

hewlett-packard 45 advanced scientific pocket calculators **STATS CALCS INSTALLED**

Remember all those days last term when you had your statistics assignment due in one and one-half hours, and you had none of the arithmetic computations done. You rushed up to APL only to find either no free terminals or a couple of free terminals and the system down. In desperation, you either worked out all those calculations by hand to get the wrong answers, or just copied the wrong answers. Well, rejoice, for those days are over. For now, in room 3047, there are 10 Hewlett-Packard 45 calculators installed, with 15 more due to arrive in mid February.

The HP-45 pocket calculator comes with many features that make it a powerful tool for doing arithmetic problems. It has functions to handle logs, exponents, factorials, trig functions and statistical formulas. They cost about \$500 each, and are firmly attached to the tables. J. G. Kalbfleisch, Associate Chairman of the Statistics Department is in charge of this venture, and says that the room is now open, from 8:30 to 4:30 every day. However, if the demand is great enough, hours will be extended. It is hoped that these

calculators will relieve some of the load on APL.

Instruction manuals on how to use the HP-45 may be borrowed from the Statistics Office, room 5038. For now, here is a guide to get started using these calculators. The HP-45 uses "reverse Polish" notation which allows you to save temporary arguments in a stack of 4 registers big. When you key in a number, it sits on the top of the stack. Typing "ENTER" pushes it down one. Typing an operator like "+" or "-" will perform an operation on the top two numbers in the stack, and replace them with the answer. Therefore, to add two numbers, say 5 and 6, you type: 5 ENTER 6 + . Chain operations are performed by pressing the operation after typing in the number. E.g., 1 ENTER 2 + 3 + 4 + 5 + adds the first five whole numbers. If you type one of the monadic functions after keying in the number, the function is performed on the entered data, and the result replaces what you entered. Typing 30 SIN ENTER 45 COS + will compute $(\sin 30) + (\cos 45)$. If you press the gold key in the top right hand corner before hitting an

(cont'd on next page)

ISSUE 4.2
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math NEWS

FEDERATION-SOCIETIES CONFERENCE

A major attempt to improve relations between the Federation of Students and the six Faculty Societies took place last weekend (Jan. 19-20) in the Village 1 Great Hall.

At this time representatives from each of the Faculties and the Federation met to discuss Student Government in general and the situation at Uniwat in particular. The agenda for Saturday consisted of a series of talks on the various levels of student government.

First off was Ben McDonald, a field worker for the Ontario Federation of Students. He outlined the development of OFS since its inception eighteen months ago and led the group in a lengthy discussion of student parity on various Campus Committees and Councils (parity being defined as equal representation among the various groups involved in a committee). For instance, if three groups, one of which is students, comprise a committee then students should have 33.3% of the representation on the committee.

Next, was David Robertson, Executive

Assistant to the Federation of Students, who outlined the development of the University of Waterloo Act. He further pointed out the need for student parity in light of the fact that a new U. of W. Act developed up until 1971 called for a Unicameral (one-tier) system with almost equal student representation. Unfortunately, what we ended up with was Burt Matthew's idea of a revised tricameral system with minimal student representation.

Following this, were talks by Andrew

(cont'd on next page)

ELSEWHEN

Fragments from mathNEWS, Thurs. Jan. 25, 1973, one year ago this week.

"...after many trials and tribulations, the Honeywell is now working reasonably well. It might even be considered somewhat reliable..."

"...'The ski trip is definately screwed for this week anyway' lamented Ross Kirkpatrick, MATHsoc's social director..."

(STATS, from front page)
operation key, the operation written above the key will be executed. For instance, 1/X becomes Y raised to the X if the shift key is pressed.

Some of the operations provided:

1/X gives the reciprocal of the number in the display

ln gives the natural log, e to the x gives the exponent

FIX followed by a number sets the displayed accuracy.

SHIFT FIX causes the display to give scientific notation.

→P takes the top two numbers on the stack, and converts them to polar co-ordinates.

E.g., 3 ENTER 4 →P converts (3,4) to polar form. SHIFT →P (→R) converts back to rectangular co-ordinates.

X↔Y switches X and Y. For instance, 2 ENTER 4 - gives -2, while 2 ENTER 4 X↔Y - gives +2.

% gives X % of Y, while Δ% gives the % change of x to y. 20 ENTER 45 Δ% displays 150 (% increase).

RAD, DEG and GRD convert angular notation to radians, degrees-minutes-seconds, and decimal grads.

CLx clears last entry, while CLEAR clears most (not all) of the calculator's registers.

The HP-45 also has a set of registers where temporary results may be kept. These are accessed with the STO, RCL RV X↔Y and ENTER keys. LAST x has the last entry you typed in.

With this quick guide, you ought to be able to get started. However, to learn of all the features, you should read the manual that comes with the calculator.

(CONFERENCE, from front page)

Telegdi and each of the Society Presidents (or their representatives) on their respective relations with each other and their faculties. This led to the consensus that communication between the Federation and the Societies needed improvement and that Society-Faculty relations could stand strengthening.

The wrap-up for Saturday consisted of suggesting topics for workshops to be held on Sunday. After many suggestions and much discussion the topics settled on were:

- 1) Federation -Society Communication
 - 2) Board of Publications -Chevron
 - 3) Parity -Student Representation
- The group then adjourned for the day.

Sunday, unfortunately, saw some of the worst weather to hit the K-W area this winter. And, correspondingly, the turnout for the work shops on Sunday was dismal. Instead of having one person per faculty for each workshop as originally planned, there were barely enough people to hold one workshop on any one subject.

So, it was decided to handle each topic consecutively and hope we could cover each adequately. But, after discussing the first topic for almost three hours and then spending an hour and a half on the second, it became abundantly clear that the task before us was impossible.

Still, some useful resolutions came out of the discussion of the first topic

and some hope for the other two were seen. The resolutions follow:

I Federation-Society Communication.

a) Each society clarify its status in relation to its respective faculty.

b) Each society is required to provide a flow chart of its respective faculty power structure.

c) The minutes of each Committee of Presidents meeting be reported by each President to his/her respective council.

d) All Federation policy proposals be brought before the Committee of Presidents for consideration by it, so that recommendations may be made to Federation Council.

e) To ensure communication between the Federation and Society Councils, it is recommended that all Federation representatives be required to report to their respective Society Councils.

II Board of Publications-Chevron

A letter should be drafted and sent to the Chevron recommending that a workshop be set up to discuss the campus newspaper.

III Parity-Student Representation

The question should be discussed at the society level and a workshop should be set up at a later date.

Phil Lanouette

jan 29

maTheatre

That's right, free movies. The Math Society has run a number of free movies, usually on a Tuesday at 1:30pm. However many people seem to be unaware of this fact. At the last movie "Joe Kidd" only thirty people showed up. These movies, while not the most recent releases, are of high quality and in general are worth seeing.

So try and make it to the next free movie, "Coogan's Bluff".

S.P.S.S.

The following Computing Centre non-fee, non-credit course will begin next week. To register, please contact Ms. Andrea Dietrich in M&C 2008 or at extension 3271.

SPSS (Statistical Package for The Social Sciences) is a programming language designed to assist the social scientist in performing many types of statistical analyses on his data. The procedures available include simple descriptive statistics, frequency tables, crosstabulation tables, correlation analysis, Guttman Scaling, Multiple Regression analysis, Factor Analysis, Scattergram, T-test, and Discriminant Function Analysis.

The course will emphasize data entry and manipulation facilities within SPSS as well as the statistical procedures available in the package.

FULLDUPLEX by ludwig van zopfault

This week's column includes (among other things) libelous innuendo, malicious slander, and an obscure philosophical harangue. See if you can find examples of all three, as there will be a test on it later.

The Faculty of Mathematics, following the lead of ESSO, has decided to change its name, to "The Faculty of Mathematical Sciences". The decision, made at a recent Faculty Council meeting, requires ratification by the University senate to come into effect. The Faculty has tried at least once in the past to make this name change, but the Senate turned them down. This writer, for one, hopes that they are turned down once again, for several reasons.

First, the proposed name is, in fact, a misnomer, in that Mathematics shares more with Philosophy and the other arts than it does with the sciences. Mathematical creations are drawn from within the realm of the mind, as are literary works and paintings, for example, whereas the inspiration for scientific achievements derives essentially from the external world. This is not to say that Mathematics bears no relation to the "real" world, but rather that the motivations of Mathematics and the other arts are different from those of the sciences.

Second, on purely esthetic grounds, the name "Faculty of Mathematical Sciences" reeks of the same bushleague bureaucratic thinking that calls garbagemen "Sanitary Collection Engineers". Does the Faculty council suppose that we can gain status (whatever that means) by having a long imposing name? We hope not.

Third, this writer, after four years of studying Mathematics, does not want to be hung with a degree in Mathematical Sciences (since that's not what we have been studying, and besides "Bachelor of Mathematical Sciences" seems rather verbose (will they have to make the sheepskins bigger to fit it on?)), and if they try to foist one on us, we will not accept it.

A week ago Wednesday, the 360/75 (bless its pointed little head) crashed, hard. The problem was a hardware check in the multiplexor channel (channel 0). Channel 0 has been a source of trouble since the machine first arrived, and has been the cause of several major crashes in the past. This time, the machine was down for four days, while IBM sent for an expert from Houston, Texas (where the channel was designed). On Saturday, it was finally decided to send to Toronto for a new channel, which arrived around 6 p.m. The shipping company tried to deliver it to the 'bun room on the third floor. In a typical display of good taste, it was turned down (the reason given being that they had ordered bacon and cheese, and could not ac-

cept pepperoni instead). The shippers then decided that maybe they wanted it downstairs, and eventually the Computing Centre took delivery. The only problem with the new channel is that it is a model /67 channel and it requires not insignificant modification to run on a /75.

Anyway, late Saturday night they got the machine up without the new channel, only to go down again Sunday. The machine was up again Monday night, and promises to give all the yo-yo fans on campus something to watch for some time.

While we're criticising things, we may as well mention that last week's YAFI was probably one of the worst examples of the "talking-down-to-the-readers" syndrome ever witnessed in this paper. We hope that in the future mathNEWS has better sense than to publish material of that caliber, and so's your mother.

Another change that should be made concerns the preponderance of Computer Science articles in mathNEWS. The present situation, in which most of the space is devoted to things like the Phantom and this column could easily be rectified but for the fact that most of the mathNEWS staff are in CS and as a result most of what gets published is what concerns them. This column is trying to provide a more global outlook (but it ain't easy coming up with new stuff every week), but in the long run, the only hope for change lies in greater participation in the production of mathNEWS on the part of students in other departments.

short plug

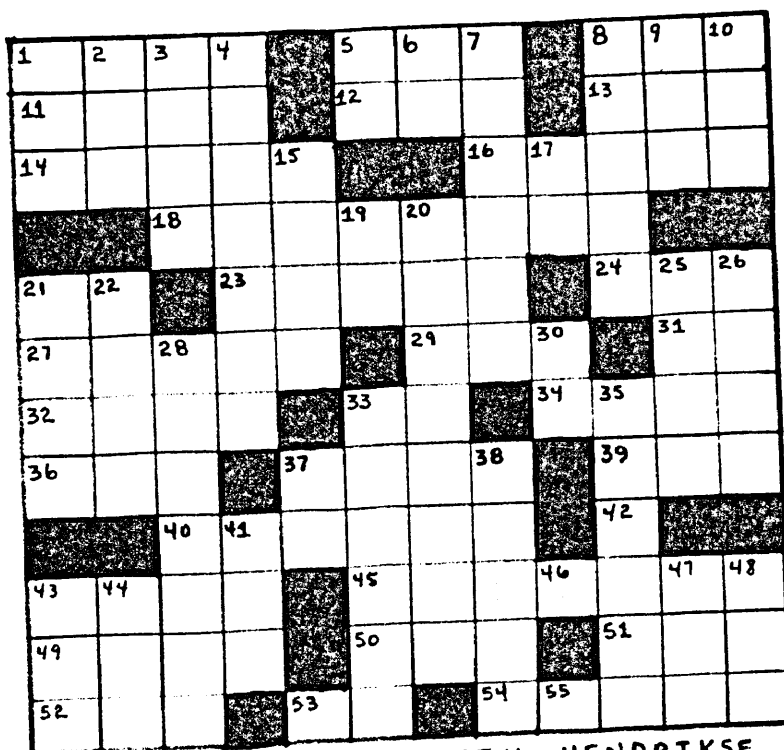
The chess program on the 'bun (a leisure service of the rghansen organization) is improving the quality of its play... it has recently been losing to stronger and stronger players. You can see it in action (?) in the MATHSoc chess tournament next monday.

According to one of our correspondents, the 'bun will be going to release F of GCOS3 (GECOS3?) as soon as the system tape arrives from Honeywell. Release F has such nifty features as time-lock passwords on files (so that SPACEWAR (are we ever sorry we mentioned that last week) can have a password on it between 10:00 am and 10:00 pm), completely re-written fortran i/o (GFRC), and disk storage is completely reorganised so that there is 25% more available filespace (since we have 4 disk packs, that means we'll effectively get a free disk-pack by going to release F).

Some messages to our correspondents in occupied countries:

to pjfraser: ut '-
to cwince: if you GAMBLE you'll go to HELL.
to rghansen: ribbit.
to mshields: tcall rjb
to the phantom and his ghostwriter: 1210
from all the real people: when is E-day?

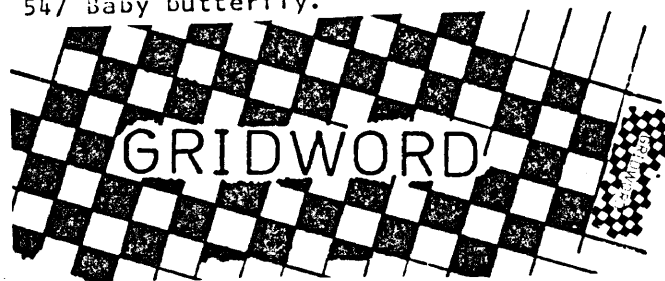
Good night Chet... ...good night Zelda



THIS GRIDWORD BY NEIL HENDRIKSE

across

- 1/ 344A, e.g.
- 5/ Phase 1 in which Doris gets her ___s.
- 8/ Shy
- 11/ You were (Latin)
- 12/ T___ the night before Christmas
- 13/ We think, therefore we ___.
- 14/ 3 of these per year.
- 16/ Moslem chiefs.
- 18/ 7% of your tuition pays for _____.
- 21/ Propter (Latin).
- 23/ What a sucker does.
- 24/ Dimwit.
- 27/ I've ___ up to here with you.
- 29/ A long fish.
- 31/ Body odor (abbr.).
- 32/ Homonym for news.
- 33/ Boy's name.
- 34/ Warning from the future.
- 36/ A popular library.
- 37/ A hot item.
- 39/ A Spanish cheer.
- 40/ Girl's name.
- 42/ ___ love you.
- 43/ A popular oil country.
- 45/ He sold out at Munich.
- 49/ Barbara _____.
- 50/ An unpopular non-oily country.
- 51/ A popular continent (abbr.).
- 52/ Oil Movement + Receiving.
- 53/ Opposite of she.
- 54/ Baby butterfly.



down

- 1/ Big 1968 battle.
- 2/ Norwegian currency.
- 3/ Park (French).
- 4/ How a cell breathes.
- 5/ It hurts.
- 6/ Alligators Anonymus (abbr.).
- 7/ Fly, not Spanish.
- 8/ A popular city, if you need oil.
- 9/ Bobby _____.
- 10/ What you want her to say.
- 15/ Porno.
- 17/ I.
- 19/ An unpopular political party.
- 20/ Like banjos.
- 21/ Without (German).
- 22/ Tree (German).
- 25/ A popular mathematician.
- 26/ ___ booth.
- 28/ Despondency.
- 30/ ___ and behold.
- 33/ ___ Road (T.O.).
- 35/ One who moils.
- 37/ A popular mantra.
- 38/ Boat-a-l.
- 41/ Girl's name.
- 43/ A popular African tribe.
- 44/ An unpopular B. of E. official.
- 46/ An imaginary quantity.
- 47/ I ___ you.
- 48/ Age.
- 53/ A popular Dutch letter.
- 55/ A indefinite article.

GRIDWORD COMMENT

Paul Morgan is this week's lucky winner of a Mathsoc T-shirt. He has to be considered lucky since there were 57 correct solutions submitted. Of the four incorrect solutions, one person put in an incorrect number (adding mistake) and the other three simply ignored rule number 5.

To pick up your T-shirt, Paul, just go to the Mathsoc Office (mc 3050), pick up the shirt of your choice and cross your name off the list.

Neil Hendrikse is this week's contributor. Our supply of gridwords is running low. Why don't you try to make one up.

This week's deadline is 3:30, Tuesday, January 20.
Winner determined by random draw.

14	7	16	14	15	12	17	12	9	29	27						
13	1	9	3	9	6	1	2	4	3	1	10	16	7	9		
7	2	4	1	11	21	9	8	7	3	34	9	6	4	8	7	
10	4	3	2	1	41	8	3	4	1	42	17	2	1	9	5	
	21	14	8	3	7	12	6	1	2	3	3	14	3	5	6	
4	3	1	12	10	2	4	1	3	11	10	7	1	2	30	29	
21	1	2	4	5	6	3	9	3	4	2	7	12	7	5		
24	9	7	8	10	5	2	6	1	5	16	18	1	8	9		
17	8	9	30	9	8	6	31	39	5	8	4	6	9	7		
	11	13	11	8	1	2	9	12	1	2	6	3	30	14	6	8
16	5	4	7	21	21	9	6	8	7	18	9	1	8	16	19	
23	1	5	9	8	8	10	3	6	1	9	26	2	9	7	8	
16	2	3	6	4	1	10	7	2	1	10	7	1	2			
4	3	1	16	9	7	21	9	4	8	23	6	8	9			

THIS Σ WEEK'S THEOREM

REQ'D: Prove that $0 > \text{zero}$

PROOF:

Define series:

$$u = 1 + 1/3 + 1/5 + 1/7 + 1/9 + \dots$$

$$v = 1/2 + 1/4 + 1/6 + 1/8 + 1/10 + \dots$$

Now,

$$2v = 1 + 1/2 + 1/3 + 1/4 + 1/5 + \dots$$

$$= u + v$$

$$u - v = 0$$

But,

$$u - v = (1 - 1/2) + (1/3 - 1/4) + (1/5 - 1/6) + (1/7 - 1/8) + \dots$$

Each term of this series is $> \text{zero}$.

$$u - v > \text{zero}$$

$$0 > \text{zero}$$

LECHERS

Professor Rolf Manne of the University of Bergen, Norway, will give a seminar on "Koopmans Theorem and other methods for the calculation of ionization energies", on Friday, February 8, 1974 in M&C 5158 at 8:30 p.m.

Dr. I.P. Fellegi of "Statistics Canada" will speak on "systematic approach to automatic data editing and corrections", on Friday January 25 at 2:30 in M&C 5158. Coffee and donuts served in the lounge following the talk.

Professor Garrett Birkhoff of Harvard University will present a lecture series the week of January 28 to February 1.

Monday
M&C 2065, 4:30 p.m. ALGEBRA IN 1974

Tuesday
M&C 2065, 4:30 p.m. MATHEMATICS AND COMPUTER SCIENCE

Wednesday
M&C 5158 2:20 p.m. NUMERICAL SOLUTION OF ELLIPTIC PROBLEMS

Thursday
M&C 5158 2:30 p.m. APPROXIMATING SMOOTH FUNCTIONS

Friday
M&C 5158 2:30 p.m. SOLVING VERY LARGE LINEAR SYSTEMS

unCLASSIFIED

(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 mall (a free service) addressed to: mathNEWS, MC 3038. Weekly deadline for submissions: TUESDAYS: 4:30pm.)

LOST: One pair men's silver rim glasses between Village I and Conrad Grebel. Please phone 884-5276. REWARD!

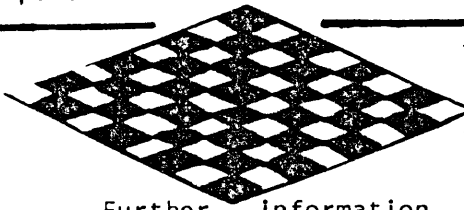
FOR SALE: Berman & Fryer, Introduction to Optimization, revised ed.; Finney & Miller's Principles of Accounting 7th ed. (Canadian ed.); Torgersen, Weinstork, Management - An Integrated Approach; Walsh, Introduction to Contemporary Micro-economics; Albright, Collective Bargaining Bus. 121W. Phone Brad, 884-2961, 885-1604.

FOR SALE: Co-op and regular math T-shirts. Available at the Mathsoc office (M&C 3038) for \$2.50. Navy, red, black, gold, sky blue. White T-shirts for 60¢ less - tie-dye them to your imagination.

FOR SALE: Pentax: Super-Takumar 28 mm f/3.5 wide-angle lens. Panagor: Auto wide-angle 28 mm f/2.5 lens. Phone 884-9523 (ask for Mike).

NOTICE: Volunteers who will help with sleigh ride for retarded children, show up Saturday, January 26, 1:30 p.m., M&C 3040 (Circle K office).

NOTICE: A group of sociology students at W.L.U. under the direction of Prof. J. Clarke is conducting a study on people who are living together unmarried. Can you help? Are you living with someone? Or could you inform couples who are living in this arrangement? If you can help, please contact Mike at 884-7704, Patty at 571-1213, or Linda at 742-4128 after 5:00 p.m.



CHESS TOURNEY

Further information on the chess-tournament.

1) The tournament will be held in room 135 of the Campus Centre.

2) It is requested that all entrants bring a chess set, board, and if possible a chess clock.

3) The tournament will be Swiss style, five rounds of approximately four hours each. The first round will start at 1:00 pm on the 28th, the second at 7:00 pm. On Tuesday, the third round will start at 9:00 am, the fourth at about 1:00 pm. The fifth and final round will be played in the third floor math lounge at 7:00pm.

math ETICS

hockey

REG. MANGLES KIN.

Reg Math, still smarting from last term's failure to return the Bullbrook cup, unleashed their vengeance on a class team from Kin. and when the smoke cleared the score read 10-1 for Reg. Math in the season opener.

Eight players shared in the scoring feast with the line of Pat Fallon, Ken Chupa and Don McLean accounting for five goals. Chupa and McLean each scored twice, while Fallon added a goal and four assists. John Hohmeier was another Math standout with a goal and two assists. Dean Mucci, on a spectacular three-way passing play; "Chico" O'Neill and Tim Skinner also dented the twine for Reg. Math as did veteran defenceman John Wetmore, recently re-acquired from Toronto. Randy Musselman assisted on three goals with his hard accurate shot being deflected by Skinner and McLean for two of the goals. Reg. Math led 7-0 after the first period, but Nephin ruined John Burnside's shutout bid early in the second stanza.

Next action for Regular Math is at Moses Springer Sunday night when the locals tangle with Upper Engineering II. Gametime is 11:00 p.m. It is possible that Reg. Math will play an all-star team from Laurier next Wednesday at Waterloo arena as part of Math week. Gametime will be about 2:30 p.m. Details can be found by checking in the MATHsoc office or the third floor bulletin board.

MATH TURBATORS

Math Turbatos (formerly Conquistadors) opened the winter competitive hockey season with a hard-fought 1-1 tie against a rough Recreation regiment. Larry Hancock converted Bob Green's pass for the Turbatos talley.

Next game for the Turbatos is Tues. Jan 29 at 12:00 midnight with an independent team called "Tijuana Taxi" as opposition.

DEATH OF A DYNASTY

Last term marked an unusual turn of events in competitive hockey as Reg. Math failed to win the championship for the first term since April 1971. In the semi-finals Village I West held Math to a 2-2 tie through an overtime period, so according to a strange intramural rule, the game was decided by each team taking sets

of five penalty shots. Finally after the third set of shots (and 45 minutes of what could have been two more overtime periods), John Kemp, a first year mathie, scored the goal that signified the end of an era in University of Waterloo intramural sports -- the Reg. Math dynasty. Village I West then went on to the finals only to lose to Village I East.

broomball

HOUSTON'S EULERS

In their debut performance, Houston's Eulers (H.E. for short) swept their opponents off the ice with ball bearing efficiency. Rolling to an early start on a goal by Leaping Larry Gifford assisted by Bruce "the Speller" Woodrow, the Euler's demonstrated that there is no real shortage of power. Once Bruce woke up to find that he was not still standing in the DEBUG line, he slipped and slid down the ice to score on his own assisted by "Powerhouse Pat" Beynou. The third goal come from a Dark Horse ASSISTed by the opposing goalie. Not to be outdone by the assist-goal tradition Pat "Physique" Beynou completed the goal daisy-chain with an assist from Leaping Larry. A closed shop boys?

Lest this game sound one sided, there was actually another team there and they did have three goals, scored by M.Y. OPIA, G.L. AUCOMA and A.S. TIGMATISM. Rumour has it that they were from Optometry, but no one knows for sure. Their major tactic was to sneak some one up to fog up our goalies glasses. However the Eulers emerged victorious 4-3. The stars of the game were undoubtedly:

BROOM HILDA
JOCK PLANTE

CARL FREDERICK GAUSS

The players roster in order of insignificance was:

"Dipsy Doodle" Darbie
Bob "Leave Before Its Over" Milette
Mike "Ditto" O'Neill
Bruce "the Sieve" Woodrow
Glen "The Happy Wanderer" Wenzel
"Slick" Mike Denome
Peter "The Wolf" Coates
Doug "the Hoop" Weber
Howie "Radical" McIntosh
Steve "Shoes" Kinsey
Hughie "Hot Pants" Allen
"Pitty Patty" Beynou "The Hunk" (sic)
"Loose" Larry Gifford
Trude "Hiccups" Muhlburger
Colleen "Shopping List" Adams
Donna Houston "Euler"

GLOOMBALL

In their first game of the winter term, played last Friday, January 18, the Math Co-ed Broomball team put up a valliant effort, but came up on the short end of a 3-2 score against the Tough Bananas(!?!).

Star player for the Mathies was Randy Arsenault who scored both goals.

Next game will be played on Monday, January 28 at WATERLOO Arena. Action starts at midnight against SLUSH.

BOLLYVALL

Intramural co-ed volleyball got off to a smashing start for the winter term on Monday, January 21, with 16 of the 21 teams seeing action.

One of those 16 was Math's own MATH C's who suprised everyone (especially themselves!) by actually turning out in great enough numbers (there were exactly 6 of us - unfortunately only 1 female) to form a team.

At that, we were still doing better than our competitors, A.S.A. (Armenian Students Association), who only had 5 members, all of whom were male. But, with a few players from teams just finished playing, both sides were evened up and the match began.

After a slow start - we dropped the first game 15-9 - the Mathies battles back to win the best of 3 with scores of 15-8, 15-8. Unfortunately, 3 games seemed to be our limit, because the fourth game saw us trailing 10-0 at one point and finishing at 15-5. The fifth and final game ended at 11-5 for the opposition.

Still, a good time was had by all. Anyone who shows (we especially need a few more females) will be muchly appreciated. The games are every Monday evening at the Seagram Gym. This coming Monday, January 28, we hit the court at 8:30 p.m.

For any further information contact the team captain, Phil Lanouette, in the Mathsoc office (M&C 3038, ext. 2324).

KEGGLING TOURNEY

The University of Waterloo Bowling Club is holding its second annual Intramural Mixed Bowling Tournament. Again this year the tournament will be held at Waterloo Lanes (14 Princess St. W. -behind the Kent) on February 9, at 12:30. Teams are to consist of 4 bowlers (2 guys, 2 chicks) and each bowler will bowl 5 games.

Co-op Residence will likely be out to defend its championship this year but St. Jerome's will likely give stiff competition again. Last year St. J's entered seven teams and still couldn't win. (Maybe more teams would help.)

Teams can register any time during the week of Feb. 4-8 in the Intramural Office in Red North, PAC. It would be a good idea to register early as the club has had to limit the number of teams.

mathweek strikes again

PINK AMBROSIA

The week of January 28 to February 3 has been set for the Math Society's version of math week for the winter term. What follows is a run-down of the week's activities. Further information can be found in the MATHsoc office (mc3038), extension 2324.

Mon. Jan. 28

Duplicate Bridge Tourney - 7:30 pm -- third floor math lounge.



Chess Tournament -- starts 10:00 a.m.

Tues. Jan. 29

Chess finals, trophies & prizes awarded in evening.



Wed. Jan. 30

Pub -- Leigh Ashford, Campus Centre 8:00 P.M.

Thurs. Jan. 31

Cross Country ski trip to Barrie -- busses leave 8:00 a.m.

\$2.00 -- Mathies

\$4.00 -- Others

Equipment provided.

Pub -- Leigh Ashford, Campus Centre 8:00 p.m.

Fri. Feb. 1

Pub -- Mackenzie, Campus Centre 8:00 p.m.

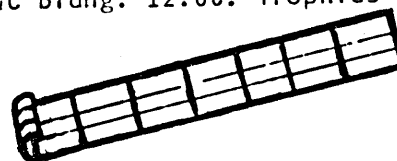
**P
U
B
S** **Ray Materick
Leigh Ashford
Mackenzie**

Sat. Feb. 2

Semi-formal -- Pink Ambrosia, at Valhalla Inn (ballroom). Dining & Dancing to the Don Pond Show. Bar opens at 6 p.m. Dinner served at 7. Tickets available at MATHsoc for \$7.00 per couple.

Sun. Feb. 3

Toboggan Races -- Transportation supplied from M&C bldng. 12:00. Trophies & Prizes



miners go on strike

MATHSOC MEETS

The math society's soft heart was again on display at this past Tuesday's meeting, with money having been granted to two obscure groups. A sum of \$50 was donated to an organization known as University of Waterloo Paralegal Assistance. Bill Fysh, a representative from that group, explained to council that the aims of this non-profit volunteer, student-run organization are "to provide assistance for legal difficulties or problems and to educate students with respect to their legal rights and responsibilities, i.e., seminars and workshops. The advice and educating will be given free of charge." The office of the group will be located in room 106 of the Campus Centre and will be open Monday to Thursday from 7:00 pm to 10:00 pm. Telephone 885-0840.

A request from Howie MacIntosh of the Canadian Liberation Movement (CLM) met with a \$25 grant from mathsoc. The donation is to cover costs to be incurred for a talk to be given by the national chairman of CLM here at Waterloo. One member brought up the point that if mathsoc agreed to sponsor such an event, this might imply that the society supported the movement. However, it was learned that, in fact, mathsoc has officially endorsed the movement and, in particular, the 85% Canadian quota campaign. Apparently this was done by this past summer's council.

In other business, reports were heard from the campus centre board rep and from reps to the Federation-Societies Conference (details of these reports appear elsewhere in this issue).

Footnotes:

- buses should return from next week's ski trip to Barrie between 7 & 8 pm depending on road conditions.
- help is still needed for Circle K's sleigh ride for retarded children (this Saturday)
- next tuesday, following the mathsoc meeting, there will be a review of the constitution.
- response to last term's anticalendar question concerning the number of copies that students wanted printed, revealed that 60% favour the printing of one copy per student. Still, president Cindy Harris and a number of council members would like to see only 200 or so copies printed.
- workers are still needed to help with math week.

FREE

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.



A few changes to last week's instructions: penultimately, the terminal room is M&C3018 (serves me right for asking the phantom), and lastly, our user id has been changed from MATHNOOS to mathNEWS (the phantom's doing again!!!).

There was a lot of junk mail this week. Of 18 messages, only 4 were serious...9 letters (yes, we counted 'em -- NINE) were doppelgangers of our example last week... including, strangely enough, one from jqpublic! But, on the serious side, we received this edifying explitive: "all over the university i see signs saying 'make a retarded child' i think there are enough retarded children in the world today" (remark: the signs don't actually say anything... they're the old-fashioned kind you have to read) Well, 'Thanx, jolanger/for a real knee-banger'... to cmtaylor: that notice made the rounds a few months ago. Better luck next time. to superio.360*: How did you get that "eot" in the message??? to everyone else who wrote: Ha-ha. Very funny.- to those who didn't write: to lvzopfault: Oh yeah?

Finally, this week's "Try This":
SYSTEM? mathNEWS/yafi

JJL's CCB REPORT

At the last meeting, CCB decided to allocate \$500 to pay an artist to decorate the concrete slabs in the Great Hall. Despite the fact that this matter has been discussed for months I feel some of the designs were of such poor quality that I would rather have the slabs blank.

Campus Centre Coordinator S. Phillips raised a proposal of hiring turnkeys for indefinite periods of time. I opposed this proposal on the grounds that it would be unfair for new applicants and could make it easier for friends of turnkeys to become turnkeys. I feel that if the turnkey is good enough he/she will be rehired after four months review. the final hiring committee which I was on was a difficult job but I feel that it should be retained. In speaking of turnkeys the 4 man, 1 woman hiring committee hired 20 new turnkeys of which 15 were female.

In other business the coordinators' spending power was restricted to \$300 without approval of the board. As well Fred Bunting was re-elected Chairman for another year.

There are movies at the Campus Centre pubs this week and although they got off to a shaky start the pub sold out.

J.J. Long.

C.S.C.

OVER THE TOP

The Computer Science Club had an excellent turnout for its first meeting this term - 100 people! Gordon Savage's presentation on "Computer mediated art & film" was excellent, and would have been better had there not been problems with the sound on the projector. We hope to show the films, with sound, at a future date. The "elections" were held, amidst a most apathetic crowd. Jim Parry was acclaimed president, Duncan Smith vice-president, and Sandra Smith (no relation) secretary/treasurer.

By the time this goes to print, our next scheduled meeting will be Thursday January 31st, at 19:30 in MC 5158. Dr. D. Tsichritzis, an associate professor of computer science at the University of Toronto, will give a talk on "Software reliability in operating systems". There will be coffee & donuts, and of course everyone is welcome.

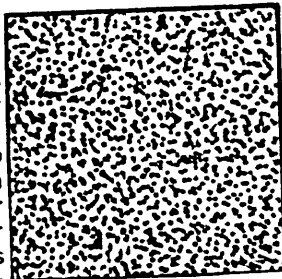
The CSC is on its way up. At the time of writing, there were 115 members in the club! We were shooting for 100. Next term the world?

The CSC's computer chess project got under way very nicely last thursday - 14 people showed up at the organizational meeting for it. We have great expectations for our program, starting with the Mathsoc chess tournament on Monday, and maybe even the World Computer Chess Tournament in August. We have nowhere to go but up after our showing at the local tournament at the end of November. If you're curious, or interested in participating, contact Jim Parry in MC 3013A. We'll be meeting every thursday at 15:30.

EYE TEST

As a public service effort we include, this week, a test for color blindness.

If you are unable to see the number "17" in the box, or see the number "6", you should see your optometrist as soon as possible as you have some symptoms of color blindness.



the phantom reports

THOSE OF YOU AROUND LAST WEEKEND PROBABLY NOTICED THE TEST VERSION OF APL THEY WERE RUNNING..... BELIEVE IT OR NOT, THAT REALLY WAS THE I.P.SHARPE UPDATE, AND BELIEVE IT OR NOT, YOU'LL PROBABLY GET ANOTHER CHANCE AT IT THIS WEEKEND!!! IF YOU FIND THAT HARD TO SWALLOW, HOW ABOUT THIS: YOU MIGHT GET "3 AFD" THIS TIME... MAYBE EVEN THE KITCHEN SINK, IF YOU'RE LUCKY....

FOR THOSE WHO DON'T KNOW BETTER, SOMETIME THIS WEEKEND YOU MIGHT TRY THIS: LOAD YOUR FAVOURITE WS AND TYPE:

```
)COPY 99 AFD
6 AFD 7 AFD 1 AWS 7
)SAVE
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THEN FIGURE OUT WHAT HAPPENED....

THE UPDATE, OF COURSE, DOES NOT HAVE THE "SCAN" OPERATOR, SINCE THAT TAKES UP AS MUCH SPACE AS AFD AND AWS COMBINED (AND DOES ABOUT 1/1000000TH AS MUCH), THE DECISION AS TO WHICH TO SCRAP MUST HAVE BEEN DIFFICULT (OF COURSE THE "SCAN" SHOULDN'T HAVE BEEN BUT.....). THE UPDATE ALSO DOES NOT HAVE FILE FUNCTION #20 GENERALLY AVAILABLE (IE. SOMEONE DECIDED TO TAKE IT OUT) AND IT DOES HAVE AN ARBITRARY, ARTIFICIAL AND UN-APL-LIKE CHECK AGAINST NON-POSITIVE FILE TIE NUMBERS... (777 MAIL USERS ON THE WEEKEND HAD BETTER HOPE 3AFD IS THERE, OR ELSE....).

HOPEFULLY THIS WEEKEND THE DYNAMIC PORT ALLOCATION (OR WHATEVER) WILL WORK PROPERLY... FOR THOSE WHO MISSED IT, IT WAS DISCOVERED THAT ANY TERMINAL WHICH WAS HARD-WIRED WOULD RECEIVE A PORT NUMBER GREATER THAN 42... HOWEVER APL DOESN'T BELIEVE IN THE EXISTENCE OF PORTS WITH NUMBERS GREATER THAN ABOUT 41... INCIDENTLY, THE OPERATOR'S TERMINAL IS HARD-WIRED..... THE MAIN RESULT OF THIS WAS HAVING YOUR MESSAGES TO THE OPERATOR PRINT ON YOUR TERMINAL INSTEAD OF HIS.....

SPEAKING OF THE OPERATOR'S TERMINAL, IT IS STILL DOING ITS UNLOCKING THING... THIS CAN BE VERY FRUSTRATING.... ESPECIALLY FOR THE POOR UNDER-PRIVILEGED TERMINAL REPAIRMEN WHO DON'T KNOW THE DIFFERENCE BETWEEN A BROKEN TERMINAL AND ONE THAT'S WAITING FOR THE OPR... I WATCHED ONE UNFORTUNATE FELLOW TRY TO FIX A WORKING TERMINAL FOR ABOUT 10 MINUTES BEFORE THE OPERATOR CAME BACK... (THEY SHOULD SPEND SO LONG ON THE BROKEN ONES). APPARENTLY THEY HAVE DECIDED NOW THAT IF WHOSEVER IS OFFICIALLY IN CHARGE OF THAT TERMINAL IS NOT THERE TO PUSH THE CARRIAGE RETURN KEY, THEN THE CARRIAGE RETURN KEY WILL NOT GET PUSHED... AND, OF COURSE, NO ONE CAN SIGN ON (OR OFF) IN THE MEAN TIME....

IF YOU'RE WONDERING WHY I HAVEN'T MENTIONED THE /75 (IE. WITS, DEBUG, WYLBUR, BATCH, ATS, ETC....) IT IS MAINLY BECAUSE THE /75 HASN'T BEEN FOR THE PAST FEW DAYS... AND THOSE OF YOU WHO HAVEN'T NOTICED HAVE THE TRULY HEART-FELT ENVY OF PRETTY WELL EVERYONE.....

ANYWAY TO WINCE & FUNNYAPPLE: THANK FOR THE GREETING, THO I WAS RATHER DISAPPOINTED NOT TO BE DISCONNECTED.... P.S. I LET MY USERID FADE QUIETLY INTO OBLIVION A FEW DAYS AGO...

TO JMS: BY THIS TIME, I HAVE PROBABLY TOLD YOU WHAT I WOULD HAVE SAID ANYWAY, SO I'M NOT GOING TO SAY IT.... (SURPRISED THAT I REMEMBER YOUR MIDDLE INITIAL??) TO THE NONE AND ONLY H.SHIELDS: I GET THE FEELING THAT I SHOULD SAY SOMETHING ABOUT "SMALL TIME OPERATORS", BUT RAUERMAN PROBABLY WOULDN'T APPRECIATE IT.... TO THE DEFECTIVE AND INSUFFICIENT GHOSTWRITER:

GHOSTWRITER^.= 'IDIOT-SOUVENT'

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. Weekly deadline for submissions: TUESDAY 4:30pm.)

computerNEWS?

mathNEWS:

I wish to express my complete agreement with the letter by 'A Math Student', which appeared in last week's mathNEWS. The all pervasive influence of the second floor was greatest in my first year here, but after a hard struggle, I have climbed out of the pits, and sympathize with those in my former position.

The influence of CompSci. extends to all Math courses in a process of saturation. Due to the great number who are in the faculty for the sole reason of studying CompSci., the Math courses offered are diluted to the tastes of this mass. Any serious student has to wait until third year to get some challenging and interesting material. It may be argued that people who wish to do so can take higher-level courses concurrently. This is true, but it requires a recognition of self that some of us do not possess for some time after entering this monolith. The change from high school to university is drastic, even if we consider the opinions of the cynics (possibly realists), and most students, even if keenly interested in math, take some time to modify their viewpoint.

The Faculty's change of name may be an excellent idea. It will not be so deceiving to bright-eyed grade 13's. I would even go further to change it to 'Faculty of Computer Science' and put math back where it belongs, in arts or science.

The same holds true for the mathNEWS. Except for the token pseudotheorem, there is very little 'math' about it. Replete

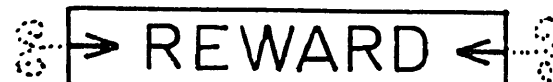
with gibberish (ie: computereeze), it fans on the hypocrisy. I know this is unavoidable, because the people who write the paper are mostly CompSci. students and the paper is set on the computer; the old cliché that "the computer is the message", holds. I also recognize that the paper is aimed at the majority of students in the faculty, who are computer 'oriented'; the more reason to change its name to: Co news, System, Aft, or any such post-Babelian inanity. L. Szasz

constitution

mathNEWS:

We are planning a referendum on a new constitution of the Math Society in March. Drafting of this new constitution will take place on the evening of January 29th at 6 p.m. People interested please meet in Math Society office, M&C 3038. Copies of the old constitution are available in the Math Society office.

Godfrey Lee
Chairman
Constitution Committee



Last week mathNEWS printed a plea for copies of past issues. Since the response was somewhat underwhelming, this week we are adding a little more incentive. For the first person to bring a copy of the summer issue 2.2 to the mathsoc office, M&C3038, he or she will be awarded either a free math T-shirt (\$2.50 value) or a certificate for \$2.50 to be spent at the coffee & donut stand. And, for the first 2 people to bring any, or all of the following past issues to M&C3038 there will be \$1.00 certificates to be spent at the C&D stand: volume 1, issues 2,4,5,9; summer volume, issues 1,2,3.

DROP & ADD GAME

This is a reminder that the deadline for adding courses this term is Friday, January 25. The last day for dropping courses is Monday, March 4.

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. Weekly deadline for submissions: TUESDAYS 4:30pm.) Circulation this issue: 1500.

Having been booted out of 3011 for the night (the term?), dealt with an unruly phantom & munched on semi-burnt subs, we are prepared to call it a night. Thanks this issue to J. J. Long, Jim Parry, various sports reporters. This week's cast of characters: Pete Raynham, Susan Berg, Pat McGrath, the phantom, Bob White, Mark Saaltink, Mark Shields, Ludwig, Randall McDougall, Tom Duff, Jim Webb, Dave Brown, Phil Lanouette, Norm MacDonald, Barb Maine, Dave Nevell, Elger Fropwith, and John Peebles.

Next mathNEWS meeting: Tues. Jan. 29, 7 pm, M&C 3011.