

# Waterloo Computing Facilities

## ONCE THE MAINSTREAM, NOW THE BACKWATER?

With the continuing presence of long delays in DEBUG service being suffered by computer science students, it seems pertinent at this time to examine the past and present facilities of our Computing Centre.

In 1967 the Computing Centre upgraded its IBM model 7044 with a /360 model 75 and became almost overnight one of the largest university computing centres in Canada. At that time the model 75 was a mammoth machine by any standards, being capable of over 2,000,000 calculations per second. It came equipped with 512,000 bytes of fast core which was soon upgraded by over a million bytes of slow core and then, again, by another 512,000 bytes of fast core. The decision to purchase such a large machine in the early stages of the university's development was a critical factor in producing the environment which enabled Waterloo to take a lead in the field of computer science. Such powerful computing facilities attracted many students and faculty not only in the areas of computer

science but in many other fields of the applied sciences as well. Computer science has since become an integral part of the curriculum of almost all faculties at the University of Waterloo. The introduction of the DEBUG service in 1968-69 made it possible for students to have instant access to the computing facility. This revolutionary idea was quickly adopted by other universities around the world.

Until recently students moved through DEBUG almost as fast as jobs could be printed. The line to the printer moved at a constant walking pace and halted only for the occasional machine malfunction.

Since this time, however, the number of students at the university has increased significantly along with faculty and administration. This increase in the user community as well as the ever-increasing demand for new and different computer applications and services have strained the university's computing resources to their limit. In fact the model 75 was considered

(cont'd on next page)

ISSUE 3.9

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# math

# NEWS

## mathweekend in retrospect

### WHERE ALL THE MATHIES DIDN'T GO

Well, it was math weekend alright, but apparently mathies did not take to mathsoc's fare as events were poorly patronized by math students. During the three evening pubs, only about 150 mathies attended; there were only 15 teams that entered the pub rally; and, only 15 pairs competed in the bridge tournament. Mickey Mouse, Donald Duck and friends seemingly were much more to student's liking as the afternoon pubs which featured such cartoons were well attended.

In any event, initial estimates reveal that the pubs about broke even, and the rally and bridge tournament, on the strength of registration fees which should have covered the cost of prizes, also showed little or no loss.

The pub rally was "kind of a mix-up" according to mathsoc president Cindy Harris. Despite a number of problems, notable a certain cow path, one team did manage to pass all check points. The winning team was composed of driver Greg Andrews and navigator Gary Phinnard. Runners-up were Ken Leak and David Harper,

Steve Jarvis and Leonard Rivest, Al Engbraucht and Dave Edmonds, Steve McGillein and Jim Wignall. All finishers, however, received consolation in the form of free admission to the evening pub.

Hence, realizing that this term's version of mathweekend was not to the liking of most mathies, mathsoc members are already discussing plans for next term that will be, hopefully, more to the tastes of math undergrads.

## return Jan. 7

### HOLIDAY EXTENDED

At its meeting Monday night, November 19, the University Senate passed a motion to change the first day of class for next term from Thursday, January 3 to Monday, January 7. It might be noted that the initiative for this move came from math's undergrad senate representative, Bruce McKay.

(COMPUTING, cont'd from front page)  
to have reached its capacity two years ago. The fact that the demand has far surpassed the limit has been reflected in a continuing degradation of turnaround. This degradation of turnaround has been suffered by both faculty and students alike. The DEBUG service, once the boast of the university, has deteriorated to a point that would have been considered intolerable only two years ago.

Although the average time required to run a DEBUG job is now five to ten minutes, there have been instances when the delay has been as long as thirty minutes in recent weeks. Many students waiting in line for their job to be printed simply gave up their program for lost and left in disgust.

A great strain has been put on the Computing Centre within the last two years to cope with this problem without adequate funds to purchase new computing power. In fact the Computing Centre has undergone budget cuts during this period. Valiant efforts have been made to squeeze every last drop of computing power out of the existent resources.

Hardware monitors have been designed to analyze the internal workings of the model 75 in order to try to optimize its performance. Actual circuitry changes have been made to the machine's core to enhance its capability.

The Operating System has been greatly modified to tune its performance to the needs of this installation. Whole routines have been removed and others rewritten. Infrequently used parts of the operating system have been moved to slow core to release the fast core for user's programs. So complex is the operating system that changing even a minor part becomes an enormous task.

The /360 model 44, a process control computer designed to record and monitor laboratory experiments, has been cannibalized to run the heavily used APL system. This computer is devoted totally to a task it was never designed to do; and it too is showing serious degradation in service, particularly in recent weeks.

The computing centre's /370 model 145, a small machine in IBM's latest series of computers can do little to relieve the load currently in the model 75. Although this machine runs most jobs at just about two and a half times as slow as the model 75, its capacity for running FORTRAN jobs is severely hampered by its poor floating point hardware; most of its floating point instructions executing in excess of ten times slower than the model 75. In an environment in which over one third of the jobs run are WATFIV jobs there is little help to be expected from this machine.

Although it can be argued that lack of budget is holding back the university from purchasing new computing power it is interesting that other universities have not encountered the same financing problems. For instance, the University of Toronto, once a backwater to Waterloo, has now a /370 model 155 (equivalent to our model 75) and /370 model 165 (approximately four times the power of our 75). U. of T.

has already planned to replace these machines with the even more powerful IBM /370 model 158 and model 168: a total investment exceeding twenty million dollars. Simon Fraser has installed a /370 model 155 as well as McMaster, Ryerson and York share a model 155. The University of New Brunswick has installed a model 158. The University of Manitoba (where our founder Dr. Stanton is now Chairman of Computer Science) has leaped ahead of Waterloo with a /370 model 158 and a model 165. UBC is ahead of us now with a model 168 together with the University of Alberta. The University of Ottawa has ordered a model 158.

The University that began the computer science revolution in Canada is now falling dismally behind. When Waterloo first installed the /360 model 75, we were well ahead of anyone else. Not only can we now no longer claim even a first rank position, we are not even able to keep pace with our student's demands. For some time now, there have been tentative plans calling for a /370 model 158 but delivery has never been confirmed with IBM. The fact that not even this machine, has at this late date, even been confirmed, is a sad reflection on the university's capacity to react to a desperate situation.

When a DEBUG job can take up to twenty-five minutes at the university which pioneered the service; when a batch job requiring only 10 seconds of the processor's time takes 8 hours to get back; and when professors must cut back assignments because of insufficient computing power it's time to take back the initiative and give this university the computing resources its users require and its reputation deserves.

## YAFI

A thunder-striking 50 messages reached us this week - all sent at the same time, from the same non-existent user "ann.landars!" (dconroy?). This leaves me with little to say. So as a filler... If anybody was wondering, the GFPR joker (-at-large) is referring to the General Excension PRocessor. (Who but a pervert would jest about something already a joke? - But then, he is the infamous Ghost Writer -- the freindly phantom's foolish fink)...

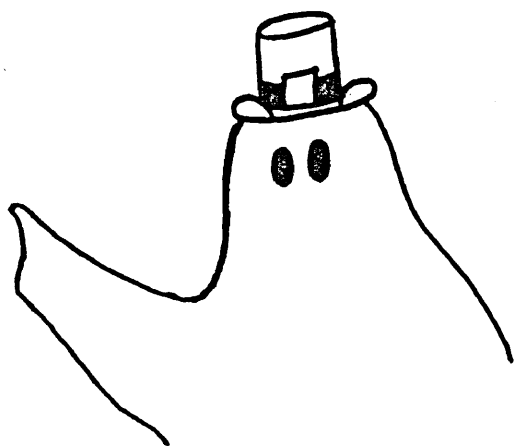
But Seriuosly... Really... That was a JOKE last week about laughing...so please write.

dconroy: "YCUR SCORE IS -100 AND YOUR MANIPULATIVE HABILITATION ON THE HONEYWELL IS EXCEPTIGNALLY THAUMATURGIC!"  
rpgurd: Cat got your fingers???

And last, but certainly least:  
Anyone who tried last week's "something to try":

SYSTEM? qed  
QED  
a  
j0mHA-  
'c'b0  
'f  
'b0

That's all folks! \*\*EOF



## the phantom reports....

Well, not much is happening this week (as usual).

Our long-overdue much-mentioned APL update has not (what else?) arrived yet. When it does, a number of rats will be called in to see how long it takes them to crash it. (ie: test it.)

Speaking of APL goodies, '666 MAIL' is undergoing metamorphosis again; users will now find that their position in the 'LISTED' group will vary according to how often he/she/it signs on to the system. Also '666 MAIL' will be moving to LIB 777 (which is not in existence yet) in the not-too-distant future.

Game fanatics now find that trying to load a game from LIB 12 during the day results in the printing of 'LIBRARY CLOSED UNTIL EVENING'. No more stockticker! But cheer up, you can always explore the stats packages!

Munch users are suffering the ill effects of the absence of a sorely needed extra 64K chunk of memory. Rumor has it that the 'GRIPE' subsystem has been re-rigged to delete messages from the file containing one or more occurrences of the word 'slow'.

Paul Wilson, harried head of operations for Honeywell, is leaving for Vancouver in January. Allegedly responsible for the coining of the title of the generally available "User's Guide to TSS", "A Taste Of Honey", he will be acting system representative and morale booster. At a farewell party last Saturday, Paul was presented with an aptly-wrapped gold watch from operations personel, which (with no little emphasis) does not imply retirement in the least! Good luck in B.C., Paul!

To close, the terminal situation is just that: a terminal situation.

TO THE GEPR JOKER: .HO .HO .HO!  
TO THE PHANTOM FROM HIS GHOSTWRITER: Where were you?  
TO ALL REAL PEOPLE: E-day is coming soon...

### A SHORT HISTORY OF THE PHANTOM

The first words of the phantom were "127101101110056010047". (Actal for "Waah!") For a time thereafter, a bearded figure was seen around UW playing with the

CP DISCONNECTS

## CAMPUS MAIL

Apparently there are still some students who are unaware of the workings of the campus mail system. Hence mathNEWS reprints the following information from the recently released Student Handbook.

"On campus mail is of course mail that is sent from one place to another from within the campus. No postage is required for this mail - all that is required on your part is to address it (putting the name of the person you are sending it to, his or her dept., and the building it is located in) and drop it in an on-campus outlet...Most buildings have these outlets (including residences) --just ask a knowledgeable person (ie. secretary, faculty member), in the one you're closest to."

Here in the math building, the mail room is located on the second floor in MC 2042 and, among other places, there is a receptacle for campus mail at the reference desk in the EMS library. So, should you wish to contact us, why not make use of this free mail service by addressing your mail to mathNEWS, MC 3038.

## Lear Lucky

### ◇ JIM'S LONELY ♡'S



On Wednesday night, November 14, mathsoc held its fall Bridge Tournament. It was fun for experienced bridge players and novices alike. There was a nominal charge(why?), but the free coffee and donuts compensated. The results were:

- 1) Leo Johnson--Paul Lear
- 2) S. Gangwal--M. Kirr
- 3) Doug Elliott--Harry Kaminker

Others placing either N-S or E-W were: Raymond Fong--Christopher Cheung, Judy Chapman--Jim Chapman, B. Wilson--Andy Seibel, Rick Hoffman--P.N. Holtman.

The 8 table game was well directed by Dave Ingham. Dave had his troubles, though. More than once players found their hands contained 12 or 14 cards, due to someone's carelessness. The most unusual thing, however, occurred when declarer thought he was dummy(no comment), and he started to display his hand after the opening lead!

The winners played very well, but they had to receive a lot of "gifts" to amass a 74% game. See if you can figure out how they were allowed to make 6NT after a heart lead on this hand:

S-AKQxx	S-xx
H-ATxx	H-x
D-Qx	D-KJ987
C-Jx	C-AQT98

Hearts was the only suit to split evenly, but the defence held themselves to only one trick. Some days it pays to be lucky!!



THIS  
Σ  
WEEK'S  
THEOREM

THEOREM

There is no point on the circumference of a circle that is closest to any given point inside the circle.

PROOF

Position the circle on the cartesian coordinates so that the centre is at (a,0) on the x axis, and the given point lies on the origin.

The equation of the circle is

$$(x-a)^2 + y^2 = r^2$$

or  $x^2 + y^2 - 2ax + a^2 - r^2 = 0$

Let the distance from O, the origin, to a point P (x,y) on the circumference be b. Then

$$b^2 = x^2 + y^2$$

and since P is on the circle,

$$b^2 = 2ax - a^2 + r^2$$

Distance OP is a minimum or maximum at the points where

$$\frac{db}{dx} = 0$$

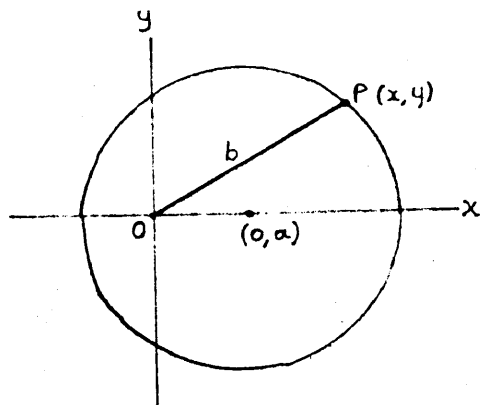
For  $b^2$ , we have

$$b \frac{db}{dx} = a$$

Since b does not equal 0,

$\frac{db}{dx}$  only equals zero when  $a=0$  or when the point O is at the centre of the circle, but then all points on the circumference are equidistant to O.

Therefore, there is no point on the circumference closest to the given point, O.



# Algebet

Object - to solve alphabetic division so that each letter represents a number. There are sufficient clues in the problem to solve for all the letters 1 - 9 inclusive. Place each letter corresponding to the numerical value it has in the following:

$$\begin{array}{r} \text{TAPC} \\ \text{SOT} \overline{) \text{ASTUPOR}} \\ \underline{\text{ATOB}} \\ \text{PBP} \\ \underline{\text{SOT}} \\ \text{TSSO} \\ \underline{\text{TAPA}} \\ \text{RPSR} \\ \underline{\text{RPAU}} \\ \text{RS} \end{array}$$

Solution:

$$\bar{0} \bar{1} \bar{2} \bar{3} \bar{4} \bar{5} \bar{6} \bar{7} \bar{8} \bar{9}$$

Solution to last week's nuzzle: LOGARITHMS

## CCB rep raps...

### OPEN FIRE TODAY

First of all I'd like to suggest that anyone who has a beef with me or the board should come to today's Open Fire Forum in room 135 of the campus centre. Most C.C.B. reps and executive will be present.

It was voted to give the Operations Coordinator, Susan Philips, a raise from \$50 to \$90 a week, retroactive Oct. 1. This was because she has been doing a near full-time job since September. Also the university personnel job analysis tends to favour full-time classification. This analysis is available from Personnel or Pat Carter in Secretarial on the 3rd floor of the Student Services building.

Also chairman Fred Bunting, in recognition of his hard work was given a \$1200 honourarium for the work he did this year. This does not set a precedent for the future. It should be up to future boards to decide what action to take.

The campus centre may have a permanent pub. Art Ram of the Federation of Students' Board of Education will see the Campus Centre Board concerning arrangements before meeting with President Matthews.

Also input to the creative Arts Board F. of S. is welcomed concerning design of pub floors and C.C.B. walls.

The turnkeys come January will receive regular ambulance training.

Any questions, write or see me in Mathsoc Rm. 3038, or phone 884-6688.

I retire from my job as CCB rep. on January 31, and the successor is Cindy Harris, a person many of you know.

J.J. Long

# math ETICS

hockey ...

## CONQUISTADORS IN PLAYOFF HUNT

This week Math Conquistadors face their sternest challenge of the season as they wrap up the fall competitive hockey regular schedule.

Conquistadors need at least one win in their two games -- one against Lower Engineering (played last night) and the other a head to head clash with their "parent club" -- Regular Math. The Lower Engineering contest is the must game of the two as both clubs sport 3 - 1 records. Only the best five records among second place teams qualify for the play-offs and the Engineers trail Regular Math (5-0) in League V while Conquistadors need help from winless Rookies in order to take top spot over Environmental Studies in League VI.

Last week Conquistadors edged Rookies 2 - 1 as Al Harper who was pressed into emergency goaltending duty shone in the close triumph. Bob Greer and Rocky D'Agostino tallied for Math.

## MADELY WINS COACHING DEBUT

Varsity hockey star, Rob Madely, a former Reg. Math stalwart, made his coaching debut as successful one Sunday evening as Reg. Math thumped Sunnydale Scrotes 6 - 1. Madely was filling in for the vacationing Jeff Rimmer. After some early shaky moments, the Math machine rolled into high gear in the second period.

An individual effort by defenceman Randy Musselman was the only score of the first period but Pat Fallon broke the game open with two breakaway goals early in the second session. Brian Nowak, Ken Chuna on a power-play, and Musselman, again rounded out the scoring. Bob Denny lost his bid for his second shut-out when a loose puck deflected into the cage off a skate.

This game marked the end of Dean Mucci's goalscoring streak which had extended nine games back to last year's semi-finals. Mucci had scored 16 goals in his last nine games. He still leads this term's marksmen, however, with seven, one ahead of Fallon and Chupa.

The next and final game of this term's regular season is Sunday at 10:00 p.m. with an interfaculty battle with Conquistadors. Play-offs open next Wednesday.

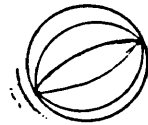
### Playoff Schedule

Thurs. Nov. 29, 11:00 p.m. or 12 midnight, at Moses Springer. Quarter-final Reg. Math vs. winner of Series A.

Mon. Dec. 3, 10:00 p.m. - 11:30 p.m., Moses Springer, Semi-final.

Tues. Dec. 4, 9:00 - 11:00 p.m. Queensmount Arena, Final.

basketball ...



### Reg Math Basketball

Despite the fact that Regular Math succumbed to defeat on Monday night, they still have a playoff berth. Final score of the team's last game of the season was 63-42 for V2 East which gave the team a 2-3 won-lost record for the term.

Math lost the game early as they trailed at half-time, 31-16. Although the difference was decreased to seven points at one point in the second half, math couldn't seem to catch the taller village team.

The scoring was well spread throughout the whole team which is a good sign for the playoffs.

Qualifying playoff game for Regular Math is next Sunday night at 8:30 against the T.O. Trotters in Court 2.

### Co-op Math Basketball

Qualifying playoff game for Co-op Math is next Sunday night at 8:30 against Recreation in Court 3.

broomball ...



Math's team lost 1-3 against the mathies on Tues. Nov 13th (bad luck). On a brighter note: math scored 4 against the MANORMEN (who only managed 2 goals all game). Goal scorers were: Jim, Mike, Doug, Randy. Math's record now stands at one win and one tie against two losses, which is a season record for the team. (Good work, team!)

Next games are at 12:00 midnight Wed Nov 28th at McCormick Arena VS THE HUSTLERS and at 1:00 pm Fri. Nov 30th at Moses Springer Arena VS THE ICEMEN.

## Dr. Graham

### PROF of the WEEK

Professor James Wesley Graham (known as "Wes"), should be well-known to many of you. He has participated in the writing of eight books, including high school texts (as well as those used in 132A this year). These accomplishments reflect his interest in teaching.

He is 41 years old, born January 17, 1932. He was raised in Copper Cliff, Ontario, which is a northern mining town. (It is the home of International Nickel, which supplies most of the world's nickel). At the age of 18 he moved to Toronto, where he lived for 9 years. He received his B.A. and M.A. in Mathematics at the University of Toronto in 1954 and 1955 respectively.

Professor Graham is married, and has six children between the ages of two and twelve. The main family interest is waterskiing, with others ranked only to aid and abet this interest. When the family travels, it is usually to tournaments or ski schools in which his children participate. A token of their skill is the fact that his twelve-year-old daughter is the Ontario Girls' Jumping Champion. Professor Graham feels he is not good enough to ski in tournaments, so he helps organize them, and skis for pleasure with his family. His children also "show" waterski, performing such stunts as pyramid, barefoot, or kite-skiing. He is very proud of the fact that they are doing so well.

When Professor Graham came to the University in 1959, it was very new. There was only one building and fewer than 500 students, mainly in Engineering. He feels it was a marvellous experience watching it grow. His reason for coming to U. of W. was that he thought it would be a one-in-a-lifetime opportunity. It was clear it would be a successful and exciting University, and he wanted to be part of helping it become something. He believes it has lived up to his expectations.

Professor Graham's main professional interest is teaching. He likes to teach anyone, especially about topics in computer science. He has taught adult education and industrial courses. "He will give a lecture to anyone at anytime". His research around computers is concerned with making them easier to use. Examples are WATFOR and WATFIV, which lead to easier use of the computer for the student, tying in with his teaching interest.

He is Director of the Computer Systems Group, which develops and maintains software (For all you beginners, software refers to programming languages, such as the above-mentioned WATFOR and WATFIV). This group is also in charge of distributing this software to about 2,000 users, such as other universities, or industries.

The professor is also in charge of the administration of the 132 course as it applies to Mathematics students. He enjoys

this facet of his duties, and says if there is anything you do not like about the course, come up and talk to him. (Room 5116). He is responsible for the hiring of tutors, arrangement of the problem sets, etc., etc. He is also a member of several other committees.

Since he has been here (this is now his fifteenth year), Professor Graham has taught many courses, recognizable by their numbers - for example, 233, 334, 240, 132, 130, 131. By subject they are calculus, algebra, statistics, numerical analysis, and computer science. He is now teaching only 132. This progression is usual -- specialization occurs after you have been almost in any field for any length of time.

For Professor Graham U. of W. is a tremendously exciting place because of his computing interests. There is extensive equipment, a host of professors and many excellent students. All of this contributes to an attractive environment for anyone interested in computing.

Now we come to the "complaints" section. Professor Graham feels that if his complaints are to be aired, he might as well tell us about his "pet peeve", which is common to most universities. The University is 'too democratic'. There is too much time spent doing committee work: too much consultation with everyone about everything. This means professors do not get as much time as they would like to teach or do research. An example is the selection procedure for new department chairmen or deans. All of these positions are temporary (3 - 5 years), and there is a very cumbersome selection process. It takes an incredible amount of time to make these selections and the process is going on constantly. "If industry ran the same way, you could not afford to buy their products". Professor Graham believes there should be a procedure for appointing chairmen, and removing them from office if they are inadequate.

The students on this campus are what make his job worthwhile and interesting. If they didn't satisfy him in their responses he would not like his job.

Study habits and interest levels satisfy him. However, not all students are responsible. When dealing with about 1000 students there are always a large number (approximately 100) who are not interested, or perhaps do not have the aptitude to absorb the material. Fortunately the vast majority are not in this category, and they make his job rewarding.

## TALKS

The Department of Applied Mathematics has informed mathNEWS of two talks to be delivered this Friday (November 23) afternoon. The first, from 2:30 to 3:30 p.m. in MC 5045, is to be delivered by Professor D. Henderson, IBM Research Center, Yorktown Heights. His topic is "two Dimensional Gases and Adsorption on Surfaces". At 4:30, Prof. C. Sandorfy, F.R.S.C., University of Montreal, will speak on "Excited States of the Ethane Molecule," again in MC 5045.



# WHAPPENING?

FRIDAY | NOV | 23:  
8pm Fed Flicks - "A Doll's House" and the "The Man", AL116.  
8:30pm FS Pub, "Flight 505"

SATURDAY | NOV | 24:  
8pm Fed Flicks - "A Doll's House" and the "The Man", AL116.  
8:30pm FS Pub, "Fast Eddy"

SUNDAY | NOV | 25:  
2:30pm Art Gallery Film, TA.  
8pm Fed Flicks - "A Doll's House" and the "The Man", AL116.  
8:30pm Varsity Hockey --  
Carleton at Waterloo.

TUESDAY | NOV | 27:  
3:00pm Gridword deadline for issue 3.9  
7:00pm mathNEWS puts it all together for the last time this term. All are invited out to this spectacular event. Free refreshments. MC3011.  
8:00pm "Troilus and Cressida", HT.  
8:00pm Campus Forum - "Canada in Mozambique", ML117.

WEDNESDAY | NOV | 28:  
11:30am Movies, EL110.  
12:30pm Movies, EL103.  
08:00pm "Troilus and Cressida", HT.

E-DAY APPROACHES

## mathsoc meet

### C & D APPOINTMENTS

Tuesday's math society meeting featured a lengthy half hour election of the executive of the Coffee & Donut Club for next term and the summer term. Despite this marathon election procedure, there was only one notable surprise in the outcome. Janice Halligan and Pat McGrath were named manager and assistant manager, respectively, for the upcoming term. In charge of the stand for the summer will be Marilyn Moore.

It was announced that locks on all lockers will be changed during the early part of January. However, all lockers are to be cleaned out by the end of exams. They will be redistributed next term.

Howard LeBlanc, speaking on the Board of Education, reported that \$150 has been given to engsoc for afternoon movies; a \$500 request from artsoc is being considered. Noting that funds for the B. of Ed. are running low, LeBlanc added that if mathsoc plans on seeking any more money from that Board they had better do it soon.

A motion was passed naming Cindy Harris, Andy Haycock and Paul Armstrong as co-ordinators for this year's anti-calendar. Vice-president Haycock announced that there were only a few classes which still had not been surveyed.

At Monday night's senate meeting, the possibility of the president of the Federation of Student's becoming an ex-officio member of the senate, was discussed. Senate rejected granting this position. Andy Telegdi, presently president of the Federation, was in attendance at the mathsoc meeting and he expressed his disappointment with the senate. Most senate members apparently turned down the request as being virtually too much of a bother.

A lack of announcements then brought about adjournment.



(cont'd)



# intercourse with cindy

## LA PREZ PARLE

The following is a mathNEWS interview with Mathsoc president Cindy Harris.

mathNEWS: Tell us a bit about yourself.

Cindy H.: Home (as such) is Windsor. I much prefer Waterloo, though, since most of my interests lie here. My academic year consists of two courses. I feel that trying to maintain a good status academically, and also ensuring Math Soc remains stable (despite my sometimes (?) apparent instability) is a great deal of responsibility. I realize that in the past, others have managed the two together, but I chose to take priorities, and by lessening the one responsibility, I am able to concentrate more on the other. Future plans.....

mathNEWS: When did your term of office begin and when will it end?

Cindy H.: March 73 to March 74

mathNEWS: What motivated you to seek the position of Math Soc president? Would you do it again? Why or why not?

Cindy H.: Initially, the idea came to me from another person. But, with considerable amount of thought, I decided that I wanted to run for election. Without trying to sound immodest, I thought myself capable. As far as running for president again... I very much doubt it. Despite the fact that it is an excellent opportunity to gain organizational background, not to mention dealing with a large variety of people, it does take up an exceptional amount of time. Since my priority this year was Math Soc, next year my priority will be my academics. I am not saying, though, that I'm withdrawing from Math Soc. I hope to be involved, but on a less time-consuming basis.

mathNEWS: Each term math undergrads pay \$2.50 to the Mathematics society. What do you see as being the purpose of the Math Society. What do you see as the use of this \$2.50 per person?

Cindy H.: The \$2.50 per term which Math Soc collects enables the society to function. Math Soc had just over 1% of the total number of Mathies request their fees back. By looking at this figure, we can see that Mathies don't mind the initial payment, and realize (hopefully), that it to their benefit not to withdraw their funds.

Math Soc's purpose is to provide a focal point for student endeavours, be they social, academic, or political.

mathNEWS: Looking back on your past term (ie. this fall term), what would you consider to be your major accomplishments?

Cindy H.: That which I was most concerned about at the beginning of the term was first year student involvement. Math Soc certainly increased the involvement through a great deal of personal contact with the first year students, especially during Orientation.

Math Soc cards changed format this year; in effect, there were no Math Soc cards. Instead, we bought a hot-stamp machine which provided an inexpensive and viable alternative to the pink Math Soc card.

The Anticalendar questionnaire was changed this year. It is more relevant than it was last year. Hopefully, the information contained in this year's anticalendar will be more useful than that contained in past years.

There has been a tightening of student relations in regard to other student organizations. Along with closer ties with the Federation, Math Soc has definitely improved communication with several of the other societies.

Student representation has increased wholeheartedly on committees in the Math Faculty. We have representatives on Faculty Council, Curriculum Committee, Student Advisory Committee, and AA & CS Curriculum Committee. This latter is the only departmental curriculum committee upon which we have student representation.

mathNEWS: What can Mathies look forward to from Math Soc next term?

Cindy H.: As mentioned before, we have student representation on only AA & CS Curriculum Committee. Although it will take some time, we will hopefully be able to get student representation on the other departmental committees as well.

This term, Math Weekend came off well, although Math participation was not as good as in previous terms. Next term, we hope to come up with some different ideas for Math weekend.

It is otherwise difficult to predict precisely what other events Mathies can look forward to.

mathNEWS: Do you have any thoughts on mathNEWS?

Cindy H.: mathNEWS, financed through Math Soc, is an important and worthwhile allocation of society fees.

mathNEWS: Thank you.

Cindy H.: You're welcome!

## november 30

## C & D TO CLOSE

Paul Armstrong, this term's manager of the Coffee & Donuts Club, has informed mathNEWS that his stand will cease operation next Friday, November 30. It is rumoured that next week will see a smash sale.

At Tuesday's math society meeting, council elected a manager and assistant manager for next term. Janice Halligan was voted manager, a position carrying a salary of \$20 per week. Named assistant was Pat McGrath at \$10 per week.

Manager-to-be Halligan notes that a list for workers will be posted early next term and workers will again be paid \$1.50 an hour.

# 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. Submit your feedback to MC 3038 and have someone there deposit it in the mathNEWS file. Or, drop your letters in the campus mail (a free service) addressed to: mathNEWS, MC 3038.)

## co-op courses?

mathNEWS:  
CONCERNING COURSE-OFFERINGS IN THE  
SUMMER OF 1974

I feel the course offering list was rather lean, both in math faculty and outside the math faculty. I think the math society should approach the math faculty in order to increase the number of courses offered.

The math society could determine which courses the spring students would like to take. In order to get an idea immediately of which courses are desired, in addition to those already offered, I suggest that the math society post a sign-up sheet in strategic locations around the math building to get a list of courses desired. Students should sign their name and course.

At present I have spoken to Prof. Ron Read who teaches Math 418A; he has said that if enough students can be found (approx. 10), he knows of someone who may be interested in conducting the course. Prof. Read does not expect to be here in the summer.

I understand that approximately twenty people are necessary in order to put on a course. I think this limit should be lowered in the spring since there are so few students on campus.

MATH 3B, HON. CO-OP AA & CS

mathNEWS - a news weekly published at the university of Waterloo, is financed through mathematics society fees and is available free of charge to math undergrads. The views and opinions expressed herein are those of the mathNEWS staff and are made independently of both the university administration and the math society. mathNEWS welcomes your contributions, suggestions, criticisms, advertisements (published free of charge), feedback, etc. Contact us via room 3038. We put the whole thing together on Tuesday nights in MC 3011; feel free to drop in. Circulation this issue: 1000.

Another Wednesday 3 am, another mathNEWS ... As we survey a deserted Honeywell room, WHY??? . . . The presence of all editors, past and present, was an inspiration to us all ... This being the penultimate issue, next week's issue will be your last chance to help out ... Thanks this week to Stanley Koch, Pat Fallon, Steve Treadwell, Tonto, Cindy Harris, Janice Halligan, J. J. Long. Tonight we were: Dennis Mullin, Pete Paynham, Paul Lear, the phantom (who put his 10 digits to work tonight), Randall McDougall, Ingrid Splettsstoesser, Mark Shields, Mark Saaltink, Norm Macdonald, Pat McGrath and John Peebles.

LAST mathNEWS SESSION FOR THE TERM: Tues. Nov. 27, 7 pm, MC 3011. Drop by.

\*\*resources used \$ 36.51, used to date \$ 182.67 = 37%  
\*\*time sharing off at 3.698 on 11/21/73

### CLASSIFIED

(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.)

- WANTED: One girl to share 2 bedroom apt. with 3 others. \$53 month. Phone Annette 884-2137

- WANTED: One copy of "The Norton Scores". Contact L. J. Dickey, MC 5150

- WANTED: Couple to share furnished, 2-bedroom townhouse, Apr.-Sept. '74. Features wall-to-wall shag carpet, swimming pool, cable TV, and water included. Columbia and Philip. \$186/month (\$46.50 each). Call Martin 884-8311 or Pat 884-4861.

- TYPING: Do you have any typing to be done? Typing done in my own home. Phone 743-0230 (please let phone ring).

- FOR SALE: Gas heater for Volkswagon or etc. 6 volt. Complete. \$25 or best offer. phone Phipp at 884-0035, room 35.

- FOR SALE: One sofa, almost new. \$50 firm. Contact David, MC 6103 or 578-8443

- TO SUBLET: Furnished apt. Jan.-Apr. '74, Younge and St. Clair, Toronto. \$160/month. 1 bedroom. c/o Phipp, 884-0035, room 35.

- NOTICE: A free T-shirt will be awarded to the person submitting an original gridword which mathNEWS uses for publication. To submit your gridword, drop it in the mathNEWS file in MC3038 or use the campus mail (a free service) and mail it to mathNEWS, MC3038.