well as spelling it phazecious.

Entertainment: It is acknowledged that a few female mathies, (and even fewer male mathies) like to watch shows such as Remington Squeal. Reasons are unknown and explanations speculative at best. Some experts suggest it is tied into emotion as this is easily the least calculated aspect of any mathies life. This is known as the Drool theory, named after Dr. Fritz von Drool.

John Wieczorek
2A Unsure

Carousel of Health

On February 1 and 2, the University of Waterloo is hosting a Health Fair, "Carousel of Health '84". The Fair will be held in the Campus Centre from 10 am to 9 pm Wednesday, and 10 am to 5 pm Thursday.

Those who attend will be able to examine their health habits through active participation in specially designed displays, which include computerized lifestyle and nutrition assessment; dental health; automobile safety; CPR demonstrations; blood alcohol level testing; smoking and effects of tobacco use; and blood typing, to name a few. All this will take place in a circus environment with clowns, puppeteers and dance demonstrations to add to the fun .

Admission is free. Further information will be published in **mathNEWS** in the w84 term.

Campus Newspapers

Ranked from best (1) to worst (7)

1.Gazette - Good writing, and it reads like a math newspaper.
2.Broadside - Excellent stuff, but poor distribution and production quality. This one is worth searching for, though.
3.Imprint - A reasonable paper, but a bit stifled and quite stagnant.
4.Iron Warrior - Engineering paper, but mathies would actually find it interesting. Worth picking up.
5.Enginews - Totally disgusting, but daring and (occasionally) humourous.
6.Arts Lion - UW artsies aren't that bad, really.
7.Chevron - Humourous, but they all look the same.

mathNEWS is, of course in a class by itself.

—* Sparky *—

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The Big Sleep

Another Fed Council meeting passed away on Grey Cup Sunday with the usual people carrying on their two-way discussions. Every meeting the term has dragged on for over four hours. The council meetings have become a forum for personal debate between another faculty's councillor and Tom Allison. This type of personal debate would best be carried on outside of these meetings. Despite these minor interruptions we have managed to accomplish (?) some things. At the most recent meeting we discussed the following.

Fed Hall- Yes, everyone's favorite topic and/or gripe. The architects (including a U of W grad) are making some design changes (which are not supposed to affect the final appearance) to bring the hall within budget.

Pub Advisory Committee- How much do we all enjoy the Bombshelter? What improvements can be made? Hopefully, the new committee will examine these and other pressing questions on our pub. This newly formed committee consists of Joanne Casteller (math), Rob MacLaren, Paul Selemba, Jeff Wilson and myself. If you have suggestions or comments please send them to me c/o Fed Office, Campus Centre or drop them into the MathSoc office.

Ad Hoc Food Committee- We all have our opinions and ideas of what can be done with the food (?) on campus. Send your constructive complaints and suggestions to Dean Nadon or Rob MacLaren c/o Fed Office, Campus Centre.

If you have any concerns which you feel should be discussed at a campus wide level I would be happy to hear from you and help you resolve the problem. I would like to close by welcoming Phil Beale to Fed Council as the Math, Regular Representative

Ross Robertson

The frosh are frozen stiff in fear
Afraid to come again next year
They heard a veteran student say
'Life was so easy in 1A'.

-Sauron

MathWeek Winners

Tricycle race: Steve Cornall, Wendy Devries, Jacquie Gibson, John Plaice

Hopscotch: Alexa Clark, Chris Werner

Egg Drop: John Ryan, Hugh Schomburg

Euchre Tournament: Brian Elliot, Greg Malcolm

Best Prof Voting: Ian "Stud" McGee, P. Ponzo, John Wainwright (3-way tie)

MathSoc Honourary Memberships: Lynn Burkowski, Stan Mikoluk (Directors of C&D Operations)

The Creeping Error

Digitigrade, its way it made
up from its filthy pit;
it stretched and groaned and thought, "Today,
what sin shall I commit?
Perhaps a slippage of precision,
or travesty of long division?"
It laughed and cackled with derision,
as onward it did flit.
A sense of mission overcame
this thing, and time did freeze.
No Einstein did this object know,
surpassing c with ease.
Silent, and with no display,
it scissored through the Milky Way
separating curds from whey
and making lots of cheese.
Through space and time, through present rhyme,
the error swiftly leapt.
It found a wanton hiding-place
and in it deftly crept.
And there, within the student's proof,
it caused the monumental goof
which caused the prof to hit the roof
and call the plebe inept.
So watch the Creeping Error, boys,
take care when you compute.
Avoid subtraction when you can,
no matrices commute.
Be pure of heart and stout of will;
the mathie's world is fraught with ill.
You can't afford to err until
your fame's beyond dispute.

Ross Brown

Common University Afflictions

November Depression
This malady is precipitated near the end of the month for which it is named. As the midterms (see midtermitis) creep in, and the end of school (temporarily) for co-op students approaches, and of course the dreaded final examinations (a cause of a good many diseases in themselves) begin to loom on the horizon, the affliction manifests itself.
Indications: 1) Extreme apathy and listlessness.
2) Senseless repetition of obvious facts.
3) Excessive need of sleep.
4) Senseless repetition of obvious facts.
5) Disintegration of sense of humour.
Cures: The only guaranteed cure of November Depression is December, but this treatment of the disease has fallen into disrepute of late due to the hazardous nature of the month. AEgrescit medendo, but what can you do?

Midtermitis
One of the most common complaints around the University, although the disease is a misnomer. Most so-called "midterms" occur during November, and the synergism between the two sicknesses has driven many a student to his knees.
Indications:
1) Young, normally active people buried alive in textbooks
some brain damage as a result.
2) Complete disappearance of others who do not conform to the above description.
Cure: Once again, only time will cure this ill, although sitting next to the class keener during the exam can't hurt. It has also been proven that ethyl alcohol and other pharmacuticals have been of monumental assistance to sufferers of either of these diseases.

WATSFIC

Office: MC 3036

Tomorrow is GAMES DAY. On Saturday, December 2, Watsfic ends lectures with a day of PURE FUN. Drop by to play a wide assortment of games. Watsfic has over 40 different games availiable, and people are urged to bring in any other games that they are interested in (no fantasy role playing games please).

Games Day starts at 10 am, and lasts as long as the members do. Headquarters is the Math building (MC 3036). Everyone is welcome, drop by anytime during the day. It's FREE!

Sparky's Revenge

Jenny woke from a short night's rest, gracefully brushing her hair off her face and the sleep out of her eyes. She glided towards the bathroom with her long, lithe legs then promptly threw up. Today was her very first interview, and the tension, combined with the excessive drinking the previous night, did not suit her stomach. As she straightened the long strands of her hair in the mirror she heard.... rrrriiinnnngggg..... The jarring noise of the telephone echoed mercilessly in her brain. Ever since that darn Tommy Tutone had written that song about her number (8675309) she had been plagued with endless calls from hopelessly boorish engineers. rrrriiiinnnngggggg..... Hmm..she mused, 8675309 happened to be a prime number, and the sum of two sqares, namely 2915 and 422. rrrriiinnnngggg..... That profound observation led her to think about her algebra prof. who was now luxuriating in her bed. How am I going to get him out of here she mused. She had really enjoyed their rendezvous at the Faculty club with its bumper pool and cozy tables a deux and intoxicating white wine. rrriiinnnngggg..... What if he answers the phone she wondered. What then? She made her way to the heart shaped bed to lift the receiver from the . hook. Maybe I'll answer this time and it won't be another boorish engineer, she thought. Hello? The voice at the other end of the line was gruff and she had difficulty making out the words. She asked the caller to repeat what they had said, and when she finally understood, she handed it to her resting Algebra prof. saying "It's Your Wife."

-** Sparky **-

DISCLAIMER: The characters in this story are fictional and do not correspond to any person, living or dead.

Ultraclassifieds

Mark Duf- Dump the Huey and call home. Better yet- come home! I still love you...
Kristin

Avacado trees and pineapples...
The boys in Section 3.

Good Luck-- all the best to you GGF (even if you are in engineering)!
SSF.

Math Grad Ball Record Raffle Results

The following people have won prizes in the Math Grad Ball Record Raffle:

First prize (25 LP's):
Shawn Neely (1163)

Second prize (15 LP's):
Andrew Palmer (1114)

Third prizes (1 LP each):
John McLaughlin (336)
Katie Suljak (352)
Steve Dods (1130)
Chris Balawejder (298)
Margaret Chong (762)
Steve Kirk (1110)
Yvonne deWit (276)
Martin LaFrance (307)
Maggie Brunton (698)
Sylvia Harding (688)

Ode to Microlanguages

You reach the room at half-past five
Make sure the stupid system's live
Call up your file and in you dive
To write tomorrow's program

Your program structure's rather lax
(It gives your tutor heart attacks)
Much longer, it would blow a VAX
Your lovely perfect program.

You praise it aloud, then execute
Blush, reset, and then reboot
Some smartass nearby comments 'cute'
A small bug in your program

Hack and hack and then type run
'Cause now, you know, the fun's begun
You play at this 'til half-past one
And then you've got your program

Your program works without a doubt
You are so happy you could shout
The system says 'I/O time-out'
You cannot put your program

This is, of course, the final straw
Your brain shuts off, senses withdraw
To blissful catatonia
(You transfer to a Fine Arts program)

-Sauron

Opinion

The other day the Toronto Sun proclaimed on its cover "METRIC SIGNS OFF". The headline resulted from the announcement by Richard Hatfield, premier of the time-honoured province of New Brunswick, that new mileage signs would show the distance in miles rather than kilometres as they previously did.

Mr. Hatfield apparently based his decision on the recent Supreme Court decision dismissing the charges of breaking the metric laws against Toronto gasoline station owner Jack Halpert for selling gasoline by the gallon. Mr. Hatfield says the installation of the imperial signs, now legal (at least according to the court decision), was based on the desire to give people a choice of a measurement system. Does this mean that one gets a choice of whether or not to look at the new signs? It seems that good old Mr. Hatfield totally disregarded the idea of having **both** metric **and** imperial measurements on the signs. This alternative would have given people a choice as to the system of measurement, whereas he is now doing with imperial measures exactly what Mr. Trudeau did with metric.

I am no great fan of Pierre Trudeau's, but he does have my support on the metric issue. Mr. Hatfield claims the only reason Canada decided to go metric in the first place was that U.S. and Great Britain were both changing, so we should do it too. **Wrong!** Metric (SI, Systeme International d'Unites) is a universal system adopted by practically all countries of the world. I am sure that at least 95% of the people who have been exposed to both systems would agree that metric is the better one; the problem arises from the changeover from metric to imperial. Ask any grade-four student, and he/she will tell you just how easy it is to use metric. Is it not more logical to have 1000 metres to a kilometre and water which boils at 100 degrees, rather thatn 5280 feet per mile, and boiling point at 212 degrees? Our children and grandchildren will be grateful for the metric systems, but it is true that there are a few problems associated with the switchover. Let us examine a few of the "solutions" the anti-metric protestors are offering us. Jack Halbert is indeed offering people a choice, as he has bot metric and imperial pumps in his station, but to what end? Most people buy gas by the tankful, or "$10 worth". In either case, the system of measurement is quite irrelevant, and the only thing that really matters is the price relative to the other gas stations. I suppose that there are some people who'd rather compare a per-gallon price with a per-litre price rather than two metric prices, but they definitely are few and far between. I certainly am not one of them.

As to Mr. Hatfield's decision, I must admit I am missing his point. Cars sold in Canada since 1977 have had their speedometers as well as odometers calibrated in kilometers rather than miles. These cars, which represent a sizable portion of those currently in use (probably over 70%), are metric, and as a result of the decision their owners will now have to convert mileage to kilometres in order to compare it with their odometers. Even the American tourist, whom Mr. Hatfield so slickly introduces as one of his concerns, will be confused. Imagine this scene: "How long will it take us to get to Moncton, dear?" "It's 45 miles according to the signs, and we can drive at 100 km/h, so .. hmmm... ... ummm.. probably we'll be there pretty soon." Is this what Mr. Hatfield wants? To confuse everybody?

As to the argument about the U.S. and Britain switching, let's look at the f acts.
Legally, metric has been a legal system of measurement in the U.S. since the 1700s, but recently (i.e. the last few decades) they have **not** said "We are changing over to metric." Thus Canadian decision could not have been based on this. One may observe that many of the products sold in the U.S. have now their contents measured both in metric and imperial systems. The temperatures are often given in both Fahrenheit and Celsius. SCientific work is generally done with metric measurements, and all new General Motors vehicles are built with metric components. Without doubt, metric is the future, even for the Americans, though the change may not be completed in the next quarter century.

In conclusion, Mr. Hatfield, I feel that you are taking a step backwards. It is not yet too late to change your decision, if you are not afraid to show some guts instead of just trying to collect a few votes.

Tom Watts

answers to roots

1. square root 2. root beer 3. root canal 4. bus route 5. grass roots 6. complex root 7. scenic route 8. paper route 9. money is the root of all evil 20. trivial per-root

A New Concept in Computer Architecture!!

CSG (Childish Systems Group) of Waterloo is pleased to announce its latest advance in computer architecture, a revolutionary new development that will take the world by storm! The concept is called Bitwise Unary Running of Programs (BURP), and is a radical change from the binary techniques of yesteryear.

Man, millenia ago, counted on his fingers. This is why we got stuck with base 10 to do all our arithmetic. This wasn't so bad until we started building calculators and computers. Since it is much easier to work with two voltage states than 10, we switched to the binary system for use in computers and computing equipment.

"Well", said the engineers from CSG, "why not go one step further? Let's go to ONE voltage state and build a UNARY computer!" This idea was researched and developed using funds donated from the KW Society for Inventions Launched by Local Youths (SILLY). The result? WATJUNK, the WATerloo Jobrunning UNary Computer. (I know, I couldn't think of a good word that started with K...)

The concept is triviality itself!!! Because there is only ONE possible voltage state, the amount of circuitry is cut in half! Some of the other advantages are:

- programming is a snap, since data and programs can be freely intermixed in memory (they are all the same value, anyway)

- there is only one opcode to learn, which will simplify the writing of assemblers and compilers. (CSG says the first assembler should be out by 1985)

- the machine renders old-fashioned gates like 'AND', 'OR' and 'NAND' obsolete; WATJUNK is made up entirely of 'THRU' gates, which use no semiconductors; they are just pieces of wire.

- the keyboard has only one key; this simplifies construction of WATJUNK terminals. (CSG also felt that it was sort of 'in tune' with the unary design).

- no matter how much information you have to store, it can all be stored in one bit!

WATJUNK will be commercially available within a month or so, and will retail for $111,111.11. (A little humour on the part of CSG, I suppose...sigh...)

mathNEWS subscriptions

Looking forward to your work term? If not, why not break the monotony of work with a **mathNEWS?** For the measly sum of $3.00, you may enjoy this high-quality (!) rag for a complete term. You can keep track of what is happening with course changes, solve crosswords (we'll probably even print solutions next term!), read about real mathies and programmers, and, best of all, enjoy premium-quality filler! Even if you prefer work terms to school, double you fun by getting a subscription to **mathNEWS!** To subscribe, just follow the steps below:

1. Write a cheque for $3.00 (this covers postage (barely))
2. Make the cheque payable to "UW Mathematics Society".
3. Write on the cheque "re: **mathNEWS** w84 subscription".
4. Attach to the cheque a note with your name and work-term address on it, including the postal code (if possible).
5. Leave the note and cheque at one of the following: (a) MathSoc office (MC3038). (b) **mathNEWS** office (MC3035). (c) **mathNEWS** box outside the C&D lounges, 3rd floor.
6. If you'd rather pay cash, go to MathSoc, tell them you want to pay $3.00 for a **mathNEWS** subscription, and get a receipt for your money (ask for it!) Now attach the receipt to your note, and leave it in one of the places mentioned above.

Thanks for your support! The first issue should be out about the middle or late January.

Outstanding Work Report Awards

Actuarial Science: M. Kirk Hutchison, 2A. "Reserve Valuation System for Deposit Administration Products"

Computer Science: H.E. (Scott) Welch, 2A. "Computer Applications in Research: A Case Study"

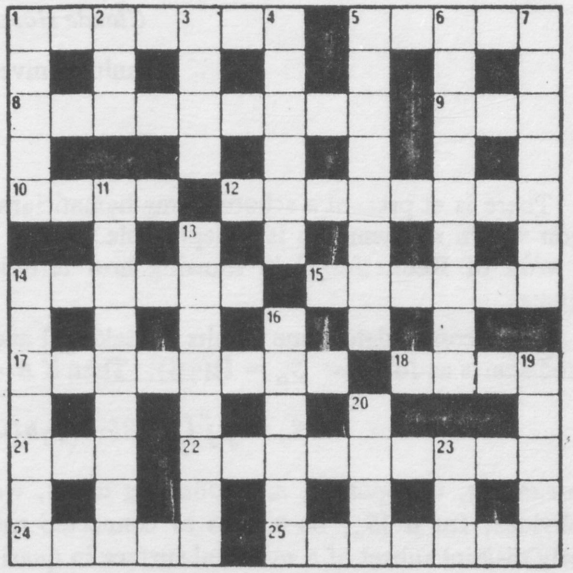
Chartered Accounting: Kelly J. Masterson, 3B. "Statistical Sampling in Auditing"

Management Accounting: G. Joanne Giuliani, 2A. "Ontario Home Renewal Plan"

Faculty: Lisa Lajeunesse, 2A. "A Study in Optimizing a SARSAT Constellation"

Anagram Special

You can solve this crossword as you would any cryptic crossword, but don't be surprised if all of the clues only involve anagrams (rearrangements). Not only that, but each clue contains only a one-word anagram. One way to solve (if you're not too familiar with the grammar of cryptic clues) is to look at the number of letters in the answer, and then look for a word in the clue with that many letters and try rearranging it. No prizes for this crossword, but have fun filling it in! Last week's winner: Karen Ford. Pick up your prize at MathSoc ASAP.



dy/dx = 0

1. Rudely ignored a black person. (7)
5. Respond when crate is damaged. (5)
8. Stationed differently to get medicine to counteract poisoning. (9)
9. Arc formed with automobile. (3)
10. Wildly shot the landlord. (4)
12. Demurred, perhaps, then killed someone. (8)
14. Confusing credos of styles. (6)
15. Haunts, perhaps, and gets rid of hood. (6)
17. Wildness, perhaps, and fraudulent schemes. (8)
18. Make a cut, and use pins, maybe. (4)
21. Disappear quickly when urn is broken. (3)
22. Worked out integrals of geometrical regions. (9)
24. Disturbing orals about the sun. (5)
25. Beach with terrible disease. (7)

dx/dy = 0

1. In poetry, it's below a thane, perhaps. (5)
2. Tug out the stomach. (3)
3. Service book jamming the door. (4)
4. It's routed a different way! (6)
5. Inserted new dweller. (8)
6. Find a Cartesian product. (9)
7. Sort of astride, but get floods of abuse. (7)
11. New coast-line is divided. (9)
13. The person in charge of the creditor, strangely. (8)
14. Resides, perhaps, with wild passions. (7)
16. Deserves new timers. (6)
19. Glue when tapes cannot hold. (5)
20. A Peruvian Indian ruined Cain. (4)
23. Eli goes out to get a garland. (3)

mathNEWS Winners

Several people can still pick up their prizes. If these prizes are not picked up by Dec. 31st, they will be claimed by MathSoc. Further, MathSoc will have (very) irregular hours during exams, so pick up your prize **today!**

The survey winner is ID number 83069886; please drop a note in the **mathNEWS** box with your name and phone number, and we'll call you and arrange the delivery of the pizza. The survey results may be found elsewhere in this issue; thanks to all who responded!

Crossword prizes: this week's winner is Karen Ford. Further, Janice Meuezes has not yet picked up her prize for completing the one in 33:1. The solution for last week's crossword is now posted outside the **mathNEWS** office (MC3035). Please not that there will be no prizes given out this week, as there will be nobody around to check the solutions or to hand out the prizes. However, the solutions will still be posted outside **mathNEWS.**

THM: Seeing is believing.
PF: I see therefore I feel.
I feel therefore I think.
I think therefore I am.
I am therefore I believe.

Hence seeing is believing.

--* Sparky *--

SURFACES IN QUASI-QUASI SPACE

Claude Hopper

Omnius University

There is at present a school of mathematicians which holds that the explosive growth of jargon within mathematics is a deplorable trend. It is our purpose in this note to continue the work of Redheffer[1] in showing how terminology itself can lead to results of great elegance.

I first consolidate some results of Baker[2] and McLelland[3]. We define a class of connected snarfs as follows: $S_\alpha = \Omega(\gamma\beta)$. Then if $B = \bullet$ is a Boolean left subideal, we have:

$$\nabla S_a = \iiint_{E(\Omega)} B(\gamma b_0, \gamma b_1) d\sigma d\phi d\rho - \frac{19}{51}\Omega.$$

Rearranging, transposing, and collecting terms, we have: $\Omega = \Omega_0$. The significance of this is obvious, for if $\{S_\alpha\}$ be a class of connected snarfs, our result shows that is union is an utterly disjoint subset of a π-hedral surface in quasi-quasi space.

We next use a result of Spyrpt[4] to derive a property of wild cells in a door topology, $\square$, which is a superlinear space. Let $\{P_\gamma\}$ be the collection of all nonvoid, closed, convex, bounded, compact, circled, symmetric, connected, central, Z-directed, meager sets in $\square$. Then $P = \bigcup P_\gamma$ is perfect. Moreover, if $P \neq \phi$, then P is superb.

Proof. The proof uses a lemma due to Sriniswamiramanathan [5]. This states that any unbounded fantastic set is closed. Hence we have

$$=> P \ddot{} \xi(P_\gamma) - \frac{1}{3}.$$

After some manipulation we obtain

$$\frac{1}{3} = \frac{1}{3}.$$

I have reason to believe [6] that this implies P is perfect. If $P \neq \phi$, P is superb. Moreover, if $\square$ is a T_2 space, P is simply superb. This completes the proof.

Our final result is a generalization of a theorem of Tz [7], and encompasses some comments on the work of Beaman [8] on the Jolly function.

Let Ω be any π-hedral surface in semi-quad space. Define a nonnegative nonnegatively homogeneous subadditive linear functional f on $X \supset \Omega$ such that f violently supresses Ω. Then f is the Jolly function.

Proof Suppose f is not the Jolly function. Then $\{\Gamma,,xi\} \bigcup \{\Delta,\Omega,=>\}$ is void. Hence f is morbid. This is a contradiction, of course. Therefore, f is the Jollly function. Moreover, if Ω is a circled husk, and Δ is a pointed spear, then f is uproarious.

References

1. R.M. Redheffer, A real-life application of mathematical symbolism, this Magazine, 38 (1965) 103-4.
2. J.A. Baker, Locally pulsating manifolds, East Overshoe Math. J., 19 (1962) 5280-1.
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5. Rajagopalachari Sriniswamiramanathan, Some expansions on the Flausgloten Theorem on locally congested hitches, J. Math. Soc., North Bombay, 13 (1964) 72-6.
6. A.N. Whitehead and B. Russell, Principia Mathematica, Cambridge University Press, 1925.
7. Mop-Yow Tz, ... 28 (1951) 27-36.
8. J. Beaman, Morbidity of the Jolly function, Mathematica Absurdia, 117 (1965) 338-9.

Masthead time again, people, and only the modest time of 22:05. Don't get the impression we are almost done, cuz we're not, but it's the only thing that can be done until certain people type in (write ,,,,,,?) their articles.Anyway, it's another production night without our favorite laser printer, but Tom managed to scrape up something that looks better than the Imagen (caligraphy, perhaps?). Anyway, Tom is telling me I don't have much room to babble, so I'll start doing these credits. Tonite's pizza crew consisted of the following; Stewart Melanson ((not Fraser, Tom) cover), Tom Watts (printing, patience), Karen, Sam and Brian (pasteup), me ((glenn) layout (what an ego trip telling people to tape that down!)), Fraser Simpson (layout, pasteup, official leader of the Opposition), Jan Gray (typesetting), and finally Saeed and Dr. J (absolutely nothing (I told them I won't credit them with anything)). Next, and even longer (gasp!) is the writer's credits. Here goes: Fraser (mathcol, xword), Tom (Staph, sub., text, editorial, opinion, misc.),Gary Beckenhauer (theorem), tnagel (mathies), spectre (arch.), grmcfarl (opinion, motions), Ross Brown (creeps), bscreac (or something like that (diseases)), Richard Tummers (Watsfic), Sparky (Revenge, seeing), Sauron (God, I'd love to know some of these people)(frosh, micros), Ross Robertson (sleep), B.B. (cancel), and Stewart (lead). Tom just told me we'ld probably have to do a dave till style masthead. Other credits include Sean Romenco(survey help, canned articles), and a few more anonymous writers (smart people!). I guess i don't have much room for tearful goodbyes and smut like that, so I'll just say the only thing I can think of: CP disconnects @22:26