

# mathweekend, fall '73

## FRI.-frolic; SAT.-the same; SUN.-sleep

Now that the weekend has just about arrived, the math society's mathweekend is at its midpoint with a few of the pubs and the pub rally yet to be completed.

This Friday afternoon marks the last of the free pubs. This drink-up in the campus centre pub area, lasting from noon until 6 p.m., will feature Disney cartoons. Later tonight there will be another pub; this one at Food Services. Admission is 50¢ for mathies (with stamped ID's), \$1.00 for federation members and \$1.50 for others. Mackenzie is the group booked

for the evening. The doors will open at 8:30.

Tomorrow afternoon the math pub rally is scheduled to transpire with the U. of W. Car Club in charge. All finishers will receive free admission to the evening pub, again at Food Services. This pub with James Leroy will feature the same admission prices and time as Friday's event.

So why not take mathsoc up on their offer of what may be a last chance for an evening of drinking before the advent of exams.

ISSUE 3.8

FRIDAY, NOVEMBER 16, 1973

# *math* NEWS

## blood donor clinic

### BLEED for MATH

Next Tuesday, Wednesday, and Thursday (November 20 - 22) marks the return of the Circle K Club's blood donor clinic, co-sponsored this term by the Federation of Students. The clinic will be held in the third floor math lounge from 10:00 to noon and 1:30 to 4:30 p.m. on each of the three days. Circle K President Bonnie Walker notes that "the club is hoping for 1000 pints" this time around.

Again this term, the Blood Bowl will be up for grabs. After each term's clinic, this award is engraved with the name of the faculty boasting the highest percentage turnout. Math has the distinction of holding the record of most number of wins but Phys.Ed. has been the recipient for the past two times.

Hence, mathies will, hopefully, turn out en masse for next week's clinic in an attempt to recapture the award and in the process give the gift of life.

## maTHeatre

The next feature of mathsoc's matheatre will be W.C. Fields flick: "You're Telling Me".

The movie will be shown next Tuesday (November 20) in MC 2065 at 1:30. There will be no admission charged.

## watt tells what

### COMPUCENTRE

Each term the Computing Centre offers a series of non-fee, non-credit courses. Roger Watt, manager, Consulting and Educational Services for the Computing Centre has advised mathNEWS of problems in general in both designing and presenting these courses. He would welcome any comments and ideas.

The Computing Centre is a staff department, not an academic; as such, it exists to provide a computing facility for those throughout the University to use as a tool to aid in their day-to-day work. Consulting and Educational Services (the "user services" section of the Computing Centre) exists to provide support services to facilitate use of the computing services. Among other things, the Computing Centre publishes the Computing Centre Newsletter and LINEUP (the DEBUG Service newsletter) in order to dispense information of interest to computer users. A Consulting Office is operated in MC 1081 as well as the Computer Reference Room in MC 1088. The Computing Centre is further active in conducting the series of non-fee, non-credit computer courses already mentioned.

In order to prevent duplication of effort, different entities within the University have differing responsibilities pertaining to computing: Data Processing,

(cont'd on next page)

(COMPUCENTRE, cont'd from front page)

a staff department separate from the Computing Centre, is responsible for servicing the computing needs of the University administration; each academic department is responsible for the education of its students where the use of the computer is part of the academic curriculum (and is also directly responsible for providing whatever consulting assistance is required by those students); the Computing Centre is responsible for support services in areas which do not overlap with the other areas of responsibility.

The foregoing is the general guideline by which the Computing Centre operates its support services: the audience they are aimed at consists primarily of those for whom other channels do not exist. This applies to the Computing Centre course series in that registrations are accepted from undergraduates only on the day of the first session of the course desired provided there is room left; the theory behind this is that the knowledge the undergraduate requires in order to use the computer for assigned work is being imparted by his or her academic department.

The manager of the Centre's Consulting and Educational Services adds that "Unfortunately, there are a few gaps which are not being filled. For example, we had to close off registration for the APL course almost as soon as we opened it; there seems to be a large number of math undergraduates who would appreciate an APL course; perhaps between Mathsoc, the Math Faculty, and the Computer Science Club, you could somehow arrange and conduct one. I would like to talk to you about what could possibly be done in an attempt to fill this gap."

### the phantom reports....

Believe it or else, if you hadn't already heard, L6 stands for: (Bell Telephone) Laboratories Low-Level Linked List Language.

And the reason we don't have it is that someone signed the contract on the wrong line. (No we don't have it yet.) (No we don't have the APL Update either.) In the meantime, DEBUG has gone back to that condition where both printers have lineups back to the operator's desk and thence out the door and down the hall.... you would think at first glance that an assignment were due or some such nonsense, but in fact, this is not the case! If you listen closely, you may hear the moans of disheartened users above the almost continuous dead silence of the printers, and as you stand in line for twenty minutes waiting for a seven line program to run, remember this is a fast day.

TO GANDALF WHO KNOWS NOTHING: You know NOTHING, so why must you be so insulting???

TO M. SHIELDS: SLEEPING though it again, eh?

TO THE PHANTOM FROM HIS GHOST-WRITER: No.

TO ALL THE REAL PEOPLE: E-day comes soon....

## mathsoc, c+d make dollars

"We're quite well off!" summarized mathsoc's treasurer Rosemary van den Akker at this past Tuesday's mathsoc meeting. In fact, mathsoc, despite collecting a sum of \$8575.00 in student fees, has \$9912.81 in the bank. This profit position is mainly a result of having made money on such events as orientation and social events.

It was also revealed that mathsoc is not the only organization finding itself in, at least what should be, an embarrassing money making situation. Paul Armstrong, manager of mathsoc's Coffee & Donuts Club (C&D), referring to the notice which has been posted behind the C&D stand that states C&D is losing money, commented "I lied." Noting a slight error in arithmetic on his part, Armstrong informed those present that after having started the term \$300 in debt, his operation, "if the present trend continues", will not be in debt, but should show a \$600 profit at the end of the term. When asked what C&D intends to do with the profits, Armstrong remarked that he is considering a "one week smash sale." The C&D manager further reported that nominations for manager and assistant manager for the winter and spring terms have closed. There are 2 nominations for manager and 3 for assistant, both for the upcoming term, plus 2 applicants for summer term manager. Mathsoc council members will have the job of making their choices for the positions at the next mathsoc meeting.

In further business, president Cindy Harris announced that by December 5 all lockers must be cleaned out so that the locks can be changed in preparation for next term. Vice-president Andy Haycock then chastised those who had promised to help distribute anti-calendar questionnaires but had failed to do so. As of the first 2 days of distribution, between one-quarter and a third of the classes had been done. The vice-president also noted that he had done a quick survey of question 8 results. This question concerns the number of copies that students prefer to have printed, if any. 58% favoured printing 2000 copies; 19% wanted 200 copies placed at strategic locations on campus; 9% suggested printing a limited number, on a first come, first served basis; 13% replied that they didn't care and 1% favoured printing none.

After an announcement that a W. C. Fields film will be shown next Tuesday, at 1:30 pm in M&C 2065, the meeting was adjourned.

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.

# Prof. Shaffter

(PROF of the WEEK)<sup>-1</sup>

(Note: the following was submitted by one of our readers.)

PROF OF THE WEEK.....this week we interview Prof. Shaffter..(Applied Money-Making)

Many Mathies will be well aware of the presence of the gifted Professor Ivan B. (Bucks) Shaffter, who has walked our hallowed fifth floor halls for the last seven years. The recent AntiCal reports that Prof. Shaffter's classes are average, cover the course material well, and his assignments, although frequent, are always personally handed to his lackey tutors to be marked.

Prof. Shaffter's favourite hobbies are of course making lots of money at his job, as well as making a great name for himself. He can't stand to see other less well-known faculty members win such prestigious positions as Chairman of the Dept. However, he feels that he has more than made up for this by possessing the largest and most luxurious car in the faculty-- a Lincoln Continental Mark IV (he uses his LTD Wagon for hauling his sailboat to the yacht club). He says, "Why shouldn't a man of my position own such a fine thing? Besides, anything else would look foolish in the driveway of my country estate."

When asked what he had to say about the students and taxpayers who support his financial post, he replied, "Who gives a damn about the students? Why, they are responsible for wasting much of my valuable time...they expect me to teach (?) in front of their classes, and then they expect to get 'extra' help when they can't do their bloody trivial assignments. As far as I'm concerned students should spend their time studying, and then they would not have to come and waste the time of great men like myself. In fact, I am in favour of completely removing all students from this University. They pay a few dollars a year, and then expect to be treated like children. Well, I don't treat them like babies, I treat them like men--in my classes, it's every man for himself, and the dollars and fame forme!"

"As for the taxpayers.. I feel that it is their duty to pay significant wages to significant men... they would still be in the caves if it weren't for men like me!"

We also asked Prof. Shaffter what his plans for the future are. His response to this question was:

"Sometime this year I would like more power, and more prestige, and I want an office off the courtyard, with a red door. If I had these, I could be a real man, and I could tell these damn students outright just what I think of them (without having the Dean or Chairman say 'Now, now, we must keep up appearances.. some day these idiot students will be taxpayers \$\$\$'). I could also get more grants, and probably a raise and an opportunity to sit on more pesty

# WHAPPENING?

FRIDAY, Nov 16

11:30 am

--Drama:"The Stranger" and"Not I"  
Theatre of the Arts

12:00-6:00 pm

--Mathweekend Pub:CC

8:00 pm

--Fed Flicks:"High Plains Drifter" and  
"Minnie and Moskowitz" AL 116

--Coffee House: "Black Forest III" local  
artists, folk and blues, St Paul's

--Pub: West Indian Steel Band,  
Village 1, Red and Green

8:30 pm

--Mathweekend Pub: "MacKenzie" Food  
Services

SATURDAY, Nov 17

Afternoon:

--Mathweekend: Pub Rally

8:00 pm

--Coffee House: St Paul's

--Fed Flicks AL 116

8:30 pm

--Mathweekend Pub: "James Leroy"  
Food Services

SUNDAY, Nov 18

2:30 pm

--Concert: "Barry Wills" Theatre of the  
Arts

8:00 pm

--Fed Flicks AL 116

8:30 pm

--Concert: "Frank Zappa" Phys-Ed Complex

TUESDAY, Nov 20

11:30 am

--Dance Programme, Theatre of the Arts

1:30 pm

--Free Movie: "You're Telling Me"  
W.C.Fields, MC 2065

WEDNESDAY, Nov 21

11:30 am

--EngSoc Movie: "Time of Man" EL 110

12:30 am

--EngSoc Movie EL 103

THURSDAY, Nov 22

1:30 pm

--Campus Forum: "Human Rights (Soviet  
Union)" CC 135

8:00 pm

--Fed Flicks: "A Doll's House" and "The  
Man" AL 116

--Demonstration: "Self Defence for  
Women" EngIV 4362

FRIDAY, Nov 23

8:00 pm

--Fed Flicks AL 116

--General Meeting: Pakistani Students CC

8:30 pm

--Pub: "Flight 505" Food Services

gritty tenure committees... Yes, I can see it now..

.....Rev. Prof. Dr. Ivan B. Shaffter, Chairman of the Department of..."

With that last remark, your intrepid interviewer stood and suffered from projectile vomiting...from pure fright and disgust. Fortunately, though, the next issue of mathNEWS will run another 'Prof. of the Week' column, and it will be sugary nice and I will feel very much better.

ACROSS

- 1 PANCAKES (FR) 39 eroded  
 7 PILFERS 40 female scholar  
 13 ICIEST 41 eyesight(fr)  
 14 NOAH'S LANDING 42 bacteria culture  
 PLACE medium  
 15 INHABIT 45 pub game  
 16 SPIN 47 man's name  
 17 ENTERTAINS 48 foot trouble  
 18 YESSES 50 \_\_\_\_\_ miserables  
 20 GIRL'S NAME 51 a \_\_\_\_\_ without love  
 21 ANGERS 52 baseball statistic  
 22 \_\_\_\_\_ GALAGER 53 remitted  
 23 TOUGH STRING 55 it's north of toronto  
 25 PERMANENT MARK 56 he 'wanted more'  
 26 GOES BOATING 58 where custer finally  
 28 BLAST IT ! found himself  
 29 DEVOUR 60 line through a circle  
 30 AJAR 61 having a will  
 31 EX-COACH (MONT.) 62 stadia seats  
 33 VERY RELAXING 63 tommy \_\_\_\_\_, a singer  
 HABIT

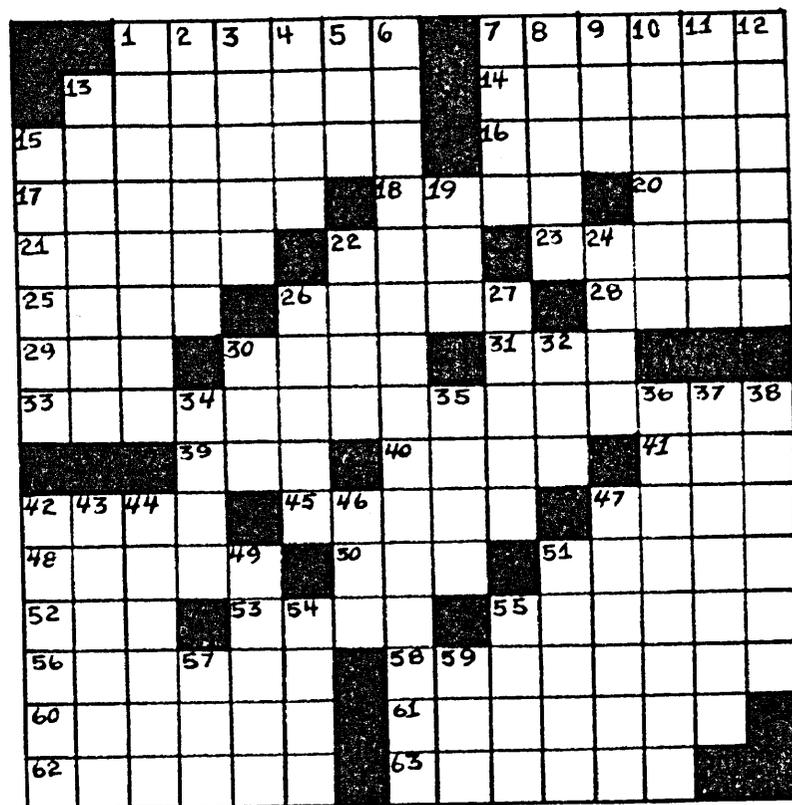


GRIDWORD COMMENT

The winner of last week's contest is JOANNE PEDDLE with DOUG BAKER and GREGG ANDREWS turning the only other correct solutions out of the 13 submitted.

To the person who suggested that we have a gridword editor ---- we had one for every issii this term ---- me!!!! Did you know that requests for mathNEWS are coming in from all over the world(probably because of the gridword)? The latest request was from Czechoslovakia...thanks Marika.

RULES: Have your correct solution in the mathNEWS file in MC3038 with your name and phone number by 4pm Tuesday 20.



LAST WEEK'S SOLUTION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
A	M	A	T	H	E	M	A	T	I	C	S		S	H	E
B	S	P	E	A	R		R	I	R	E		M	E	E	T
C		R	A	R	E		C	L	E	O	P	A	T	R	A
D	T	I	M	E		S	H	E			R	E	S	E	T
E	A	L		S	C	H	E	D							
F	K					O	R	R		N	O	S	I	O	U
G	E	M	E	R	G	E		A	D		S	N	A	K	E
H	N	A	V	E		A	R	R	O	G	A	N	T		E
I		T	I	R	A	D	E	S			G			E	D
J	D	E	L	E	T	E		O	I	S	E	A	U	X	
K	I	R		A	T	R	A	N	C	E		M		A	H
L	A	N	O	D	E		T	O	T	I	S		C	E	
M	T	A	D		N	E		A	N	O		T	O	T	E
N	O	L	E		D	A	S	S	U	M	E		L	L	
O	M		S	E	S	A	M	E		T	A	L	L	Y	

- 01 this could mean 15-a and it's a ball  
 02 awakener  
 03 they(fr)  
 04 vegetables  
 05 paris to cannes  
 06 taking bird courses  
 07 spice  
 08 rendezvous  
 09 auricle  
 10 as usual, it's at war with someone  
 11 awaiting development  
 12 mQueen's  
 13 humorous  
 15 analyzes a sentence  
 19 brynner  
 22 french city  
 24 little bird  
 26 worked for the cia  
 27 nippens  
 30 choose  
 32 ancient  
 34 deserve  
 35 small children  
 36 assess too much value to  
 37 contour
- 38 required  
 42 from one side to the other  
 43 canadian singer  
 44 spirits of \_\_\_\_\_  
 46 clay  
 47 entrance  
 49 go shopping  
 51 use without purpose  
 54 languages, philosophy, etc.  
 55 outpost  
 57 vehicle  
 59 seine

DOWN

The person who generated this week's gridword was  
 NORM MACDONALD

THIS  
Σ  
WEEK'S  
THEOREM

GIVEN: Square ABCD and line BE such that  $\angle ABE$  is an obtuse angle of a given value.

REQ'D: Prove  $\angle ABE$  is a right angle.

CONSTRUCTION: Let P, Q be the middle points of CD, AB. Take BE equal in length to a side of the square. Let the perpendicular bisector of DE meet PQ at O.

PROOF: By symmetry, PQ is the perpendicular bisector of CD and AB.

Consider triangles ORD, ORE

$$\begin{aligned} OR &= OR \\ \angle ORD &= \angle ORE && \text{(construction)} \\ RD &= RE && \text{(construction)} \\ \therefore \Delta ORD &= \Delta ORE && \text{(SAS)} \\ \therefore OD &= OE \end{aligned}$$

Consider triangles OQA, OQB

$$\begin{aligned} OQ &= OQ \\ \angle OQA &= \angle OQB && (\perp \text{ bisector}) \\ QA &= QB && \text{(construction)} \\ \therefore \Delta OQA &= \Delta OQB && \text{(SAS)} \\ \therefore OA &= OB \\ \therefore \angle OAB &= \angle OBA \end{aligned}$$

Consider triangles OAD, OBE

$$\begin{aligned} OA &= OB && \text{(proved)} \\ AD &= BE && \text{(BE=side of square)} \\ \therefore OD &= OE && \text{(proved)} \\ \therefore \Delta OAD &= \Delta OBE && \text{(SSS)} \\ \therefore \angle OAD &= \angle OBE \end{aligned}$$

Now, point O on PQ may be either  
i) between P and Q  
ii) at point Q  
iii) beyond Q (as shown)

Case i:

$$\begin{aligned} \angle ABE &= \angle OBE + \angle OBA \\ &= \angle OAD + \angle OAB \text{ (proved)} \\ &= \text{a right angle} \end{aligned}$$

case ii:

$$\begin{aligned} \angle ABE &= \angle OBE \\ &= \angle OAD \text{ (proved)} \\ &= \angle BAD \\ &= \text{a right angle} \end{aligned}$$

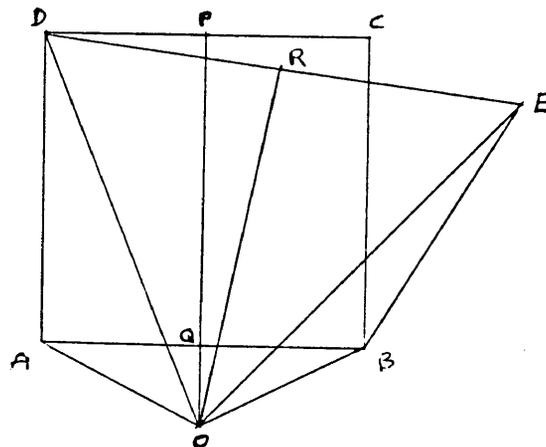
case iii:

$$\begin{aligned} \angle ABE &= \angle OBE - \angle OBA \\ &= \angle OAD - \angle OAB \text{ (proved)} \\ &= \text{a right angle} \end{aligned}$$

HENCE

$$\angle ABE = \text{a right angle}$$

\* QED \*



## Algebet

The object of this puzzle is to correctly solve the alphabetic division; thereby getting a one to one correspondence between the letters and the digits 0 - 9 inclusive. The result, thus obtained becomes a commonly used word.

$$\begin{array}{r} \text{SLHH} \\ \text{MATHS/HISTOGRAM} \\ \text{HIAOOO} \\ \text{TILOA} \\ \text{IMIHA} \\ \text{TRASLM} \\ \text{IMIHA} \\ \text{IMOI} \end{array}$$

Solution:

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

Thanks to Stanley

## rep reports

### CAMPUS CENTRE

The Campus Centre Board will cut some weekend overtime in order to impose the required 5% budget cut. Salaries and job classification of turnkeys and the coordinator will be reviewed by the University Personnel Board.

There is a plan to remove some of the rug in the Campus Centre Pub. This area will become a painted floor for dancing. Also there is a possibility of holding the pub at the Centre permanently.

The Board may hold a forum next week in order to be questioned on policies and operation matters. If you have any questions, write me at my mathsoc office box; see me in room M&C 3038; or, phone me at 884-6688.

J. J. Long

# math ETICS

hockey...

## REG MATH STOPS STUDS STREAK

A near capacity crowd jammed Moses Springer arena Sunday night to watch the Dynasty of Regular Math continue their winning ways in competitive hockey action.

Reg. Math extended their unbeaten skein to twenty-nine games over four terms with a 2-1 verdict over previously unbeaten Environmental Studies. The win boosted the Reg. Math record for the current term to 4 wins 0 losses and clinched a play-off berth.

While a 2-1 score suggests a very close game, the outcome did not reflect the Reg. Math superiority in most facets of the contest. Bob Denny was clearly in command in goal for Reg. Math turning away several hard drives. He was victimized for E.S.S.'s only goal on a penalty shot by Paul Banner with 20 seconds left in the game. This was a result of a delay of game penalty to Denny for moving the net out of position, (with malice and forethought according to the referee) which is a penalty shot during the final two minutes of the game.

Reg. Math led by rambunctious Randy Musselman hitevery Stud that moved and some (notably Glenn Schnan) that were incapable of moving. This hard hitting play was attempted by E.S.S. as well but their clumsy efforts only resulted in poor positional play.

Dean Mucci and Ken Chupa accounted for Reg. Math goals in this game, both in the first period with Randy Musselman, John Hohmeier and Chupa getting assists.

Next contest for Reg. Math is this Sunday at 11:00 pm with Sunnydale Scrotes facing off as opposition.

## Conq. konk Opt.

The rejuvenated Math Conquistadors continued their improved play last week as a solid team effort resulted in a 3-2 verdict over Optometry.

With their third coach in as many weeks, behind the bench, the Conquistadors seemed to respond to mild-mannered approach of mentor Tom Wilson as opposed to the lacklustre effort they exhibited under Dean Mucci and Randy Musselman, the recently deposed coaches.

Wayne Adams, Bob Green and Al Harper tallied for Conquistadors to pace the victory.

Conquistadors received more good news this week as the team doctor permitted ace Len Kulperger to resume skating in preparation for the tough upcoming part of the schedule. Kulperger will be in the line-up wearing a bird-cage protective helmet and his presence should be the catalyst

necessary to spark Conquistador's bid for a play-off berth.

Sun. Nov 18 11:00pm Reg Math vs Scrotes

### Reg Math Statistics

Scoring	GP	G	A	PT	PIM
Dean Mucci	4	7	3	10	4
Pat Fallon	4	4	4	8	2
Ken Chupa	4	5	2	7	0
Jim Barton	4	4	2	6	2
Tom Wilson	3	3	2	5	2
Randy Musselman	4	0	4	4	2
John Oatway	4	0	3	3	6
John Nohmeier	3	0	3	3	0
John Merklinger	4	0	3	3	0
Don McLean	2	2	0	2	0
Pete Self	3	1	1	2	0
Brian Nowak	4	1	1	2	2
Ed Neakes	1	0	2	2	0
Fred Vivash	3	1	0	1	0
Bob Denny	3	0	0	0	2
Goaltending	GP	GA	SLG	GAPG	
Bob Denny	3	3	1	1.00	
John Burnside	1	1	0	1.00	

## basketball ... reg

Last Monday night, the Reg. Math B-Ballers practically ensured themselves of a playoff berth by squeezing past the St. Jerome's "C" team, 54 - 53.

Joe Labukovec, Dominic Jansen and Mike Gavriel provided most of Math's scoring punch. Mike Gavriel also played a strong game under the backboards picking off a high percentage of rebounds.

With about four minutes to play Math held an eleven-point (50 - 39) and still held a seven-point advantage with slightly over a minute remaining, but the defence relaxed a little bit allowing St. J's to make the game close.

The win evens the team's record at 2 - 2 and gives them a chance to finish the season with a winning record, when they play V2 East next Monday at 8:30 in court 2 of the Phys-ed Complex.

## CO-OP

Last week the co-op math basketball squad polished off the Blue Darts 45 - 26. This week, Village I North must have heard of the prowess of the math crew, as they were "shaking in their shoes" according to a member of the math team. The villages bowed 52 - 34. So, with a season record of 3 wins and 2 losses, the math gang has made it into the playoffs.

# Dr. Gentleman

## PROF of the WEEK

Professor M. Gentleman may interest you. Driving fast cars and "playing" with computers are favourite pastimes of his. Right now he drives a Lotus Europa, and has a dinky-toy model of it in his office, for interested people.

Prof. Gentleman was born in Calgary on July 6, 1942, but spent most of his youth in Lethbridge, then moved to Montreal. He obtained his B.Sc. from McGill in Honours Mathematical Physics in 1963, then he moved to Princeton, N.J. He received his M.A. and Ph.D. in Mathematics in 1964, 1966, respectively, from Princeton University. He worked for Bell Telephone in Murray Hill (N.J.) until 1968, then went to London, England, for a year.

Here he worked with the National Physical Laboratory, which is primarily concerned with Physics, but also has a well-known mathematics division. A comment: In Canada there is one government research organization, the "National Research Council", which controls all facets of research. In Great Britain research is divided among different organizations for each of the various areas, NPL being one of them.

At some point during these various travels and jobs, Professor Gentleman acquired a wife, who is at the moment an assistant professor in the Statistics department. They have two children, a two year old girl, and a fourteen year old boy.

Having been in the U.S. and Britain, Prof. Gentleman wanted to come back home to Canada. He wanted to work at a place that was "good" with computers. He feels that the University of Waterloo is the best place to work for computers, so he came here in 1969.

Prior to that time, and since, he has published twenty articles in various British and American journals on Numerical Analysis, statistics, symbolic algebra, programme language design, and computer networks.

Here at U. of W., Professor Gentleman is in charge of the Honeywell computer, is chairman of the Computer Science Curriculum Committee, and likes to do research. In his own words, he "likes to have his thumb in many pies."

His average teaching load is two classes per term, but at the moment he is tackling only one, because he is having three next term. The course he is teaching is 474A, applications of software. He is also supervising several PhD. students.

Prof. Gentleman doesn't regard himself as a teacher. He feels he is a scientist, and gets a kick out of his subject, especially sharing it with others, such as undergrad and graduate students, who also enjoy it. He enjoys U. of W. because there are students who are interested in new ideas, new problems, and want to share in his search for new knowledge.

When you speak of research, you must

define it first. What happens is that you look for a problem that you think needs solving. It must be the type that people care about the answers. When they care, it is usually fairly easy to get a backer.

Having worked in industry, where funding is done differently, Professor Gentleman is irked by the annual filling in of grant applications. He must apply to a known source of funds: there is then a review body which looks at your case and decides whether you are 'worthy' or not. Up to this time, he has never had any trouble obtaining necessary funds.

Examples of the types of problems to be solved follow: In the field of numerical analysis, you would look at the particular ways of solving a problem, considering degrees of difficulty, speed of solution, cost of computer time. In statistics you would ask questions such as, "What happens if your assumptions go wrong?" How would the situation change?

One opinion he has of U. of W. is that there is too much politics. There is a jockeying for position: "Be reasonable, do it my way." However, almost every large organization has this phenomenon, and U. of W. is a large organization.....

## YOU ASKED FOR IT

TTTTT

T HE motto this week seems to have been  
T "Don't speak unless spoken to"...

A consternating 80% (4/5) of this week's mail was from rpgurd, mentioned in last week's article, leaving a paltry sum of one person with enough get-up-and-go to get up and go to M&C 3018 and send us a message! (Come on, we really enjoy laughing at your stupid comments, so please write)

To this week's mail:

gdylee was quixotious enough to warn us that Tuesday is math474a assignment day - Thousands of ALTRAN jobs gumming up the system. So BEWARE, 'bun users, and thank you g. lee.

rp"who asked you" gurd sent us a sesquipedalian epistle (4 messages long) supporting his statement about a FORTRAN compile-and-go. OK, we believe you!

To dconroy (who didn't write us):

"YOUR SCORE IS 0 AND YOU ARE DEFINITLY PERVERTED"

Finally, something to try:

SYSTEM? qed

QED

uf !wait

Don't forget to turn your terminal off before you leave...

## TEACHING CAREER?

Are you interested in a teaching career? The Career Planning and Placement Centre has informed mathNEWS that for anyone interested in the Faculty of Education, University of Toronto, there will be such a careers information talk. The talk is to be held Wednesday, November 21, at 3:30 p.m. in B2-350. For more information, phone ext. 3675.

# 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.)

## pro arena

mathNEWS:

I feel that this school should have an arena to put us on the map in sports and also to provide extended student facilities for both participation and spectator sports. If an arena is built here it should be built on open land to the north of Columbia and it should have at least 2,000 seats in order to be worthwhile. If one is only interested in skating then they can freeze over an area of field such as the village green.

I believe that varsity hockey should be allowed to play its home games in the arena, but not have an over-pervasive influence so as not to interfere with student participation.

Financing of this building should be done by soliciting as many donations as possible from citizens of the community, companies, students (by voluntary fees), faculty, and staff. With this type of financing, I would entrust administration with control of the building.

However, if the financing is done by a compulsory student fee, I believe a referendum should be taken and that we should only vote to pay the fees if the students (ie. the Federation or some representative body) will be guaranteed control of what would then be our building.

J.J.Long

## Excited States

The Department of Applied Mathematics has advised mathNEWS of a Quantum Theory Seminar to be held next Friday, November 23 at 4:30 p.m. in M&C 5045. Professor C. Sandorfy, F.R.S.C., University of Montreal, will speak on "Excited States of the Ethylene Molecule." All staff, graduate and undergraduate students are welcome.

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.

The new look this week is due to the fact that we (the PHANTOM did it) misplaced last week's master ... The honeywell tells us that we owe it \$146.16 worth of funny honey money ... Any suprises this week, Norm? ... Thanks this week to: J. J. Long, Don Ablett, Norm Macdonald, Pat Fallon and N. D. Kendall... At 3 am we were: Dennis Mullin, Pete Raynham, Dave 3 rown, Randall McDougall, Ingrid Spletstoeser, the phantom, Mark Shields, Mark Saaltink, Dave Newell and John Peebles.

Next mathNEWS get-together: Tues. Nov. 20, 7 pm, M&C 3011. See you there.

## 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.)

FOR SALE: Christmas "goodies" (cakes, puddings, shortbread cookies, tinned biscuits, deluxe nut mixture). Fund-raising project for Circle K, room 3040.

WANT TO BUY: 2 15" rims to fit G.M. car, also a ski rack phone: 884-6617, Brian

FOR RENT: Summer term '74. Semi-furnished two-bedroom apt. in the Greenbriar. We pay rent of \$210 during this term, but can let it go for \$150 during the summer. First come, first served. Call Don Ablett, 745-3772, after 5:30 DON'T WAIT FOR SPRING ... DO IT NOW

FOR SALE: 5'7" skis laminated wood, with acrylic top  
\$35 phone 884-3652

WANTED: Copy of Wegner "Programming Languages, Etc." Phone 884-5806

WANTED: Volunteers that will be on campus during spring term '74 for Mathsoc's Anticalendar. Drop in to MC 3038.

TO SUBLET IN SUMMER: one-bedroom apartment (Waterloo Towers). available May 1 to Aug. 31, 1974. Fully furnished and appliances included. Suitable for 3 persons. Phone 884-9013 after 6:00 p.m.

COFFEE HOUSE: Black Forest III featuring "coffee from around the world, music from around the corner." St. Paul's College, Fri. & Sat. (Nov. 16, 17), 8 - 12 midnight, \$1.00

HOUSING AVAILABLE: Jan through June; ground floor of a home in Lakeshore Village; furnished including TV, stereo, use of washer and dryer; private entrance, swimming pool; phone 884-8635 after 5 or come to MC 3063.