

## ELECTION results :

4A REP - JOHN DARK  
2B REP - PHIL LANOUCETTE  
1B REPS - CALVIN BARRET  
-LYN STEPHENS

Turnout was as follows:

70.2% for 4A

43.6% for 2B

29.8% for 1B

To all those who failed in their bid to become their year rep., help is desperately needed for other jobs in Mathsoc. A special thanks to those who manned the election booths.

CHIEF RETURNING OFFICER  
STEVE SMITH

# Math NEWS

a news bi-weekly  
published at the  
University of Waterloo  
Vol. 2.3  
Thursday June 28, 1973.

## the president writes ANother ARTICLE

I am slightly reticent about committing writer words to paper. It seems that my writing is hard to read and spelling seems to be a problem. However a few words are perhaps in order. Not an awful lot going on just at the moment, far too many midterms and assignments for anybody to get really involved. Athletics seems to be going like a house on fire. T-shirts are still for sale and we've got lots of them. ANTI-CALENDAR is rolling along. Suzie and Dennis are busy with this and will need help. The classes are processed but now we need volunteers to help write it up. Anybody with comments, criticisms or suggestions should come and see us in the office (M&C 3038) and/or in M&C 3004A. Social is still busy under Phil and Tara's able guidance and I am sure they will have an article elsewhere. A new venture is struggling to get off the ground, a coffeehouse to be held in engineering. There are posters and information available all over the place. Elections results are in and should be available elsewhere in this issue. Well, 474 is coming too close (and so are my eyes so I won't say much more). In fact no more.

THE END

John Dark - President

Graffiti splattered table tops.  
Candlelight.  
Colloquial entertainment.  
What's it all about?  
**THE BLACK BUBBLE**  
Wednesday evening in  
Engineering 4

This week's prof is Dr. Fryer, holder of the "Pabickeral". Do you know what a "Pabickeral" is? No? Well then why not ask the proud owner of this 'rarest of northern wild life' (he is very easy to get a hold of) or go to the Mathsoc office and ask to read a few words about the Sauer Krauts (of which he is a member) winning this prize trophy at the 1973 convention of the Ontario Association of Teachers of Mathematics, held May 11-13 at the College Education Centre in North Bay.

Enough about that, more about Dr. Fryer.

## Prof. of the Week

- Kenneth D. Fryer

- professor of mathematics, Associate Dean of Faculty of Mathematics

- born at St. Thomas at a very early age. (I'll never see thirty again)

- educated at St. Thomas Collegiate Institute; received his B.A. (Honours Mathematics and Physics) from the University of Western Ontario (a gold medalist in Mathematics), his M.A. from the University of Toronto and his Ph.D. from the University of Toronto

- married with 4 daughters and 1 son

- interested in sports; plays tennis, badminton, squash; was former chairman of University of Waterloo Senate Committee on Physical Education; is president of University of Waterloo Athletic Advisory Board; was past president of Ontario-Quebec Athletic Association

- active member in the community; executive member (up to and including president) of Home and School Associations in Kingston and Waterloo; former member of Community Services Board in Waterloo

- taught at University of Toronto, Royal Military College of Canada, Queens and Waterloo

- has written many publications, co-author of a dozen high school text books and 3 at the university level, editor of Ontario Secondary School Mathematics Bulletin

Opinion on the University of Waterloo

As chairman of the Faculty Council, he is concerned about student opinion on; professors, subjects, course material. He obtains student opinion directly from the students and from anticalenders, and more often than not these sources are conflicting. He suggested that students verbally communicate their problems, and see the associate deans if the desired result is not forthcoming, rather than waiting until

the end of the term for the anticalender. Faculty Council Meetings are a way in which the students may help themselves. These meetings move very quickly since the Faculty of Mathematics operates in harmony - departments are not often at each others' throats. His concern is for a good program for a large variety of students - for example, he would like opinions on a law course for mathematics students similar to MF100 (law course for engineers) or a communications course to improve the students' speaking and writing abilities.

He welcomes all suggestions to improve our program. As the Faculty of Mathematics stands, new and open to change, he feels the students can help themselves now.

## "SUMMER WEEK"

The BIG news in the coming weeks is Summer Week. This is being sponsored as a joint effort of Mathsoc, Engsoc, and the Federation. It will encompass a wide variety of activities from a "Boat Race" to a semi-formal and all things in between. Surely you will be able to find something to participate in. Things start rolling on Friday the sixth of July and don't slow down (law of the conservation of angular momentum), until Sunday afternoon on July the fifteenth. For further details, study (naughty word) the Coming Attractions calendar and see what's happening.

## M.S. 407

Course Summary- Management Science 407

"The business game" it's called, although it's really a comprehensive simulation. Up to nine teams compete by selling "products" in certain "markets". The objective, of course, is money in the form of profits.

The game seems to be a pleasing arrangement of work and fun. The workload is average, but not consistent- sometimes it can eat up 10-20 hours of one week- other times, nothing. A lot depends on the particular people or a team. If all 3 are carrying their weight, things go fairly well. If they don't, the workload escalates quickly.

The returns from this course are impressive- it's possible to learn a lot about group decision making and about business itself- a welcome change from most courses- and best of all, it is a learning-by-doing experience.

This course number is subject to change- however it is offered at various times both at U. of W. and W.L.U. so it should be possible to find it with a little bit of moaning. It's well worth that effort.

# COMING ATTRACTIONS

Thur	Fri	Sat	Sun	Mon	Tue	Wed
28 SOFTBALL Mathsoc Col 2 Team Crackers VILLAGE GREEN 5:00 MATH PUB	29 B-BALL Math Society court 3 8-9	30 NO FLICKS	1 NO FLICKS	2 COMING HOME -	3 B-BALL CO-OP Math court 3 9-10	4 SOCCER 1/4 final FOOT-B 1/4 final BLACK BUBBLE coffee house ENG-4 LOUNGE
5 SOCCER SEMI FINAL	6 GAUSS LIVES after noon PUB "un+st+on" UNDEEOL 300X F. S. PUB with MANCHILD	7 BEACH PARTY Columbia field 1:30	8 REAL BOAT RACE on The Grand	9 SOCCER SEMI final FOOT-B SEMI final B-BALL Rookies court 3 9:00 HOLSON FILM NIGHT VILLAGE GREEN	10 BLEED at the BLOOD DONOR CLINIC	11 SOCCER FINAL FOOT-B FINAL BLACK BUBBLE coffee house - FREE - FOLK PUB C. C.

# the phantom reports...

## REVENGE OF THE HONEYWELL

As the frontiers of the Honeywell's Command Lib become ever wider (time sharing COBOL?), it seems to be developing a strange and fascinating (if somewhat malicious) mind of its own (or in the words of that fine old aristocrat, Baron Frankenstein: "We've created a 'monster!"). As we all know, computers love air-conditioning, and about a week ago, the Honeywell's died the death. Our beloved HIS quickly showed it disapproved by the totally unrelated malfunctioning of a disk. While the air-conditioning was being handily repaired (the temperature soon dropped to a balmy 50), the mangled disk was being tested and repaired. HIS is, of course, the key word, since at this point the printer helpfully ground to a halt. But the show must go on and the testing was deftly routed through the console, which quickly followed the printer on the list of fatalities. However, as with most stories, there is a happy ending; ISS was finally ready to be rebooted, and they would have made it too..... if the tapes had been working.....

And speaking of disasters, it seems someone is trying to start another regular column. He/she/it (not necessarily in that order) calls him/herself "ISHUATLE", either out of common human decency or those of the similar sounding name or because he can't spell (having read as much of his column as is humanly possible,

I've come to the conclusion he can't spell). It might interest you to know that by the time the Honeywell had typed out most of ISHY's article it became violently ill and had to be severely browbeaten for the better part of two hours before it would go on.....

As for his last comment, I have hardly mentioned terminals at all this term, mainly because they are being kept in very good repair for the most part (unlike last term when a lot of yelling about their condition was the only way to get any half-hearted effort put into terminal up-keep), and anyway, if he doesn't care whether the terminals are broken or not he can come out next issue and type his article in himself....

(My sincerest apologies to all men, boys, male animals of all species, and engineers for my derogatory use of masculine pronouns in the above paragraph!)

TO 555 MAIL: When do we get rid of the CPUPHY non-sequential numbering system???????

TO MARK SHIELDS, WHO ON READING ISHY'S COLUMN, STATED: "I'VE FINALLY FOUND A PART OF mathNEUS WORTHY OF WRAPPING FISH WITH!": You said it, not me!

AND FINALLY TO EVERYONE WHO SAID THEY'D COME OUT AND DIDN'T: The joke's on you, tonight we got donuts.

(THE PHANTOM can be reached thru APL's 555 MAIL or 666 MAIL, mathNEUS can be reached by sending a message to "mathneus" on the Honeywell's "mail" system.)



## En Français

I speak Français par notons, but I can débrouille, so here ga est:

Cette histoire se passe il y a quelques centaines d'années, dans une cour du Vatican. A ce temps-là, les mères allaitaient leurs enfants dehors, et il y avait justement, au fond de la cour, une maman italienne nourrissant ses jumeaux. Arrivent le Pape et deux cardinaux, discutant caudement. L'un de ces derniers dit "Ce sont deux éminences.". L'autre répliqua "Ce sont deux saintetés!". Et le Pape avait aussi son mot à dire: "Mais ce ne sont pas deux Pie IX!!".

# Dr. BOB

Welcome to Dr. Bob's Column! Today's topic is the fantabulous, the magnificent, the world-reknown MATH 720's. Just who the hell are the MATH 720's, you may ask. (Man, are you out of it!!!!!!) For those of you who are uninformed, the aforementioned team is a group of MATH students (ID's starting with 720) who play together (most of the time) in the Recreational Ball Hockey League. Having completed their schedule with a 3-4 record, our heroes enter the playoffs with plenty of optimism (the season's almost over!). Last Monday, for example, they lost by but 4 goals (11-7) to the undefeated league leaders. The 720's have what must be the strongest lineup, if not the funniest. In goals, Don "The Wall" Steiner guards the pipes, though at times he gets a burn on the back from the goal light going on too often. The defence is solid, when you can find it. Up front, Larry "The Mouser" Hancock and Ken "sharpshooter" Miller(?) are the top snipers, while Larry Allcorn scares off the opposition with his tenacious checking. Throughout the season, this fleet-footed bunch have attracted the attention of many spectators (4 to be precise!), one of whom was from Sudbury and rumour has it that the entire team may be lost to the OHA or MHA next season. So cheer us on while we're still the MATH 720's ..... we need all the help we can get!!!!!!!!!!!!

## \*\*\*\*\* DR BOB'S CONTEST \*\*\*\*\*

As part of this column (if it lasts), there will be a regular contest, with the prize being related to the topic discussed in the particular article. This week's award--- a BROKEN HOCKEY STICK from a MATH 720 GAME, (autographed by each member of the team, even!) If that's not enough incentive, what is??  
**QUESTION OF THE WEEK:**  
 WHO IS DR BOB AND HOW MANY GOALS HAS HE SCORED THIS SEASON???

- RULES:** (1) All staff of mathNUTS, their families, relatives, friends, and pets ARE eligible. (fooled you, didn't I?)  
 (2) All answers must be submitted on the back of a computer card, and must be filled in with a PENCIL OR pencil.  
 (3) All answers must be post-marked no later than July 7.  
 (4) In the event of a tie, nobody wins.

Send all answers to DR BOB, c/o mathNUTS, P.O. 3030.  
**FINAL NOTES** Don't forget the weekly Black Bubble Coffee House on Wed. night.  
**HAPPY BIRTHDAY KARAI!!!!!!!!!!!!**  
 Next Week: DR BOB discusses (?????????????????)

# reflections -through a beer bottle

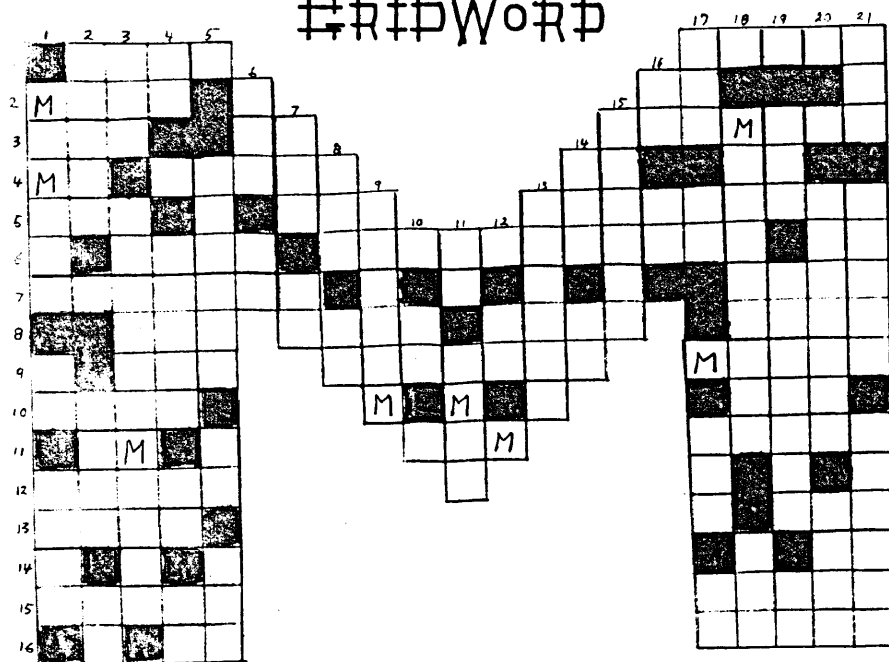
It may be, as the poet once said, that God is in his heaven and all is right with the world; it's hard to tell whether he meant the whole world. There is no doubt in my mind, that if you include my stomach, the above comment holds no water. I guess it was the weiners and beans. Like all university students who cook for themselves, I am recovering from a gastronomic hangover brought on by a Tuesday night feast of weiners and beans. Add to that the rhubarb pie for dessert, and you have the kind of dinner that can make even the strongest men quiver. Of course Rob\* cooked tonight. You may say what you wish to about Rob. Talk about his pleasant disposition. Point out his general neatness around the place. Make mention of the fact that he even likes to wash dishes. But, say what you may, when the final judgment comes, those who know Rob, offer odds of less than 100 to 1 of St. Peter approving any application Rob may tender for that Big Residence In The Skv. What can you say about one who has systematically done everything in his power to cut short the expected life spans of his room-mates, by insisting on doing the cooking! Now I know there are worse cooks in the world (my mother for instance), but how much hope can you have for a guy whose girlfriend puts milk in spaghetti sauce. It's almost sacrilegious! (As a matter of fact, next time I see the Pope I'm going to bring up the question.) But don't get me wrong. I don't mind living this way at all. I'm all for the "I love being free - it's the best way to be" life. I think after he's finished ironing out an "Impeachment With Honor", I'll get Henry Kissinger to negotiate with Rob for a truce. At least on Tuesdays. Food may not be everything, but as the man said: armies and Math students travel on their stomachs.

\* name changed to protect the innocent - me!

# mathletics ?

As far as I can gather, mathletics is in good standing. I heard that the "Vets" won their soccer game and carried onto win the basketball. Since the sports editor didn't show up with the results, there are no mathletics. The members of the team do deserve their just fame.

# # # # Word # # #



## ACROSS

- 1 2 Scandinavian god of thunder  
 1 17 Said "War is Hell"  
 2 1  $\sum x_i f(x_i)$   
 2 16 ~OFF  
 3 1 Work done by 1 dyne through 1 cm.  
 3 6 Where we are  
 3 15 Cigar shaped glacial deposit  
 4 1 Women with undisclosed marital status  
 4 4 Willow branches to be woven  
 4 14 Primary verb of the English language  
 4 18 Help for the alcoholic  
 5 1 ~Under  
 5 7 Lawyers are called to this, but students come uncalled  
 5 13 Intersection of two lines, when destroyed  
 6 3 Capital punishment  
 6 8 Not based on fact  
 6 20 Han's name  
 7 1 (A co-op math student could become one)<sup>2</sup>  
 7 18 Permutation of Thailand native  
 8 3 Double-barrelled slingshot  
 8 7 Regular Officers Training Plan  
 8 12 Destruction of any kind  
 8 18 Those that catch fish  
 9 3 10  
 9 8 Large-leaved plant used in pies  
 9 17 Branch out of an IB" Macro  
 10 1 Computer talk for procedure  
 10 18 Students' Advisory Council  
 11 2 Initials of a brand of cigarettes  
 11 10 A memory that cannot be written  
 11 17 Permutation of Canadian aquatic birds  
 12 1 Empty a vessel  
 13 1 ~Is  
 13 19 Louse egg  
 14 20 Lithium  
 15 1 Identified by keys  
 15 17 German toast  
 16 4 2  
 16 17 Foot of all evil

## DOWN

- 2 1 That which retains information  
 9 1 What the system never seems to be  
 12 1 Movable head storage drive  
 1 3 ~Verbose, especially in NYLBIIP  
 10 2 Rocking Ladies Phythm Session  
 15 2 Elevated railway  
 1 3 Witch  
 5 3 The finding of water by divining rod  
 1 4 See 2 16  
 6 4 Having to do with gold  
 12 4 Subject of an impersonal verb  
 15 4 And  
 4 5 Statement structure  
 11 5 Tin  
 14 5 Shakespeare made much of this about nothing  
 2 6 Many Canadians do this in winter  
 6 6 Rank in RAF above Squadron Leader  
 3 7 You weave this when "first you practise to deceive"  
 7 7 Mouth to mouth is a favourite form  
 4 8 Used in Psychology experiments  
 8 8 U  
 5 9 Contraception condoned by Pope  
 8 10 Two thirds of lowest form of humour  
 6 11 Supervising software, especially in IB"  
 9 11 Permutation of unexpected system crash  
 8 12 Sheepskin for Artsies  
 5 13 Look at  
 4 14 A sure one often isn't  
 8 14 Niobium, also a province  
 3 15 What the computer does with more than 1 choice  
 2 16 See 8 8  
 5 16 Feline cartoon character of the 60's  
 1 17 African antelope called "wildebeest"  
 5 17 Noon to midnight  
 3 18 Quality of being like a man  
 14 18 Professional  
 3 19 Delay in circuit  
 7 19 A side more than U.S. military H.O.  
 15 19 See 2 16  
 5 20 Poset with glb's and lub's  
 13 20 Permutation of small island  
 1 21 See 9 3  
 5 21 A rubber band without the "IC"  
 11 21 Anything real in itself

## GRIDWORD COMMENT

Much to your relief, Marsha did not make up this week's Gridword, Bruce Woodrow did. Last week's Gridword winner is Maurice Prevost. His entry was registered at 9:40 P.M. June 20/73, six days after the paper came out; so hang in there, people. Honourable Mention to Louis Boyle who can't spell either. Remember, when you complete the Gridword, submit it to the Mathsoc Office (MAC 3038). The winner, the first correct Gridword in, gets a Math T-shirt.

# WORDS OF WISDOM

.....by ISHMAILE

It was the best of years. It was the worst of years.

I had the best of professors. I had the worst of professors.

...Hell, I can't go on. I guess Dickens could get away with writing crap like that.

But I can't.

Everytime I begin to get the least bit "literary" my pen starts to choke.

However there is no doubt in my mind that you will read this column every week. (By the way, this column is about to become a regular feature). You might say that this column is in poor taste. You might say it's written poorly. You might say it's garbage.

But you'll read it anyway....

So with a smile on my face, some good smoke in my pocket, and tongue in cheek, here I go....

I spent the last hour making a pie. Well, learning how to make a pie. We put in apples with it.

I've got a problem. I've got some leftover dough and I don't know what to do with it. I could always make a couple of tarts (no pun intended).

I have an idea. Let's have a contest.

Why don't you sit down, think very hard, and come up with three or four good ideas about what to do with leftover pie dough. (The possibilities are endless: cookies shaped like double integrals, imitation goldfish, etc.)

Next, write out your ideas (typed please, double spaced, one side of the page only); put your entry in a large brown envelope, and then throw it away.

I don't want to hear your stupid ideas!

Last week's solution

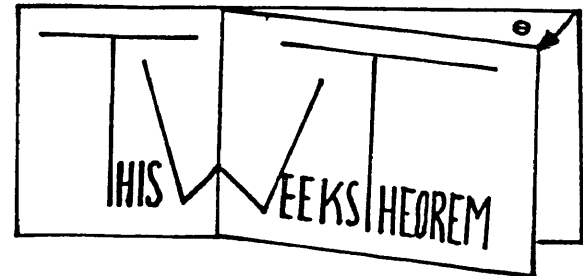
	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r
1	I	N	T	E	R	V	A	L		L	O	C	U	S		T	U	C
2	S	O	I		E	A	T		A	L	S	O		T	A	R		O
3	O	R	T	H	O	N	O	R	M	A	L	I	Z	A	T	I	O	N
4	S	I	S	Y		S		O		E	N		T	A		U		
5	C		P	I		S	T	A	R		C		I	N	N		O	
6	E	N	T	E	R	S		A		H	A	I		C	O	G		C
7	L	O	A	R	S		T	O	O		D	O		T	L	K	A	
8	E	T		B		A	X	I	O	M		E	T	E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

Anyway, next issue this column will be better (of course, it doesn't matter, you'll read it anyway). So before I go, I'd better thank the Math Society (a leisure time service of Formosa Breweries), for donating this space. By the way, how many people really care about how many API terminals are broken? There's more to life than computing. Screw the "Phantom".

Remember - keep those cards and letters!



On July 7 (Saturday) starting at noon there will be a SAILING CLUB regatta and party. We will have 5 sunflowers to race. Also, food, prizes, fun and hopefully sun! Everyone is welcome. So, bring your friends to the boathouse on Columbia Lake. For further information call 884-1734.



Prove:  $1=2$

Proof:

We have, successively, for all values of  $x$ ,

$$\cos^2 x = 1 - \sin^2 x$$

$$(\cos^2 x)^{3/2} = (1 - \sin^2 x)^{3/2}$$

$$\cos^3 x = (1 - \sin^2 x)^{3/2}$$

$$\cos^3 x + 3 = (1 - \sin^2 x)^{3/2} + 3$$

$$(*) (\cos^3 x + 3)^2 = ((1 - \sin^2 x)^{3/2} + 3)^2$$

let  $x$  have the value  $\pi/2$ . Then  $\cos x=0$ ;  $\sin x=1$ , and  $(*)$  reduces to,

$$9=9$$

a true result.

But now let  $x$  have the value  $\pi$ . Then  $\cos x=-1$ ,  $\sin x=0$ , and  $(*)$  reduces to

$$2^2 = 4^2$$

That is to say,  $2=4$ , or  $1=2$ .

# classified

For sale: 1 DYNACO SCA-35 STEREO  
AMPLIFIER. 1 HEATHKIT TUNER  
Asking \$125 - Call John 579-4727

Wanted:...2 females for an all female boat  
racing team. Contact Marsha or  
Liz at 579-0877; race to be held  
Thursday June 12 at 3:30 P.M.

Wanted:...Two bedroom apt. near University  
for fall. (Not in the Towers!).  
Will sublet. Call Ted Van Possum  
or Claire Adamson, Toronto  
961-0582, or write 84 Lowther  
St. M5P 1E1.

# FEEDBACK :

Now that the hot weather is here, everyone likes to wear shorts- until they reach the Math building. Entering the Math building is like entering a deep freeze. Then when you leave the building, you're hit by a wall of hot air. Such changes in temperature are great for causing colds, especially if you go in and out of the building very often during the day. The temperature inside is fine if you're wearing long pants, a long sleeve shirt, sweater or jacket, but this isn't practical for the weather outside. Everyone could change into warmer clothes when they got here, but an easier solution would be to raise the temperature a bit.

Pete

\*\*\*\*\*  
\*\*\*\*\*  
\*\*\* DEAR(?)MAGGIE \*\*\*  
\*\*\*\*\*  
\*\*\*\*\*

What should we do? In Vol.2.1 we submitted an ad requesting an invitation from 516J for a party. Last thursday June 21st they had a party and we went to bed to the sound of their party. Not a hint of an invitation came across!

Heart Broken 519E

Dear Heart Broken

Obviously the girls aren't worth it, but if you're engineers they have a valid reason.

Maggie

Write your problems down and have Maggie console you.

# it's party time !!!

Alright all you mathematicians out there! It's time for you to release sum of that pent-up literary talent inside you. Now, you wonder, what the integral does that have to do with a party?! Well, if we had mentioned "antical" at the outset, people probably would have stopped right there, but we know how much you all love parties... so, read on.

It's time to do antical write-ups on profs and courses, and since there are "N" of these to do (where N is very large) we are requesting your help. The week-end of July 7 is the time, and the place will be the third floor lounge. The above-mentioned party takes place on the Saturday night for all the hard workers, with some of the beer provided by antical. If only a couple of people show up, there will be an intimate dinner at Suzie's instead.

Would all interested please sign the list in mathsoc, or see Dennis Ablett or Sue Bell. Please, antical needs your help.

mathNEWS - financed by but independent of Mathsoc

We missed you Liz... Ponder why did we get the left over coffee?... But four dozen donuts for five ± a few at times... Thankyou Honeywell for not crashing without warning... Marsha has a new toy at 3:37 a.m. the local terminal... The phantom had his article in on time relative-ly speaking...

We were... Bruce Morrison, 'the plumber', "the phantom", Marsha Tat-ebe, Pandall McDougall, Phil (did i spell it right) Lanouette, Maggi-e, ,,, Thankyou for your submissions; tiny, ISMAILE, Bruce Hahn, Hark Shields, John Dark, Steve Smith, Evelyn Stephens, Mark Algar, Dick Kraft, Louis Boyle, Bruce Woodrow, Pete(sorry forgot your last name). Thankyou for your hyphens, Marsha, Glad to see you still can spell...poorly. See you next issue in person?... July 5 or 9.