

CO-OP HOUSING ?

Have you noticed the helter-skelter arrangement of housing notices on almost every notice board all over campus? The Department of Co-ordination, the Student Advisory Council to the Department of Co-ordination, and the Housing Office, hope to streamline the whole effort of advertising and seeking OUT OF TOWN accommodation for co-op students.

The Department of Co-ordination has developed a new Job Reporting Card for students proceeding on a work term, whereby part of the second section is devoted to collecting information on out of town housing. As in the past, students will be encouraged to fill out a job reporting card and return it to the Department of Co-ordination no later than the end of the first month of the work term. The top half of the card will be forwarded to the student's Co-ordinator. The bottom half of the card will be sent first of all to Data Processing for the recording of the off-campus address for the Student Record File. The card will be returned from Data Processing to the Department of Co-ordination and those cards, where the student has filled in the section on housing, will be handed over to the Housing Office for recording. Once the Housing Office has finished collecting their information the card will be returned to the Department of Co-ordination and filed in the General Office along with the other job reporting cards.

The Housing Office has agreed to record as much housing information for out of town students as they receive. The Housing Office will then be in a position to publish more complete information for any student wanting it. Once a year the Housing Office sends a "thank you" letter to landlords renting to students and asks them if they wish to remain on (or be removed from) the list. Students will also be able to ask that undesirable boarding houses or apartments be removed from the list.

In addition, the Housing Office has the facility to assist all students in finding roommates, in advertising "apartments for rent" and in advertising sub-leasing opportunities for out of town locations, via a notice board and card system. Students on campus should visit the Housing Office personally. Students off-campus may write to the Housing Office (on the first floor in Needles Hall) with their advertisements.

In short, the Housing Office will handle all of the mechanics. The system is already there, but it is not as effective as it could be because the Housing Office is not getting a significant amount of information.

It will be the responsibility of all students, through the Student Advisory Council and the Department of Co-ordination, to provide the Housing Office with more information on places available. The success of this project will depend entirely on the student returns of the job reporting card by the end of the first month of each work term.

ISSUE 6.4
FRIDAY, NOVEMBER 26, 1974

math NEWS

appleturnover

REBUTTAL

To the Editors:

The first reaction to such an ignorant diatribe as "An Apple a Day" is to dismiss it as not worthy of notice, especially since it is unsigned. Reconsidering, however, leads to the conclusion that a reply is in order, as uninformed readers may not see the article for what it is.

The article asserts that the University of Waterloo once had a reputation for progressiveness and ingenuity in Computer Science, but that whatever reputation still exists is being eroded by the association with HONEYAPPLE. Few members of the Computer Science department would agree that the university's reputation in that field rests solely on a few software products, or on the provision of APL to the masses. However, many would agree that the

production of a viable APL system in less than 26 man-months (much of it part-time) is a most significant achievement, and that the implications of student talent, and of the tools and techniques available to those students, far from hurting our reputation substantially enhance it.

Stripped of its offensive wording, the article in fact is just quibbling about small differences between APL as implemented in HONEYAPPLE, and APL as the author believes it should be. However, there is no standard definition of APL. Iverson himself did not implement the language as described in his 1962 book, and each of the many implementations since then has introduced more new variations. Although the SEAS APL Working Committee set the definition of a standard as a goal in 1970, the main view of the APL community,

(CONTINUED FROM PREVIOUS PAGE)

as expressed in Quote Quad or in the International APL Users Conferences, is that APL is still growing as a language - new features are needed, and old ones should be rethought - and it is not ready for a standard. The differences between HONEYAPPLE and, say, I. P. Sharpe's APL Plus are not particularly greater than differences between other implementations. The article accuses the developer of being unaware of other implementations, but in fact, beyond the IBM 360 and 370 implementations APL\360, APL Plus, and APL-SV, we have some familiarity with, among others, APL/700 for the Burroughs B6700/7700, APL/KRONOS for the CDC 6000, 7000, and CYBER series, APLSS for the DEC System 10, APL\1100 for the Univac 1100 series, and MULTICS APL and DTSS APL on other Honeywell hardware. During HONEYAPPLE'S development, we also talked with people who had been involved in APL development in Iverson's own group, at IP Sharpe, or for Burroughs. The author of the article may disagree with the developer's decisions, and if he is prepared to argue rationally may get them changed, but he cannot honestly accuse the developer of making them in ignorance.

Specific issues raised by the article were:

- 1) Permitting the origin of indexing to be other than 0 or 1.

What is important about a mathematical notation is convenience in use, and since, for example, many problems are most naturally expressed using symmetric indexing, from -k to +k, arbitrary origin can be a considerable advantage. However, while components within a coordinate may be convenient to so name, it is unlikely that the coordinates of the array itself would be convenient if so named, hence, as stated, origin change does not affect coordinate indexing, eg. in +/[3]A.

- 2) Escape sequence for terminals without APL graphics.

We believe if you want to use APL, you should use a terminal with APL graphics. As an emergency measure if you cannot get such a terminal, escape sequences to ASCII characters have been provided. The article alleges these are not standard. The issue of what escapes to use has been discussed repeatedly in Quote Quad, and several different standards proposed, but in practise:

APL\360 and APL/SV support nothing except 2741's.

APL/700 supports only 2741's and ASCII/APL terminals.

APL\1100 supports 2741's, ASCII/APL, and their one character escape.

APLSS, APL/KRONOS, DTSS APL, and MULTICS APL all support 2741's, ASCII/APL, and a two character escape (the escape symbols being ., \$, ., and " respectively) but in no two cases are the character pairs the same.

XEROX APL supports teletypes, using a mixture of one, two, and three character escapes.

3) Execute Operator

Execute operators are implemented in most non-IBM implementations of APL. The EPS (ϵ) operator in APL/B5500 appears to predate that in York APL by at least several months. The operators used vary:

York APL used δ
APL/Kronos uses \pm monadic
APL/700 and APL 1100 use \pm
DTSS and Xerox use monadic ϵ
APLSS uses monadic ϵ or monadic \pm
HONEYAPPLE uses monadic ϵ or δ ,
depending on whether the operator should produce no result or whatever would be typed as a result (including the effect of system commands)

4) The null vector and empty arrays.

Honeyapple definitely treats these differently. No loss of generality is involved, but certain things must be coded differently.

Rather than continuing to discuss other differences, and other enhancements (eg. the file system interface), I will stop by repeating the invitation: If the author of the article is prepared to rationally argue why his version in any of these cases is better than the version currently in HONEYAPPLE, we are prepared to consider changing it.

Yours truly,
W. Morven Gentleman

⚡ BLOODY ⚡
VICTORY

As has been happening almost since the beginning of recorded history, mathematics has taken the lead. Once again, math has triumphed in its last week's victory at the Circle K Blood Bowl Competition. This time, it wasn't even a hard-pressed battle, as we beat our nearest opponent (Science) by a comfortable margin of .9%. A total of 990 pints of blood (minus 90 of red-coloured beer from engineers) was collected during the three day clinic. However, only 673 pints figured into the contest tally, as apparently many people forgot to leave their names on the lists before donating. The standings are as follows:

	STANDING	PERCENT	PTS.
1	math	9.6%	202
2	Science(includes Opt)	8.7%	148
3	HKLS	6.9%	65
4	Engineering	4.9%	90
5	Envir. Studies	4.5%	49
6	Arts	4.2%	91
7	Faculty	1.4%	28
	TOTAL		673

FED FOLLIES

This Sunday once again fed council failed to hold a meeting because of lack of quorum. The meeting has been rescheduled to next Sunday at 7:30 in the usual place. I feel personally that Sunday is not a good night for meetings but President Telegdi is so concerned that two or three members may miss a weeknight meeting because of classes that he holds meetings on Sunday night when there are no classes but when most council members find it difficult to attend because of its inconvenience.

Speaking about next Sunday, Radio Waterloo will approach fed council again for funds to complete their new studio. I personally feel that they have come to fed council enough times for money. Also, I feel that since the money they ask for amounts to a 50% increase in their budget they are indicating fiscal responsibility. However if students give me the opinion that this studio completion is important to them and the federation I may support giving Radio Waterloo the funds. Perhaps that may finally solve their problems.

Now I suppose you've heard this appeal before and it may be redundant, but I shall make it to you anyways. I hope that this appeal may cause you the students (or at least some of you) to quit the most powerful party on campus, the SAP (Student's Anathy Party). They have won too many elections. This silent majority has been a source of concern to the federation. We find this

hard to deal with because when the majority is silent we don't know what they want and there is the danger of the feds doing something that benefits only a select clique instead of the students as a whole. So speak up, let your views be known.

Also if you want to get involved there are many boards in the Federation which will take members. Shane Roberts needs extra people in both his boards. If anyone is interested in finance see Treasurer Marjorey Loveys. Also people are needed in the Board of Publications especially in their subsidiary enterprise otherwise known as the campus's favorite ray the 'Chevron'. The other boards do have people but will welcome any interested students.

As well as the feds you can get involved in our own mathSOC; many people feel that it is at an alltime low this year. However I believe at least part of it must be your fault. So if you want to help your society see Jim Langer or Phil Lanouette in the MathSoc office.

In closing I'd like you to see me if you have any problems. It doesn't have to be strictly a fed matter. A note may be left for me in the MathSoc or Fed office. My home phone number is 884-6547. So I hope to have more to say for you in January and until then I am willing to listen to you.

JJ Long

STUDENTX

You as a student are not represented on Waterloo City Council. You should be! Issues such as transit, housing and the lack of a ward system concern you. The fact that the City bypassed students in enumeration, and has established inconvenient polling locations is evidence of the discrimination you experience.

Most of the current council does not take a stand on the issues, they ran on their personalities. Once elected, they turn a deaf ear to the residents of Waterloo, especially those who want accomodation. This means you do not have a voice at City Hall.

There are students running who can give you this voice. Read this week's Chevron and find where we stand on the issues. Then make the effort to by-pass the hassles of the city and vote on December 2nd. If you are not on the voter's list, you can sign an affidavit at your polling station saying you are an eligible voter, and then exercise your right to vote.

Vote For A Voice
Bruce Woodrow Terry Harding

Subscriptions

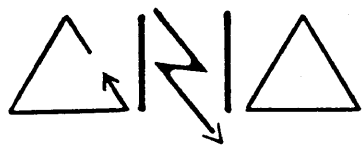
This is the second term that mathNEWS has operated a subscription service for people not on campus who wished to receive mathNEWS. This includes people out on work term, as well as other students who have graduated and left the University of Waterloo. This term, we had about fifteen subscribers. We will be operating this service again next term. Although the mathNEWSes are free (paid for by Math Soc), the postage and handling has to be paid by the subscriber. The fee is \$1.25 per term, which lets us operate on a break even basis.

If you wish to subscribe to mathNEWS, so that it will be mailed to you during the winter term, do one of the following:

(1) Go to the Math Soc office, M&C 3038, and someone there will be glad to take your money, and also your name and address.

(2) Mail your name and address and \$1.25 to mathNEWS, M&C 3038, U of W. For people who don't yet know where they will be living next term, we will accept new subscribers until the end of January.

For only \$1.25, you will get crisp, informative, up to the minute issues of mathNEWS, jam packed from front to back with relevant articles, interesting features, and useful information, mailed to you so that you can keep up on all the happenings around Waterloo, and in the Math Faculty.



To submit your solution you can:
 1. Mail it to MATHSNEWS, MC1618, 4111 W.
 2. Put it in our mailbox in the Maths Soc office (MC3638).
 3. Put it in our MAILBOX outside 3rd floor lounge.
 A T-shirt will be given to the correct solution picked at random (the writer of the solution will be awarded custody of the T-shirt until the solution reaches 18).

To submit your solution you can:
 1. Mail it to MATHSNEWS, MC1618, 4111 W.
 2. Put it in our mailbox in the Maths Soc office (MC3638).
 3. Put it in our MAILBOX outside 3rd floor lounge.
 A T-shirt will be given to the correct solution picked at random (the writer of the solution will be awarded custody of the T-shirt until the solution reaches 18).



horizontal



- 1a penury
 1i fighting in cinema
 2a deteriorate
 2g second stage in Freud's mentality
 2k what angle isn't
 3a rhythm & blues
 3d it isn't really there
 3n common 77 t-shirt
 4a roman traveller
 4j he places a wager (2 wds)
 5a why I can't
 5g canadian national tomatoes
 5k you shouldn't
 6a they is
 6c 2 vowels
 6f perpendicular prefix
 6l don't stop
 6o me
 7a land ruled by thane
 7i "___ the lonely"
 7n before columbia
 8b 1st stage of horizontal 2g
 8e what sugar comes in (sing.)
 8m perverse university
 9a racing car type
 9d running through poems with them
 9i athlete
 10c 2 more vowels
 10f 3rd son of Adam (pl)
 10l always correct
 11a there isn't any ana (2 wds)
 11g don't lie or stand
 11k what he did with the food (2wds)
 12a cause and this
 12j parts of bread thrown to beggar
 13a type of echelon form
 13d athletic sponsor
 14a nautical desist
 14k getting hammered? be tough
 15a triangular sails
 15i banana, gun, volcano

vertical

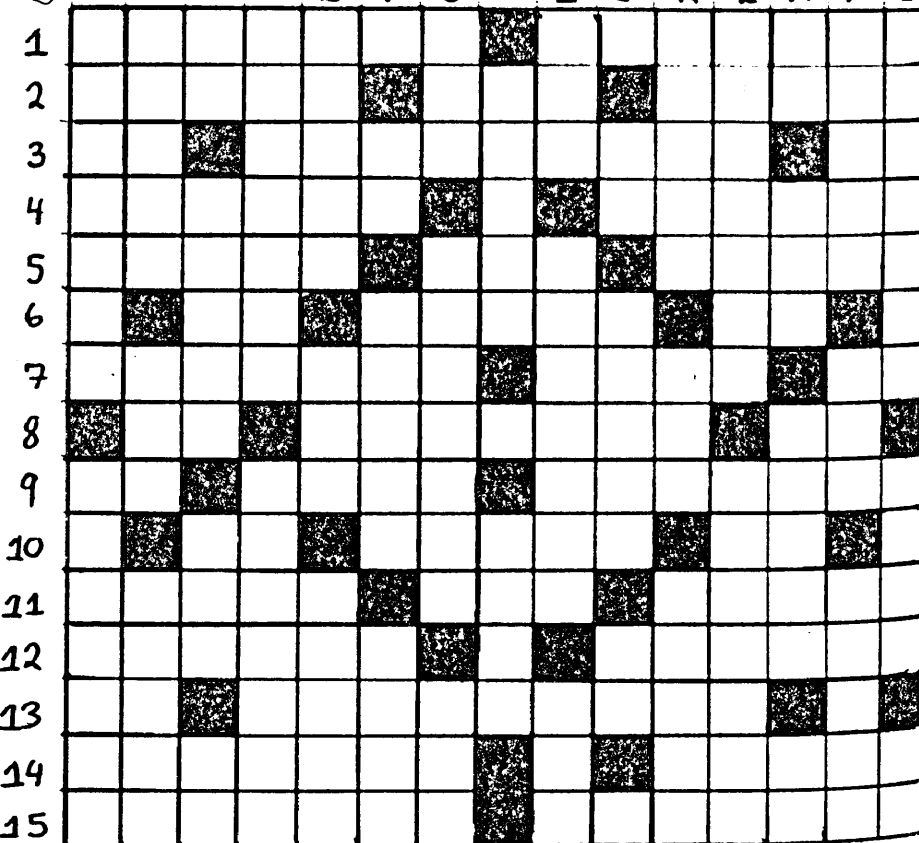


- 1a deviant
 9a nonspecific army officer
 1b what world goes round
 7b syndicate killing
 11b about latin eggs
 1c type of liquor
 4c lettuce taking lead
 10c dolt
 14c where it is
 1d 1st of Tamerlane just sold for bundle
 9d way to get bridge tricks
 1e about moc
 7e what you always do
 11e a nice penetration
 3f all right
 6f bad giants

- 12f indian home
 15f let's say this number
 1g youth educational grant
 5g artist makes
 13g latin foot
 1h big fellow
 8h suppose this number
 10h Yugoslav statesman
 1i in the song you dig sixteen ___s
 5i here we always have food for this
 13i mayhewhostolemywallet rest in pieces
 1j altc
 6j "___ the lonelys"?
 12j city
 15j lj
 1k having ears
 7l diminutive of Gulliver's 1st name
 11k where gladiators & hockey players go
 1l is ___ there?
 9l seven or eleven in dice
 1m a9
 4m philosophy of being as abstract concept
 8m measures out in steps
 14m sick ill
 1n right hand page of book
 7n cheap method of getting there
 11n almost italy
 1o type of band
 9o children with drinks
 14o social credit



A B C D E F G H I J K L M N O

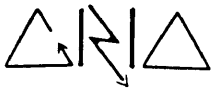


NAME _____

PHONE _____



This Week's



GLIMPSE

Last week's gridword subscribed liberally to the philosophy of 'gl across'; a total of four times, but we had all the clues in there somewhere. In 'al across', interdependence was incorrectly spelled; the proofreader missed a mistake in the clue for '19 down' in that the 'league' should have been 'incorporated'; the clue for '114 down' was wrong but just about everybody got it; and the label 'f15' should have been 'f13'.

Most people had trouble with the word 'trias', it is a word, and it does mean a trio. To Bruce Ebanks and Owen Leibman, try getting bigger dictionaries. To Mark Brader, would you believe that it has no capital letters?

This week we had 20 entries. Even allowing

alternative spellings of the two incorrectly spelled words, we had only 2 correct solutions. Out of the hat, this week's winners are Marg Aldridge and Gregg Andrews. They only get one tee-shirt for the two of them, so how are you two going to wear it? taking turns; each wearing a half; or at the same time?

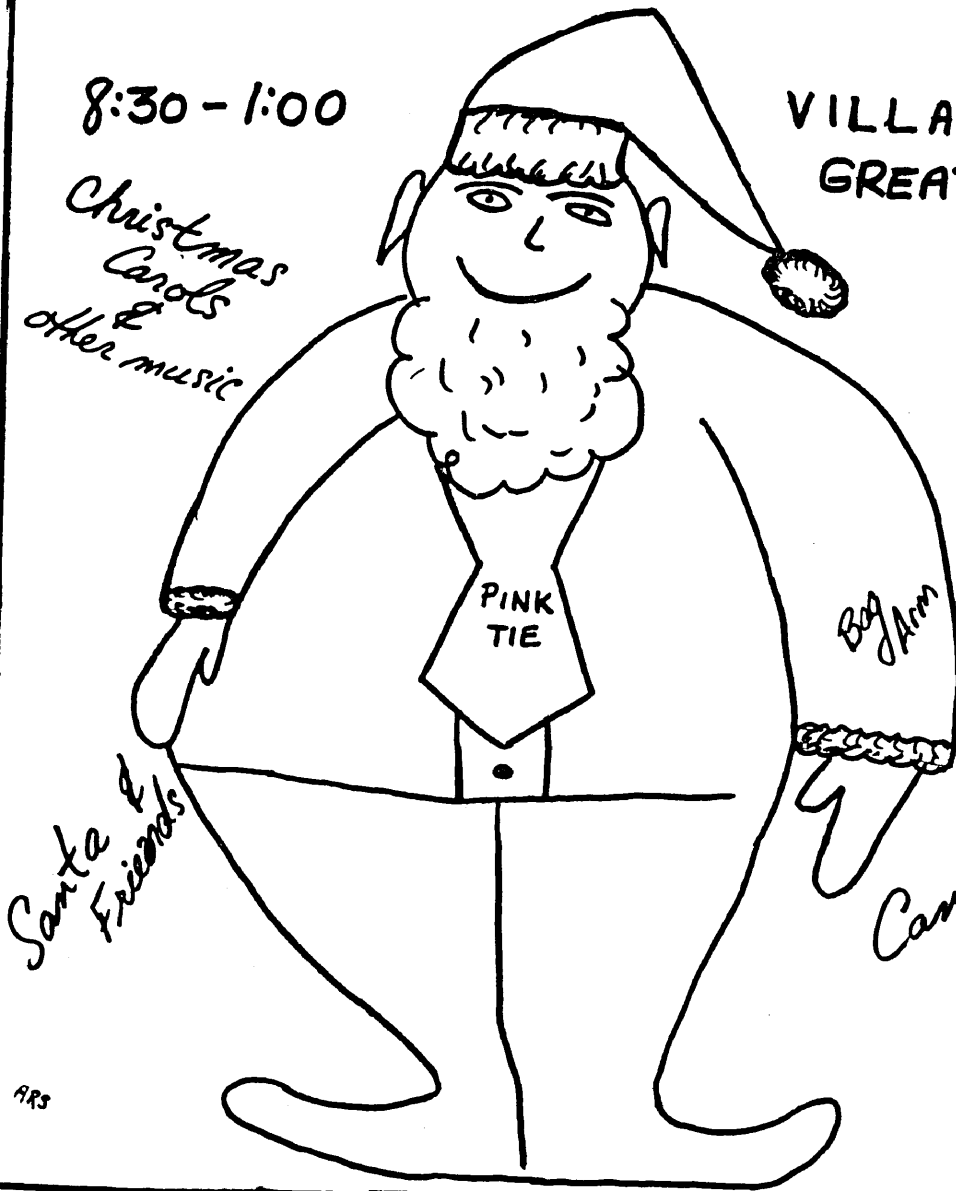
COME TO THE MERRY CHRISTMATH PARTY

NOV. 30

8:30 - 1:00

Christmas Carols & other music

VILLAGE II GREAT HALL



Cash Bar

Free gifts for the lucky few

Candy Canes

Santa & Friends

ARS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
a	I	N	T	E	R	D	E	P	E	N	D	A	N	C	E
b	R	E	I	G	N	R	E	D	C	H	A	R	M		
c	K	I	N	G	T	I	G	E	R	T	R	E	E		
d	S	T	Y	E	R	E	N	I	B	C	A	R			
e	O	H	P	S	I	G	E	T	K	G					
f	M	E	T	R	A	P	A	H	A	F	E	E			
g	E	R	H	F	S	S	I	T	T	R	D	S			
h				O	U	R	I	S	I	R	E				
i	T	O	T	A	G	E	L	E	T	O	D	D			
j	H	A	H	N	O	R	E	M	U	N	E	E			
k	G	T	E	T	A					O	D	D			
l	I	M	P	O	L	E	A	T	E	F	E	D			
m	E	E	L	S	S	M	I	T	E	C	L	A	E		
n	R	A	Y	O	N	I	S	M	G	A	U	S	S		
o	F	L	I	B	B	E	R	T	I	G	I	S	B	E	T

FREE ADMISSION
TICKETS AVAILABLE
AT MATHSOC

3038 (stamped I.D.'s only)

This is my own column...it should be appearing in most future issues of mathNEWS next term-match for it - jlgollan

THE ROVING ACTION

BURLOAF

The Burloaf was unable to report to the mathNEWS room last week due to an unscheduled meeting in another room with the author of the letter to the Answer Burloaf of two weeks ago, which preempted the regular mathNEWS production schedule.

The past few days have seen a number of factors cause Honeywell service become ridiculously slow. We have been up on system release G, which is still with a few problems. The way to tell which release we're on is by the case of the system prompt. "SYSTEM ?" means we're on F, "system ?" means G. Right now, the 240B team of Patient Programmers have been working on their SLOBOL programs, core gobbling things that execute so slowly that DEBUG begins to look almost like a viable alternative to getting assignments done. There is a source of parity errors in the 6050 somewhere, and to aid finding it, the hardware interleaving has been turned off, slowing the machine response by about 10-15%. Combined with the large number of users usually signed on, taking over an hour to compile and execute a 240B program is not unheard of. One user named the interactive editor he wrote "SLED", for "Slow Editor".

The question circulating among the Hacks of 'Bunland this week is: "What do you do with a user that spends half his time writing software that is very useful (in fact, some of the most popular systems implemented for use by everyone), and the other half of his time crashing the system, and being a general nuisance?"

Another suggestion that has come up is: Perhaps file space on the Honeywell could be sold to students. The current rate listed is 15 cents per link (that's 12 llinks) per month, although the cost to students could be somewhat lower. For students with only a few llinks of space for a course who want to work on some of their own stuff, this could be a reasonable solution. One hitch with this, though, is that there is not that much disk space available.

We have a problem for all you English experts: Is the following sentence grammatically correct, and if not, how can we make it correct: If you don't do it, it won't find itself get done.

Reading your average student newspaper can tend to make you depressed. Recently, there appeared an article stating that, because of new changes to the Liquor Act, there will be no student pubs after the end of this year. If this is the case, then perhaps one solution would be to change the format of the pubs. Instead of serving beer at them, they could serve Coke. Of course, we might get the odd bad batch of Coke, which is gold coloured instead of brown, or it may have been bottled in bottles with the wrong labels, but I'm sure the occasional foul up with orders would be tolerated by students.

The roving Action Burloaf was able to attend the Computer Science Club meeting for a few minutes. I arrived at about 8:45. At about that time, the donuts arrived. A discussion was in progress about something. After about ten minutes, a suggestion was made that we break for twenty minutes to think things over (actually a disguised request to get some refreshments). The motion was put through quickly, and there immediately followed a scramble for the Coffee and Donuts. The donuts were quickly consumed, and the meeting was brought back to order at about 9:20. The discussion was then continued. I left at about 9:30.

This is the last mathNEWS this term, and so in closing, perhaps I should say a few things about all the improvements that have been happening around here.

Moving on, hopefully in the next few weeks, as the term ends, and assignments are completed, system usage will drop to the point where it is not totally impossible to get work done in a reasonable amount of time. It makes you long for the days of summer, when you could always find a terminal in the 2741 rooms, you could always find a table in the math lounge, when it was still light out when you went home after a day in the math building, ... It's not that bad now though, for soon Christmas will be upon us, and one can take it easy for a little while before next term gets underway.

THE ANSWER


BURLOAF

Dear Answer Burloaf:

I have been reading a lot of things about the way they're making miniaturized computer and calculator circuits. I need something small which will multiply. What do you suggest?

Yours truly,
Bryan Anderson

Dear Bryan:

I OBJECT TO THAT SLUR
A rabbit. UPON RABBITDOM. BOFF 

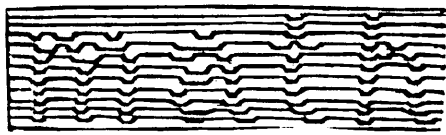
Dear Answer Burloaf:

I have read mathNEWS for two years now, and I have never been insulted in print. Could you please print something that would offend me.

Yours truly,
Willy Maykit

Dear Willy:

Sorry, but you're not important enough.



LETTERS

HOCKEY - B

The Math B hockey team appears to have clinched a playoff berth again this season. They ended the regular schedule with a 2-2-2 record, tied with St. Jerry's and St. Paul's, with 6 points. However, Math advances to the playoffs as a result of victories over these two teams.

In the fourth game of the season, the team began to connect and managed to overcome a 2-0 deficit to emerge the winners over St. Paul's, 3-2.

The fifth game saw Math B survive the intimidation and head-hunting of St. Jerome's Bag-Biters to defeat them 4-0. Dirty tactics throughout the game by the Baggies nearly blew the lid off the game a number of times, but Math kept penalties to a minimum as St. Jerome's had one man ejected from the match, and played three-quarters of the game with one or two players in the penalty box.

Doug Snoddy opened the scoring early in the game. Jim Barton and Jim Nichol soon put the game out of reach and Larry Hancock rounded out the scoring late in the game, as two Baggies cooled their rears on the penalty bench. Ed Grabb played an excellent game in net to ensure the victory.

In the final game of the regular season, Math B played their strongest passing game of the year, but inability to clear the puck from their own end and general lack of luck resulted in a 5-3 loss to Village.

Early in the game Ed Lebar failed to score on a penalty shot and Jerry Chimo hit the cross-bar on a clear scoring opportunity. Chimo later opened the scoring and Jim Nichol added another as Math dominated the opening minutes. But errors in their own end proved costly, as even Wayne Adam's goal, on a deflection of a shot by Doug Heard from the point, could not deter the Villagers as they swept the win.

Math B is confident of victories in the playoffs, and we wish them best of luck.

HOCKEY-REG

Defenceman Fred Vivash scored the winning goal and then donned the goaltender's equipment for the final minute in leading Regular Math to a 4-2 hockey showdown over Environmental Studies last Sunday evening.

The win enabled Regular Math to preserve a 6-0 record entering the Competitive hockey "A" playoffs next week.

E.S. wound up in second place in league A1 with a 4-1-1 record.

Vivash's goal late in the first period gave math a 3-0 lead while playing forward. While playing a sterling game on defence during the second period, Vivash was called upon to play goal for the final 45 seconds when goalie Bob McKenzie was ejected for fighting. With Math playing 2 men short, Vivash made 4 key saves to preserve the triumph.

Pat Fallon, Scott Wetmore and Dennis McDonald added the other Math scores in this game while Bob Budd, Neil McLean and Mark Edwards added assists.

Earlier in the week, Bob Budd scored twice as Regular Math, with their fourth straight shut-out, blanked Sunnydale Sabres 5-0. Vivash, Brian Greatirx and Dean Mucci also scored in this contest.

Regular Math will now await semi-final action next Wednesday night, December 4th, at either 10:00 pm or 11:30 pm at Moses Springer. Spectators are encouraged to attend.

advance, defaulted their game on Tuesday by not showing up. At press time, Math Mucks had a consolation championship by default, but by Monday things may change. The players hope to have some sort of game anyway.

Meanwhile, in P league, Co-op Math lucked out by a hair to the Jocks in second round championship action after winning their first game against V1 East. The Jocks go on to play the Environmental Studies for the right to play in the championship game. Pentagon has won two straight games and will play St. Jeromes A for the right to play the winner of the E.S.-Jocks game. This writer picks E.S. and Pentagon to make the final. You can find out the outcome Sunday at 7:15 pm on Court 2 where Pentagon plays. Beside them will be the other game on Court 1. The B league championship will be decided on Monday at 7:30 pm, immediately before the A league championship is played. Both games should be exciting and close.

Math Mucks will have 6 out of 8 players returning next term and with some maturity and some new players, should do much better. So, assuming we have a game on Monday, it will be at 9:00 pm in Gvm 3. And, let's watch those fouls, eh Uttley?

Don't forget the Haismith this Friday and Saturday, all you P-Ball freaks.

BASKET BALL



Math Mucks finally won their second game of the season Tuesday night in the second round of the A league playoffs. Mucks ended up in the consolation round after losing in first round action on Sunday to a very good Kin A team. Kin A will go to the championship game against the Alvfhons. This was the expected outcome and it now remains to be seen who will be the A league champions on Monday at 9:00 pm. Math Mucks play for the consolation title also at 9:00 pm that night in Gym 3. However, we may not have any opponents to play as both of the teams which were to play to see which one was to

SENTINEL

The Mathematics Student Body is electing a senate rep in the next two (2) weeks. I WANT TO KNOW I REPRESENT YOU! Please come out and vote.

I intend to take the information at hand and:

- 1) Make a good decision.
- 2) Postpone to analyze the situation.
- 3) Inform you of what is going on.
- 4) Do nothing, if that is what is called for.
- 5) Do what is called for by Mathematics students.

J. J. Carpenter

FEEDBACK

Note: Letters appearing in this column represent the opinions of our readers. mathNEWS welcomes your criticisms, comments, suggestions, etc. All letters should be signed, but, if requested, a pen name will be used.

There has been a great stink in the math building lately, one by smokers, and another of a different kind caused by non-smokers who don't like the stink caused by smokers. It's about time somebody said something. I also think it's about time somebody said something about the mess smokers and non-smokers leave behind them.

The only restrictions on smoking in m+c are in effect (they are?) in terminal and computer rooms, and wherever ashtrays, or equivalent, aren't available. It is well-known that smokers pay as much attention to these restrictions as Larry Csonka does to a 102 lb. weakling. And, I don't think smokers are very concerned about there being no ashtrays around when the floor, desks and table-tops are around (I just came out of a midterm where smokers were asked to refrain, and the nic-addict beside me did his best to burn a hole in the table-top as he butted his butt). It seems that neatness is the last worry of a smoker.

But looking around the rooms, especially around the 3rd floor, there must be other people around who don't give a damn for the next person. Paper cups, gum wrappers, candy bar wrappers and general trash abound on tables left behind by what I can only describe as sloppy and lazy clods, lazy because they don't have the strength to carry their container (empty!) to the garbage can, one of which there is in each room. If they happen to dump a cup of coffee or pop, they just leave it there (not much they can do in the middle of a class), and they'll leave the cup lying in the middle, perhaps to let us know just where they bought it.

To sum up, I am not too angered at smokers who are too stupid to give a damn about their health, and too ignorant to give a damn about practicing every non-smoker, provided they don't leave a mess behind. I am very angered at the clod who thinks he/she is so superior that they can leave their mess behind rather than carry it to the garbage.

Jim Mantle Math, (of course)

I find the article 'An Apple A Day' in the November 22, 1974 issue of mathNEWS to be objectionable because it misrepresents HONEYAPPLE and it makes unwarranted attacks on its developer, WCW Ince.

There is no doubt that HONEYAPPLE has had its problems in its creation, and of course one can and should debate the advantages of one implementation over another. However, it is misleading (to the non-APL user, for instance) to make an anonymous front page attack on HONEYAPPLE on the basis of certain misconceived notions of the way things should be.

It is probably the case that I have found more bugs in HONEYAPPLE than any other user, but I have found Mr. Ince to be willing and able to make corrections almost as soon as the errors were found. I think that he has done an excellent job in producing an APL implementation in such a short time.

Your article, however, is a bad review written by a novice critic, not unlike some of the critic's reviews one reads in the daily papers. Please, mathNEWS, raise the standards of writing to a more academic (or at least professional) level.

Yodar Critch

Dear MathSoc/mathNEWS:

I usually write letters of complaint, but this time I have some wonderful news. I found a nice, quiet, clean, smoke-free place to eat lunch! I have been looking for such a place for some time now, as the math lounge is a most unbearable place for non-smokers. This place is in m+c, on the third floor—just a short walk from C+D if you care to dash in there, holding your nose, and purchase some eat and drinks. The room I am speaking of contains several electric typewriters, but nobody uses them. A lot of people walk in and say, 'down again, eh?'. Sometimes they swear too, but they usually don't stay very long. The room number is 3018.

They tell me sometimes people use the typewriters, but not very often, and I haven't seen anybody typing all day today so far (Nov. 21).

One thing the room does need though, is softer chairs, and then it would be a very nice lounge. It certainly is quiet.

Yours truly

J E Laperwerf

Who says people don't smoke in 3018? ed.

It has been pointed out that perhaps the most potentially dangerous threat to the future of the tobacco industry is not so much legislative smoking and advertising bans -- or even outrageous level of taxation -- as the developing psychological attitude that smoking is somehow socially unacceptable. As nonsmokers in recent years have gone through various levels of what might be called consciousness-raising via anti-smokers' adroit use of media, there has been a declining willingness to tolerate tobacco smoke. This 'take-a-stand' attitude on the part of nonsmokers has been reflected in the growing hue and cry for smoking bans, which has met with only limited success thus far, and for advertising bans, with both cigarettes and little cigars now off the air -- and attention turning to excluding tobacco advertising from print media. More subtle, but far more dangerous, is the creeping attitude that smoking is not always socially acceptable. If smokers can be made to feel guilty if they do something frowned upon in certain social situations, they're less likely to do it. There's a snowball effect, with the socially unacceptable situations widening. More and more smokers are likely to give up their pleasure altogether. Guilt is a powerful force.

We think there is evidence of this attitude and it apparently is becoming more widespread. People who smoke, who enjoy it, many of whom are not in the least desirous of giving up their pleasure, are beginning -- because of a developing social unacceptability -- to enjoy it less and even forego it in certain situations. The tobacco industry must begin to think about this phenomenon and lay the groundwork for a countervailing strategy to defeat it.

--from the U.S. Tobacco Journal, Oct 25, 1973, as quoted by the National Clearinghouse on Smoking and Health, Dec 18, 1973.

Since this is the last issue for the term, I figured I could get away with writing an article without any danger of being threatened with making it into a weekly mess upon pain of exposure (you don't think I'd own up to any of this bull, do you?).

Anyway, for all you M132A students who don't know what to do with yourself now that the last test has been written and nothing is left besides the exam (wordy-dirty), try key-punching up a program, and run it with the following cards.

SACC etc.
SJOB WATBOL D0000UOW, KP=26
SRUN, MSGLEVEL=0, LIST
Put the rest of the program in here.

This will get you all sorts of GIBBERISH, which will make sense if you study it hard enuf, pray, meditate, and refuse to eat Village food. Sticking around to 4th year Computer Science also helps (now that I've got your attention for a little while...). Actually, the output is very basic, i.e. the code your WATBOL program(?) is translated into. The MSGLEVEL=0 will get you all the messages from the compiler, which should do a good job of trying to confuse you. Didn't think you got away with all that, did you? Go see your tutor, and get them to explain everything, and don't leave until you're satisfied.

Several weeks ago in mathNEWS, a filler (PIC X(20?)) suggested a neat program to tie up DEBUG terminals (as if they needed it) and make enemies at the same time. Well, not to be outdone by anybody, I marched right up and ran it. The program ties up a terminal for 34 seconds, which is really an insignificant amount of time when it comes to DEBUG, and then bombs out. It seems there is a lines limit of 1000 lines that nobody found because they ran into the 10-page limit first. Unfortunately, the only parameter which is changable in DEBUG WATFIV (CLASS W, for those of you who want another piece of trivia) is increasing execution time from 2 to 3 seconds. Nothing can be done about page limits, line limits, getting more than one copy of output etc. The Komputin' Senator new we was komin'.

For those of you who are having trouble with page limits in ALGOLIV, you can get rid of the program listing with a %NOLIST

Over the term, I have had a change in my respect for the maintenance services of IBM, for the worse. On one Computer Science day, the operator was getting so many read checks and validity checks on both Math DEBUG readers, he somewhere got a vacuum cleaner and vacuumed out both card readers, thus stopping read and validity checks. Perhaps IBM saves themselves the trouble of doing it by waiting until the situation is so intolerable somebody says the hell with the Itty Bitty Meaty Company, Incorporated and does it themselves. The DEBUG terminals may be a lowly method of running jobs, but they are the only contact with the computer many students have with the computer and have run, on a busy day, over 14,000 jobs. Surely they deserve better maintenance than what they are getting now.

Speaking of DEBUG, tomorrow is another CompSci Day, and this week, the DEBUG terminal will be closed to UniWat students from 8:30 am until 4 pm.

To continue service for a full 8 hours, DEBUG will be open from 4pm until midnight, instead of the usual noon to 8pm hours.

Das all for this week and this term, have yourself a very merry holiday, and maybe Komputin' will be better next term.



And now, the article you've all been waiting for.. As you no doubt know, the University of Waterloo chess program went down to San Diego and wrested the U.S. Computer Chess Championship from Chess 4.0 of Northwestern University, Ill. who had won the championship in every previous competition for the U.S. title. To do this, we had to beat Chess 4.0 in the final round. So, due to popular request, we present the last round game score (plus commentary) to all the avid chess players lurking out in the wilds of the M&C building...

White: Us. Black: Them.

Time control: 40 moves in 2 hours, 10 moves per half hour thereafter.

1. P-K4 P-0B4
2. P-0B3

A prepared line to catch them out of their memorized openings book. But their knowledge of this line was still more extensive than ours, so this tactic was only partially successful.

2. ... P-04
3. PxP 0xP

This early development of the black queen is justified in this case since White's centre is undermined. However, black leaves it out in the open a bit too long for his own good, as the queen gets hassled by white's minor pieces.

4. P-04 PxP
5. PxP N-0B3
6. N-KB3 B-N5
7. N-0B3 0-03?

It was necessary for black to play 7. ... BxN first, as now white's minor pieces start infiltrating the black position.

If 7. ... BxN; 8. PxP, 0xP?; white continues with 9. 0x0, Nx0; 10. N-N5! with a position that is worth the pawn down.

8. P-05! N-N5

8. ... N-K4 was somewhat better.

9. B-N5+! B-02
10. BxB+! KxB

Unfortunately necessary, for if 10. ... 0xB? 11. N-K5!, 0-03; (else 12. 0-R4+ picks up the knight) 12. 0-R4+ and black must surrender his knight (if 12. ... K-01?; 13. NxBP+ wins the queen)

11. B-K3

11. N-N5 followed by 12. 0-R4 or 12. N-K5 (depending on black's reply) seems to be a quicker win. But simple development can't be bad here.

11. ... 0-R3?

A fatal error. Black is avoiding development in an attempt to inhibit white from castling and also threatens 12. ... N-06+ .But with only his queen and knight in the fray, development was essential. Also, the black knight needs 0R3, as will be seen.

12. N-K5+! K-01

13. P-0R3!

...and the black knight is trapped. Black snarls, but due to his lack of development, he is doomed to failure.

13. ... 0-03

14. 0-R4+! N-B3

If 14. ... K-01, then 15. NxP+ wins the Queen.

15. PxN

And now, of course, the white knight is immune, since if 15. ... 0xN?; 16 PxP+ will leave white at least a queen and rook up.

15. ... PxP

16. NxP P-K4

17. NxRP+! 0-02

Else black loses a rook to 18. N-B6+.

18. 0x0+ Kx0

The rest is silence. White is a piece and pawn up, with the much superior position to boot. It is now only a matter of time before black is beaten to his knees.

19. R-01+ K-K3

20. 0-0 N-KB3

21. P-0N4 B-K2

22. P-KR3 P-KR4

23. KR-K1 P-R5

24. R-03 P-K5?

Losing another pawn. But there is no hope.

25. B-04! KR-K1

26. BxN BxB

27. RxP+ K-B4

28. RxR

Due to his material surplus, white is very happy to trade.

28. ... RxR

29. P-N4+ PxP e.p.

30. PxP R-K8+

Spite check.

31. K-B2 R-0B8

32. P-N4+ K-N3

33. N-K4 B-K4

34. P-N5 R-B7+

35. K-B3 R-KR7?

Black is intent on suicide.

36. N-B2!

Now black's bishop and rook are tied up due to the threat of K-N3 winning the rook if the bishop strays too far away.

36. ... B-B3

37. R-06 K-R2

38. R-05

Preventing the threatened ... B-R5 by the counter threat R-R5+. Also, the white rook now prevents the bishop from defending the misplaced rook at KR7.

38. ... B-N7

39. K-N3 RxN

40. KxR BxP

41. P-N6!

Passed pawns must be pushed. White now can force promotion of this pawn, but misses on his next move.

41. ... B-B8

42. P-N7(?)

Here, 42. K-B3 would have stopped the bishop from getting back to sacrifice itself for the white pawn. Now white "only" wins the bishop, rather than getting a new queen.

42. ... B-B5

43. N-B6

Threatening 44. N-K5.

43. ... B-B2

44. R-K7

The program is greedy to the core, and filches another pawn while black watches helplessly.

44. ... B-B5

45. RxP B-03

46. P-N8(0) Bx0

47. NxB K-N3

48. R-B5

Now, white just walks in and surrounds the trapped black king.

- 48. ... K-R6
- 49. N-07 P-N3
- 50. R-B6 K-N4
- 51. K-N3 K-R3
- 52. N-K5 K-N2
- 53. P-N5!

Making sure the King stays in the corner before taking the pawn.

- 53. ... K-N1
- 54. NxP K-R2
- 55. P-R4 K-N1
- 56. P-R5 K-N2
- 57. P-R6+ K-R2
- 58. N-B4 K-R1
- 59. P-N6 K-N1
- 60. K-N4 K-R1
- 61. R-B8 MATE.

(Comments and notes by Grandpa, Kamshaft and McRook.)

RERUN

Page 232 of the 1974/75 University of Waterloo Undergraduate Calendar contains the following statement:

"For each academic year, except the graduating year, a student must register in n courses where n is not less than 5, and n is not greater than 8, and these must include at least two mathematics courses. In his graduating year the student must take two mathematics courses and at least as many other courses as are needed to satisfy degree requirements."

It is the intent of the Mathematics Faculty that this regulation be applied on an academic term basis. Consequently, commencing in January/75 the above regulation should be interpreted as having "year" replaced by "term". This regulation has been altered appropriately for the 1975/76 Calendar.

In recent years the Faculty of Mathematics has observed that some students change their minds in the middle of first-year regarding their choice of an Honours programme. In addition, some students find that they are doing very poorly academically after one term and would appreciate an opportunity for a fresh start. To assist students in these categories, the Faculty has adopted new policies concerning its first-year calculus and algebra courses.

All the policies stated refer to Maths 130 and 120. However, with the exceptions stipulated in note (2), the same policies also apply to Maths 129 and 119 respectively.

- (a) Math 130 remains a two-term (full-credit) course. Math 120, however, is offered as two consecutive one-term (half-credit) courses, Math 120A and 120B.

- (b) Every Math 130 student is assigned a term mark at the end of first term. Any student, whether he/she receives a passing or failing term grade, may elect to continue in Math 130 for a second term. The student will then either pass or fail the full-credit course depending upon the final grade obtained at the end of the term.

- (c) Students who pass Math 130 after first term may elect to continue in Math 120B in second term. The term marks obtained in Math 130 will be used as final grades in Math 120A. Note that students who receive a passing term mark but a failing final mark in Math 130 will not normally be given retroactive credit for Math 120A. Such students will have to repeat all of Math 130 or both halves of Math 120.

- (d) A student who receives a failing term mark in Math 130 at the end of first term may elect to drop Math 130 and get a fresh start by enrolling for Math 120A in second term. The term mark from Math 130 will not be included in any cumulative averages which determine a student's eligibility to continue studying in the Mathematics Faculty.

- (e) Every student in Math 120A for the first term will receive a final grade in the course at the end of the term.
 - (i) A student who passes Math 120A in first term will receive credit for the course and proceed to Math 120B in second term.
 - (ii) A student who fails Math 120A in first term does not have his failing mark counted in his/her cumulative averages. However, he/she must re-register in Math 120A in second term.

Notes: (1) The stipulation in (e) (ii) that a failing grade in Math 120A during the first term will not be counted in cumulative averages does not apply to students who have previously been enrolled in the Mathematics Faculty. It applies only to new first-year Math students taking the course for the first time.

(2) Because of the cumulative nature of the course content, students may not take Math 120B without first obtaining credit in Math 120A. However, students obtaining a final grade in Math 119A (or term grade in Math 129) between 45% and 49% may be permitted to enrol for Maths 119A and 119B concurrently.

It will be each student's responsibility to contact a Faculty Counsellor at the start of the winter/75 term if he/she wishes to make any changes to his/her algebra/calculus course selection. Further information in this regard will be announced later in lectures and posted on bulletin boards throughout the Math and Computer Building in January. Final grades in Maths 119A and 120A and term grades in Maths 129 and 130 will be available on the first day of classes in the winter/75 term (January 6/75).

unCLASSIFIED

ADS

(Note: mathNEWS will print your classified ads FREE OF CHARGE. Just jot them down on a slip of paper, take it to room MC 3038 and have someone there deposit it in the mathNEWS file. Or, drop your ad in the campus mail (a free service) addressed to: mathNEWS, MC 3038.)

Need a place to stay for the winter? Try Waterloo Co-op, 280 Phillip Street, Waterloo. Phone 884-3670. We offer co-operative living in a student resident environment. Single, double, and single-double rooms are available. Food is provided.

Singles \$570
Doubles \$520
Single-doubles \$620

Housing Available- 1 person needed to share 2 bedroom apartment with 2 males. January to May. Apartment is near Westmount Plaza. Rent \$70 per month. If interested call Glen at 884-0204 after 6.

I will be working in Ottawa this summer, and am looking for an apartment in the east end (near St. Laurent Blvd.). If you've got a year lease, I might be able to take it off your hands this summer.

David Villeneuve
V1-W3-212
884-6416

WANTED: One girl to share bedroom in apartment at 285 Erb street from January to April. For more information, phone 576 2575.

Lost: Lady's Timex watch, beige strap with bronze face, in Math building on Thursday, Nov. 21. If found please contact Beth Beach, Dept. of Computer Science, ext. 3402.

Lost: Left black leather glove with rabbit fur lining in Math building, on Nov. 15th. If found, please call Lily at 884-9831. Reward.

Wanted: Roommate to share apartment in Montreal for January-April work term. Dave 884-1786 evenings.

For Sale: Hohner Contessa guitar with hard case. Good condition. Asking \$110. Call Dave 884-9757.

Apt. to Sublet: January 1st-April 31st. Ottawa. 3-bedroom. Contact 885-2924.

I am looking for persons to share an apartment in Montreal, January-April '75. Or, if you already have an apartment and are looking for someone call Doug Taylor at 884-2652.

PERSONAL: World Inflation would appreciate mail of any sort but particularly from sympathetic persons.

mathNEWS-- is a news weekly (every other week in the summer) published at the University of Waterloo, Waterloo, Ontario, Canada. Printed on campus at Graphic Services, mathNEWS is financed through mathematics society fees. The views and opinions expressed herein are the sole responsibility of the mathNEWS staff. We welcome your letters and submissions and we can be contacted at mathNEWS, M&C 3038. Our weekly deadline is 4:30pm, Tuesdays, with production that evening in M&C 3011. Feel free to drop in. Circulation this issue: 1200.

as this is the last issue of the term we hope we've lived up to the expectations of our subscribers and our general reading public, if not you can come out and work on it next time... at 8:00 the system says 'no opp til 9:00', so the system should be up for at least another hour... this could easily have been 14 pages, but nobody was willing to work for another 5 hours... this term we have survived: few workers, no workers, the russia-canada hockey series, the csc, the 'bun, lack of sleep, minor disagreements with c&d, and major disagreements with prraynham's coffee... we have now successfully completed two full years of operation... there's a new look on the front page... thanks to pregg andrews (we told you that you'd get your name in this issue)... no luck, it's 8:25 and system going down until 10:00, darned operators are back..... it's a nice way to spend an hour and a half, asleep at a terminal, but they could make the chairs a little softer. for once they guessed it right and the system is up at 10:00... this final issue for the term, was whipped, beaten and generally pounded into shape by: the isometric jilong; the isomorphic C.M.F.; NEVERMORE (so say we all); DAVE BROWN; the invaluable (sic) IAN GOLLAN- #1 roffist?; MPDILLON (too young to grow a beard?); Ray (he found two compiler bugs but didn't get his assignment done, what use is he?); prraynham (from the University of Waterloo Computer Science Club Life Support Group, and a host of other subversive organizations) エーゾー; Jim the Torch Mantle (did you say that you were going home at 12:00, it's only 8:20 now); boff (who is getting sick of all those rabbit jokes) and dave; and the incomparable, and this week, vigilant, Randall S. (what is the 'S' for) McDougall. some weeks it seems harder to fill this space than others... maybe it's time to lay off for about four months... as the room begins to resound with the chatter of busy terminals and die-hard 'bun phreaks, mathNEWS finally and irrevocably disconnects.....

SYSTEM ?logoff
**resources used \$ 1.05, used to date \$ 312.79= 15%
**file space 9 links used from 12 links quota
**time sharing off at 10.676 on 11/27/74