there's one born every minute
CAMPUS DAY: HARD SELL

Feeling the pinch of waning enroll-ments, the University of Waterloo last year initialized a campaign dubbed "Campus Day". Apparently this crusade met with such success that next Tuesday will see a repeat performance. As the university propaganda puts it: "The University of Waterloo invites senior Secondary School students and their parents to spend an informative day on campus: Tuesday, March 19th. Visitors may meet with faculty, students and staff and observe lectures and laboratories."

The programme this time around is much more elaborate than last year's endeavour. "This day will also include activities such as noon hour concerts, tours of the residence facilities, careers information center, swimming, a drama presentation, etc." proclaims one flyer. "One added attraction this year will be the All-Ontario High School Basketball Championship being held at the University of Waterloo on March 18-19-20. There will also be free swimming from 4:30-5:30 p.m. on Tuesday so bring bathing suit and towel if you are interested", advises associate math dean K. D. Fryer in a memo to the students.

Arrangements have also been made at St. Jerome's and Notre Dame for meals, not to mention "St. Jerome's and Notre Dame have also very kindly offered to accomodate overnight a few extra math types who show up with sleeping bags."

It seems no detail has been overlooked as another notice in the mail-out sent to the high schoolers lists "for the convenience of Toronto residents" informa-tion concerning Gray Coach Lines and even Canadian National Railways. In fact, "as Gray Coach will add extra busses if needed, it would be advisable to call the Toronto terminal if you plan to journey by bus", advises S. J. Little, U of W Liason and Publication Officer.

Not to be outpaced, the Math Faculty has done its homework. From a list obtained from the university application center in Guelph, all students expressing an interest in the Math Faculty at Waterloo were invited to "Campus Day". Some 1,800 invitations were sent out by our faculty and as of this past Tuesday, one week before the event, almost 200 high school students had notified the faculty of their intention to attend.

Math has prepared a full day of amuse-ments commencing with the arrivals at 9

math NEWS

the gift of life
FREE DOUGHNUTS

This coming week the Circle K Club once again sponsors a Red Cross Blood Donor Clinic. In order to participate, present yourself at the 3rd floor Math Lounge on March 19, 20, 21. (Tues, Wed, & Thurs.) Giving blood is truly the gift of life and the few moments of your time will be greatly appreciated both by the organizers and the recipients. If you've never given before come on out, you'll be given a warm welcome (pretty nurses!) plus refreshments after. If that's not enough incentive here's some more:

1. Math almost lost the Blood Bowl to the jocks last term. (It goes to the faculty with the highest <u>percentage</u> turnout.)

2. Vampires don't attack people who regularly give blood. (Something about giving it away free, repels them.)

3. There's a rumour circulating (unintentional pun!), that the Faculty will pass a student in the subject of his choice if he donates one gallon. (I personally think it's a commie plot. The average stu-dent only has two quarts and the average human has four or five.)

ELSEWHEN

Fragments from mathNEWS' files, Friday, March 16, 1973, one year ago this week: "...Theft brings total to $600: During the early morning hours of Friday, March 9, approximately $200 of the coffee and donuts money was stolen..."; "... there would appear to be some math 132 assign-ments due, in fact, there have been people stacked two deep waiting for terminals..."; "... at the meet the Math Fed reps meeting last Tuesday the audience was out-numbered by the Math reps..."; "... on March 17 the Math Society will have a special St. Patrick's Day Pub. Also featured is real green beer for all you off colour beer drinkers."

1

a.m. A number of mathies ("mostly co-op teaching students") have volunteered to help with the day. These helpers will be in charge of small groups of grade thirteeners for a tour of the building and informal discussion. A couple of lectures have also been prepared. P. A. Honsberger is to present a talk "consisting of a number of brief topics in mathematics, MC 2065", and Dr. P. J. Ponzo will lecture on "The Mathematics of Colour Television". Of course, refreshments will also be in abundance to keep visitors contented.

Seemingly, the Math Faculty is not willing to settle with just a Campus Day for soliciting future mathies and, dollars. A telephone campaign is apparently in the works. Or, in the works of associate math dean, K. D. Fryer in his message to the high school students: "Much of our contact with applicants to date has been on an impersonal basis and we see Campus Day as an opportunity for us to meet some of you and for you to meet some people at the University. If you are unable to come, we hope to telephone you on one of the evenings, April 15-16-17 to answer any questions you may have. (Why not jot down any questions you have on this letter so you'll be teady for our call?) If we are unable to reach you at that time and you have some unanswered questions about the University please write to me. We look forward, to contacting you in one way or another."

So, as the swarms of wide-eyed high school students descend on the campus next Tuesday, Administration officials seem determined to convert these unsuspecting souls into future dollars in university coffers. The success or failure of this hot and heavy campaign should prove interesting.

cindy harris named v.p.

FED REPorts

Though I've attended many Federation meetings in the past, this Monday I attended my first council meeting as a federation rep.

The three-part meeting started with the introduction of new members and A.P. Telegdi's 2nd term inagural address. In it he included a press for a stronger united federation and societies. He urged for student representation on the proposed new Arena Board and urged a permanent pub. He planned to mave better relations with administration. Most of his plans soun ed good except for his idea of doing away with right of the students to democratically directly elect their representatives to Senate. He can try to decide on how representation is selected on other committees but I feel the students should have the right to select their representa-

tives on this important organization.

Moving on, A.P.Telegdi announced his executive appointments to council. Most offices, except one were acclaimed. I voted for most of the candidates except the ones I didn't know about and abstained for.

Here is a list of the candidates elected all by large majorities. Vice-
Pres. - Cindy Harris - Math.Rep.
Treasurer - Stan Bonifero
Bd. of Ed. - Mike Taylor - E.S.Rep.
      - Myles Lawlor
Grievances - John Shorthall
      - St. Jerome's Rep.
Critics at large - Malcolm Murcer
      - Warren Turnbull
      Eng.Reps.
Entertainment - Art Pam
      - re-elected
Communications - Kathy Reynolds -
E.S.Rep.
Creative Arts - Ken Hall
Publications - Terry Harding (over
M.Gordon)
External - John Morris - Arts Rep.
Co-op Services - to be determined
Speaker - to be determined

Later the meeting moved to Arts Lecture 113 to where the Bd. of Directors of the Federation were selected by lot from the elected Board Chairpeople. They are Malcolm Murcer and Kathy Reynolds. Later the council returned to Bd. Room 3000 Stud. Services for the regular meeting. Here Art Rom's salary was extended to April 30. Also the council approved a tentative aggreement with the university concerning the pub. Under Bill 146 the University has to hold licenses, hire staff and set prices. The university apparently will spend $50,000 to get the pub operations approved. Income from the pub is apparently to remain in the pub to pay for entertainment.

Later the two full-time Record Store employees had their salaries extended to April 30. This ended the inagural meeting of the 1974-75 Council.

After this, the last meeting of the 1973-74 Council was held in the same room in the Student Serviced Building.

The salaries and honoraria recommendation to give all board chairpeople a $300 honorarium, except for Allison Stirling who would get $50.

Also it was clarified that the Amateur Radio Club got their money from the Bd. of Ent. Also in regarding education, course critiques were discussed.

Regarding entertainment, acting Business Manager Shane Roberts questioned the Math society asking for Federation money to subsidize a semi-formal when it appeared that the Math Society was not hurting financially. However, a person from Math dealing in entertainment said that the Math social budget was in or near the red.

Before the meeting adjourned, Paul Dobrocky mentioned a change in Financial Services policy regarding the Federation.

Concerning the Federation, a general meeting for all Math students to discuss Monday's meeting will be held in the Math lounge Thursday at 18:30. All representatives and students are invited to attend.
J. J. LONG

2

A BURLOAF'S MEADY WFFRS

Perhaps you have noticed how the proofs in Calculus texts often seem to leave out a lot of steps. You're reading along about the derivative of x squared, when suddenly, the author states that "clearly, it follows that the binomial expansion is....". After wondering a little while how it could possibly have followed, you decide that it obviously must, and that you're just too stupid to see how. Well, upon further investigation, it turns out that the two facts are totally unrelated, and that this is fully intentional.

After talking to one of the authors of high school textbooks, it turns out that young nippers often ask, "how does it all fit together?". By creating proofs that meander from one area of mathematics to another, the student is given the impression that these areas must be related.

Another often asked question is, "Why do math texts contain so many wrong answers in the back?" Well, there not there because there's a shortage of people to check them, they are put there on purpose. "We want these youngsters to build up a bit of self confidence in themselves." comments the author, "Now, if all the answers in the back of the book were correct, the students become too dependent on them, and tend not to do their own work. However, by making some of the answers wrong, students tend to do more of their own work, and become self reliant. In fact, a couple of us wanted all the answers to be wrong, but our boss vetoed the idea."

Well, it seems the game players and the stats people have met in confrontation over APL. It seems someone wrote a game of spacewar for APL, and then let the world know about it. Well, it proved popular. A little too popular, evidently, since it has now been disavowed. At times, you would be able to find 17 of the 20 terminals in room 3022 playing spacewar. As well as tying up many terminals, it ground up much CPU time (APL never was noted for its efficiency). Well, the stats people, I'm told, got upset about this, and let some big shots know of the situation. Evidently, one of the people in charge of APL doesn't believe in such things as people using APL to play games. He took measures to rid the system of this particular program and remove the author's resources.

This seems a bit harsh to me. Statistics users mainy use APL to do calculations that could be handled by their HP-45's. Surely one doesn't need a 360 to add up numbers. Also, what's wrong with people enjoying themselves?

In fact, the author had tried to get the game into the games library, so that it would be locked out during the day, but the Computing Centre decided that more drastic action was needed. Also, if the situation had been left alone, the popularity of the game would have died down, the way all other new and wonderful games have.

Another institution of the University that bothers me is Computer Science Day. Sure, there is the bother that you never know when they are, so one often plans a Saturday to work on APL, only to find APL occupied until 16:00. Can't do anything on Debug eitner, it's occupied by the Tutor Troupe.

What so perturbs me is how someone goes to all the trouble to build up a false impression of Computing at U of W. On CSD, the nippers are shown all these wonderful facilities, they get to run programs, and be impressed all to heck. They are deliberately given the impression that the Computing Centre is only too willing to avail whatever resources the potential University student will need.

Only later, when he's paid his fees, and the men upstairs have lots of grant money to play with, do they discover the way general use, especially games, are discouraged. (APL's interrupts, found only on generaluse numbers, are one such attempt to do this.)
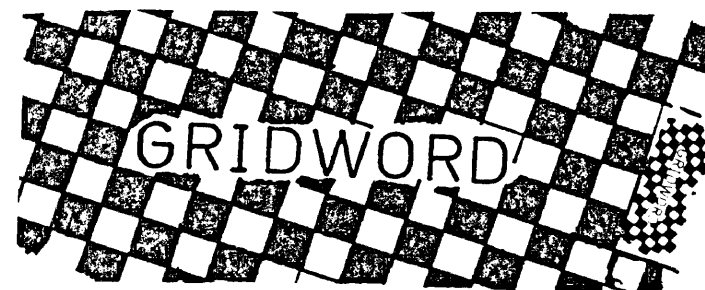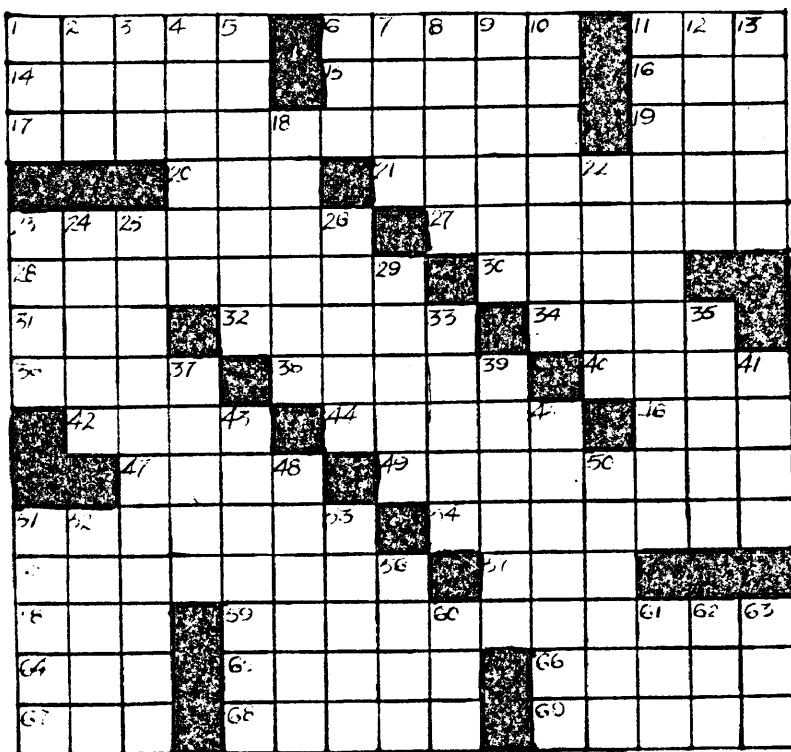
All I can say, is I'm glad the Honeywell isn't being used for such disgusting purposes.

The Honeywell 6050 has had its share of bugs in the past weeks. The manuals said you couldn't do it, but it turned out you could create a certain type of file. The strange thing was, though, you could look at any part of the 'bun's core memory by creating these files. You could even look at memory that doesn't exist. (Doing so crashes the system and leaves you with a half created file.) Well, that's been fixed now, but for a time, so many people were creating files, and releasing them, for the sole purpose of looking at core, that all the catalog space was used up -- this meant no one could create any new files or catalogs.

A few other bugs allowed one to do almost anything he wanted, including list off people's passwords. These things have been repaired, so now the honey freaks are looking elsewhere to crack system security. Although passwords were for a while easily obtained, that pitcher of beer offered back in November still has eluded everyone.

A couple of new terminals were installed recently. True to tradition, neither lasted more than a few days. Both now have a case of the "LSI blues". Amazingly enough, the Tektronix terminal has lasted already a month without any problems.

People often have trouble understanding the 24 hour clock as implemented on most computers. It takes a little while for the user to realize just what time it is when his terminal types 22:56:38. To remedy the situation, a qed buffer called time has been written. On the 'bun, merely type:
SYSTEM ?qed time
The time will now be printed in a format easily understood by university students.

3

Well, according to one person who does our crosswords, they're too easy. I think we have a little bit of evidence against that. Fifty-three people submitted gridword solutions last week and only five of them managed to do it correctly. Obviously very few people remembered George Takei who played Sulu on "Star Trek" nor had they heard of an actor named Dana Williams. (By the way, to Caesar, his city was Roma, not Rome) Winner of a T-shirt via the random draw method was Roy Gorka. (He deserves it too, he's finished almost every gridword this year).
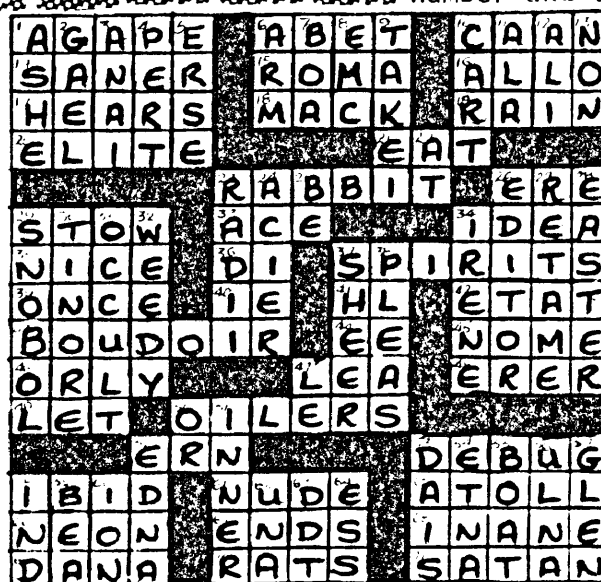
Contributor this week is Norm Macdonald (hey, that's me!) Again this week's deadline is tuesday at 3:30.

If you have submitted a gridword and it has not yet appeared in mathNEWS, please leave me a note in the mathNEWS box in the Mathsoc office with your name and phone number and I'll contact you.
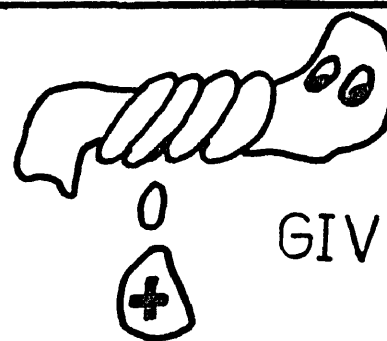
name _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

across

1. nice skirts
6. added liquor to
11. overhead railways
14. Ontario town
15. take ____ ____ (boxing)
16. member of a much maligned religion
17. self-gratifier
19. friend in Calais
20. mineral
21. top of a liquid in a test tube
23. Asians
27. eats up
28. texas symbol
30. ____ numbers
31. cereal basis
32. Pentateuch
34. health centers
36. masculine name
38. chimney passages
40. Secretariat, for one
42. defeat soundly
44. carpenter's aid
46. CX
47. Hudson and Desoto
49. Cassidy
51. sagas
54. band section
55. careful judgement
57. American agency
58. N+O+CO$_2$
59. consummation of love
64. those elected
65. they will be (Latin)
66. sensor
67. never (German)
68. African capital
69. pay for

down

1. she stays the same no matter how you look at her
2. Gershwin
3. our (French)
4. chant
5. most acerb
6. black dog, for short
7. first to experience 59-A
8. mentioned
9. tie maker
10. deduces
11. sudden utterances
12. monkey-like animal
13. Holey Cheese!
18. remainder
22. detergents
23. plug up
24. amass greedily
25. conversation
26. British nobles
29. Argo coach
33. Henderson received a ____ welcome
35. taking to court
37. footballer
39. pertaining to decay
41. Lhasa Apsos
43. shorter
45. legal document
48. woman in Quito
50. roster maker
51. part of Iberia
52. Lopez
53. MD's pre-op
56. down, it's a Sicilian town; up, it's a princess
60. Communication Co.
61. anger
62. eggs
63. ____ serve

last week's grid (solution):

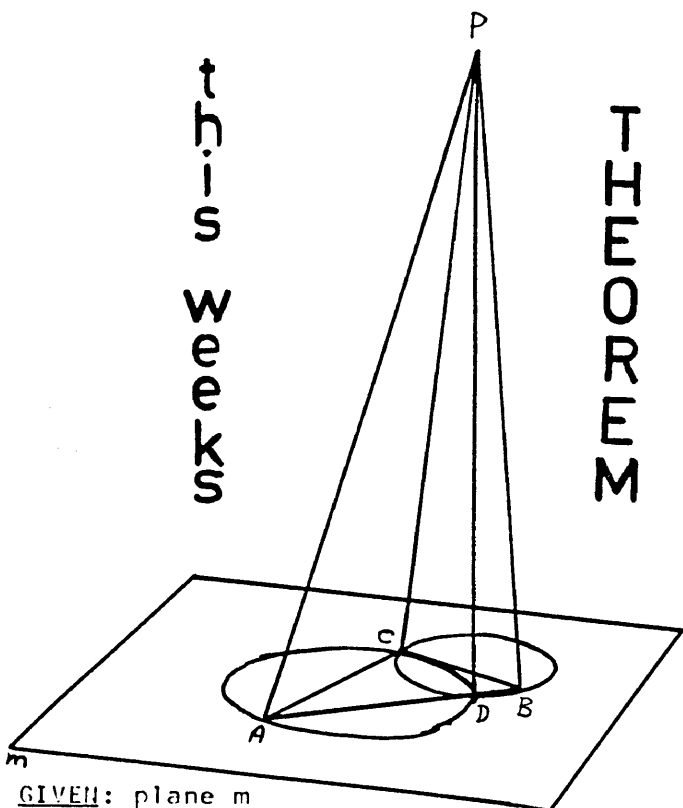| A | G | A | P | E | | A | B | E | T | | C | A | A | N |
S	A	N	E	R		R	O	M	A		A	L	L	O
H	E	A	R	S		M	A	C	K		R	A	I	N
E	L	I	T	E				E	A	T				
				R	A	B	B	I	T		E	R	E
S	T	O	W		A	C	E		I	D	E	A	
N	I	C	E		D	I		S	P	I	R	I	T	S
O	N	C	E		I	E		H	L		E	T	A	T
B	O	U	D	O	I	R		E	E		N	O	M	E
O	R	L	Y			L	E	A		E	R	E	R	
L	E	T		O	I	L	E	R	S					
		E	R	N			D	E	B	U	G			
I	B	I	D		N	U	D	E		A	T	O	L	L
N	E	O	N		E	N	D	S		I	N	A	N	E
D	A	N	A		R	A	T	S		S	A	T	A	N

GIVE the Phantom did!

4

this weeks

THEOREM

GIVEN: plane m

REQ'D: Prove that an infinite number of perpendiculars can be drawn from a point not on a given plane to that plane.

PROOF: Let P be any point not on the plane m. Choose any two points A and B in the plane. Use PA and PB as diameters, and create two spheres. These spheres will intersect the plane in two circles.

These two circles will intersect at two points. Call them C and D.

Construct lines PC, PD, AC, AD, BC and BD.

Take the plane passing through P, A, and C. The plane will intersect the sphere about PA in a circle, so that $\angle PCA$ will be inscribed in a semicircle. Hence $\angle PCA$ is a right angle. $\angle PCB$ is a right angle for the same reason. Therefore PC is perpendicular to both CA and CB, and therefore perpendicular to plane m.

Similarly, it can be shown that PD is perpendicular to both DA and DB, and therefore perpendicular to plane m. As there are an infinite number of choices for A and B, there are an infinite number of perpendiculars from P to m.

are you a latent streaker?

Try this simple test to determine your S.Q. (Streaking Quotient):
1) How often do you take a bath?
    a) twice a day.
    b) once a day.
    c) once a week.
    d) once a month.
    e) none of the above.
2) Do you enjoy it?
    a) extremely!!
    b) kind of
    c) so-so
    d) shrug

    e) yup!!
3) Which of the following courses would you prefer?:
    a) KIN105-Introduction to Streaking
    b) ARTS105-the Aesthetics of Streaking
    c) MATH105-The Calculus of Streaking
    d) PSYCH105-Group Streaking Therapy
    e) HIST105-History of Streaking
4) If you had labs in a streaking course, the t.a.'s shoud be:
    a) dressed, male.
    b) undressed, male?
    c) dressed, female!
    d) undressed, female!!
    e) none of the above.
5) Do you feel that continuous streaking leads to:
    a) an increase in the price of eggs.
    b) juvenile delinquency
    c) brain damage
    d) an increase in the number of corporate welfare bums.
    e) orgies.
6) What do you think has brought on the rash of streaking?
    a) an increase in the price of eggs.
    b) juvenile delinquency
    c) brain damage
    d) an increase in the number of corporate welfare bums.
    e) orgies.
7) Which of these people do you think could be most likely to streak?
    a) The Phantom/The Ghostwriter
    b) Lenin/Marx
    c) Lennon/McCartney
    d) Masters/Johnson
    e) Johnson/Johnson
8) Streaking was discovered by:
    a) Adam and Eve.
    b) it wasn't discovered, it just was.
    c) Thoreau
    d) Lady Godiva
    e) Archimedes
9) Why did the streaker cross the road?
    a) Because someone told him to.
    b) Because someone told him not to.
    c) To get to the other side.
    d) He was heading for the pass.
    e) etc.
10) Streakers are usually...
    a) confused
    b) essentially very warm human beings
    c) nude
    d) drunk
    e) <your choice>
11) Would you let your sister marry one?
    a) she's already married
    b) what was the question??
    c) syntax error -- try again
    d) um, none of the above
    e) I don't have a sister

HOW TO SCORE
    Score 1 point for each "a" answer, 2 for "b", etc. If your score is -
    1-10 -- You didn't answer all of the questions.
    11-55 -- You are normal and will probably never streak.
    56-100 -- Check your addition. It's wrong.
    0 -- You are definitely "streak" material, and dangerous to boot (so we won't boot you). Be sure to come out to mathNEWS and see the phantom streak.

math ETICS

REG MATH UPSET IN HOCKEY FINALS

Regular Math saw their hopes of regaining the coveted Bullbrook Cup, emblematic of intramural hockey supremacy dashed Monday night at the hands of an aroused Kinesiology team.

In what was termed by intramural hierarch Peter Hopkins as the best final ever at UW, Kin held off a determined third period comeback by Reg Math and potted an empty net goal with ten seconds left to ensure a 7-4 triumph.

It was the first title since 1968 for Kinesiology and also resulted in claiming the Fryer trophy for overall competitive excellence in intramurals over St. Jeromes College.

Kin opened the scoring early in the first period but Dean Mucci combined with Tim Skinner and Mike O'Neill to tie the score and Randy Musselman put Reg Math ahead 2-1 still in the opening stanza.

The second Kin goal which tied the score in the second period was hotly disputed by Reg Math as John Frittenbury of Kin directed the puck into the Math cage with his upper arm while standing in the goal crease. Referee Eugene Miklovich, unfortunately was out of position on the play and failed to make the call which was obvious to all players and fans alike. The goal stood and moments later, defence stalwart Randy Musselman was sent to hospital with an errant cross-check in the face which went unpenalized. Kin soon took a 3-2 lead and held this into the final period.

Reg Math turned on the pressure in the early going but Bob Neal, playing a standout game for Kin in net, made key saves on Ken Chupa, Murray Walker and Pat Fallon. With less than ten minutes remaining, Kin tallied their fourth goal as a blueline slapshot dipped unusually to fool Bob Denny in the Reg Math goal. Ken Chupa on a Mike O'Neill pass scored a brilliant solo effort to cut the margin to 4-3 and John Hohmeier had the tying goal on his stick seconds later only to misfire. On the ensuring play, Hohmeier was assessed an extemely questionable minor penalty and with less than four minutes remaining, Reg Math had taken their seventh penalty compared to three for Kin.

On the resulting power-play the game was decided as Kin fired an excellently set-up goal and added a sixth tally less than a minute later. At this point, the linesmaen suggested to referee Miklovich that player Mucci and coach Birner should be ejected from the game. Miklovich, easily persuaded by fans and players alike throughout the game, complied by banishing the aforementioned Reg Math members.

But the game was not yet over as Fred Vivash scored with two minutes left to cut the score to 6-4 and John Hohmeier was robbed only seconds later in a bid for a fifth Math tally. But the clock ran out on Reg Math and a final empty net score resulted in a 7-4 triumph for a deserving Kin crew.

Earlier Play-off Results

1st round

Science	2	Village I West	1
Reg Math	3	Sunnydale Sabres	1
Kin	4	St. Jeromes	0
Village II W	6	Big Bananas	3

Quarter Finals

Village II W	4	Science	2
Reg Math	2	Upper Eng.	1
Kin	4	Environmental St.	3
Village II W	2	Co-op	1

Semi Finals

Reg Math	6	Village II W	5
Kin	7	Village II W	0

In preliminary play-off games, Regular Math demonstrated less than championship ability in squeaking out three close overtime verdicts over inferior teams.

Against Sunnydale Sabres, a team Reg Math had dominated in the regular schedule, Ken Chupa and Pat Fallon gave Math a 2-0 first period lead but they had to hang on in a listless second session and Fallon wrapped up the game with an empty net goal.

Reg Math was the underdog against highly rated Upper Engineering and despite outplaying the Plumbers by a wide margin, they required Pat Fallon's overtime goal to claim a 2-1 verdict. John Wetmore scored the other Math score.

In semi-final action surprising Village II West scored on three of the first four shots to jump into a 3-0 first period lead against Reg Math. But Math kept chipping away at the margin as Randy Musselman, Jim Barton and Ken Chupa scored while Martin Falke scored his third and fourth of the game for West. With three and one-half minutes left the score read 5-3 Village II West. Jim Barton cut the score to 5-4 with his second score of the game and with Bob Denny on the bench for a sixth attacker, Pat Fallon tied the score at 5-5 with twenty seconds left.

It was left to Dean Mucci to convert a Mike O'Neill rebound in overtime to win this semi-final contest.

Tournament Slated

The second annual University of Waterloo Intramural Invitational Hockey Tournament commences this coming Monday night and lasts until Saturday, March 23.

Six other universities are expected to enter this year's event, won in 1973 by Waterloo's own Regular Math.

Tentative Schedule
Championship Round
GAME 1 Mon Mar 18 Waterloo-C vs Laurier
         11:00pm-12:30am Waterloo Arena
     2 Mon Mar 18 Waterloo-D vs Guelph
         11:00pm-12:30am Moses Springer
     3 Tues Mar 19 Reg Math vs McMaster
         11:00pm-12:30am Moses Springer
     4 Thurs Mar 21 Winner#1 vs York
         3:30-5:00 pm Moses Springer
     5 Thurs Mar 21 Waterloo-B vs Winner#2
         10:00-11:30 pm Moses Springer
     7   Semi Finals - Fri. Mar. 22
         Winner#3 vs Winner#4
         9:30-11:15 am Waterloo Arena
     8 Brock vs Western
         9:30-11:00 am Moses Springer
     11   Semi Finals
         Winner#2 vs Winner#5
         2:30-4:00pm Moses Springer
            Sat. Mar. 23
Final 9:00-11:00 pm
         Winner #7 vs Winner # 11
            Waterloo Arena
            Consolation Round
GAME 6 Thurs. Mar. 21 Moses Springer
         11:30pm-1:00am Loser #1 vs Loser #2
     9 Fri. Mar. 22 Moses Springer
         11:00am-12:30pm Win.#6 vs Loser#3/5
     10 Fri. Mar. 22 Moses Springer
         12:30-2:00pm Loser #8 vs Loser #4
            Consolation Final Sat. Mar. 23
         7:30-9:00pm Winner#9 vs Winner#10
            Waterloo Arena

Admission: 25¢/day
             50¢ for Saturday championship
Double-Header.
Math students with validated I.D. cards admitted free.

MATH TALKS

This week from the Stats Dept:
Professor J. Cani (University of Sheffield) will present a series of two lectures (1) Biological problem connected with the DNA cycle in Lymphocytes, (this is Stats?) Wednesday, March 27, at 13:30 in M+C 5158. (2) Stochastic Model in Linguistics (??) Friday, March 29, at 13:30 in M+C 5158.

All Welcome

From the C&O dept.

Last two of a series of 4 lectures on "Superlinearly Convergent Methods for Constrained and Unconstained Minimization Problems".

Date	Room	Time
Wed, March 20	M+C 3032	11:30-12:30
Mon, March 25	M+C 5158	15:30-16:30

From the Applied Math Dept.

Seminar: The Areodynamics of Beer Bottles in Flight. Location: Campus Centre pub, Guest Demonstator: P.L. Ummers.

SPOOK RETURNS

Well people, it has been a bad week for APL. Of course, this is only reasonable, it is merely the latest in a long, long string of bad weeks. In case any of you are wondering, the chances of anything of our erstwhile update (remember it?) ever sneaking into the production system, even temporarily are pretty slim.....though there was a rumour for a time that a cannibilized version with everything of interest removed would be put on but it has apparently been swallowed up with great crimson silence of the ubquitous 1st floor.

In the meantime, you could expect the system to, at least, hold its own against the swelling tides of software decay....however time has proven our expectations to be a tiny bit unfounded.... This is, if not reasonable, at least understandable....considering the decay of hardware that has accompanied the passing of the months, possibly helped along by the general lack of anyone downstairs who has any sort of connection with the service.

In the past few weeks more attention has been drawn to the general lack of interest and action by the Computing Center, which has led to numerous system crashes which are not only annoying but could have been prevented. Due to the large number of users constantly on the system, it is only natural that these crashes have damaged files and destroyed workspaces on several inconvenient occasions. Even without these mass crashes, there is still little chance of getting things done, due to the recently developed habit of generating SYSTEM ERRORS at random. These, of course, wipe out the active WS. It is a favourite game now to watch a Stats student generate data for half an hour then bet on how long before his plot gives a SYSTEM ERROR and he has to start over.

What little interest these problems have generated at all has been directed mainly at the total irradication of the re- cently popular game "STARTREK". While this game has aggravated the current situation it has not caused it, and the over reaction of the "authorities" has been more than a little ridiculous. Aside from the obvious fact that there is no way to suppress it, the reluctance of these "authorities" to recognize this and place the game in the games' library(12) where it belongs, and where it would be accesible only during reasonable hours seems slightly incompetent.

Perhaps instead of making futile efforts to suppress a popular game they should worry about how many users the system can support, and how much longer the 144 can survive under the load, even with all the terminals operational(two have been removed at present, three are broken and most of the rest are not in the best repair) and no one playing games, there are still more people than terminals during the peak hours.

So how much longer before something constructive is done???
(by the bye, you can count on "Funny Apple" for help....in about ten years....)

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YOUR FAIR SHARE

One part of the tax form which is very beneficial to the average student is the ONTARIO TAX CREDIT. The only students who **do not** qualify for the Ontario Tax Credit are students who are under 21, living at home, and are claimed as a dependent by someone else (<u>all</u> 3 conditions must hold for you to be ineligible).

STUDENT RESIDENCE

If you lived in a student residence you can claim only $25. It does not matter whether you were in residence for 1 term or 2 terms during the year --- you can only claim $25.

RENTAL PAYMENTS

This is the amount of money you paid in rent for housing <u>while</u> living in Ontario. You <u>can not</u> include payments for student residence in this amount. If you paid for room and board you must <u>exclude</u> the amount paid for board.

OCCUPANCY COST

This is calculated by taking 20% of Rental Payments and adding to it the amount claimed for student residence.

TOTAL PROPERTY TAX CREDIT

You take the lesser of $90 or the occupancy cost and add 10% of the occupancy cost.

SALES TAX CREDIT

You <u>can not</u> claim this if anyone else claimed you as a dependent. The credit is 1% of your personal deductions.

DOCUMENTATION

You have to list the places where you resided during the year on the tax form. You do <u>not</u> have to provide receipts, however, you must be able to show them if asked to do so by the government.

EXAMPLES:
Student A : $1000 in rent
B : $675 in rent
4mo. student residence
C : $225 in rent
8mo. student residence

	A	B	C
20% Total Rent Payments	200	135	45
Student Residence	0	25	25
Occupancy Cost	200	160	70
Property Tax Credit	90	90	70
10% Occupancy Cost	20	16	7
Total Property Tax Credit	110	106	77

Each student then adds Sales Tax Credit to obtain the amount claimed for the ONTARIO TAX CREDIT.

"Thus number may be said to rule the whole world of quantity, and the four rules of arithmetic may be regarded as the complete equipment of the mathematician."
- James Clerk Maxwell

"(Arithmetic) is one of the oldest branches, perhaps the very oldest branch, of human knowledge; and yet some of its most abstruse secrets lie close to its tritest truths."
- H.J.S.Smith

security guard
JOINS RIGID TOOL

Earl Bowman, night security guard, joined the ranks of such notables as the Rigid Tool, K.D.Fryer, and Ralph Stanton, on Tuesday afternoon. The occasion was granting him a honourary membership to the Mathematics Society. Noting that such an award has not been made for about 3 years (an unsuccessful attempt was made last year to bestow the honour upon Karl Frederic Gauss), vice-president Andy Haycock presented the motion which passed unanimously.

In a series of reports, council learned that the new Math Society Constitution was approved by last week's secret ballot; anti-calendar is under way with 75 to 80 more classes to be done than last term's 135; Fed. Rep. J.J. Long reported on his first Federation meeting, noting that Math continued its dominance of the Federation vice-presidency with Mathsoc President Cindy Harris having taken over that positon from Math grad Steve Treadwell.

In other business, for the third consecutive week, the 85% Canadian Quota Campaign appeared on the agenda. Bruce Woodrow, 3B co-op rep. presesnted a motion calling for Mathsoc to contribute $50 towards a fund set up to prosecute foreign professors who have broken Canadian law by abusing existing tax treaties. Considering the fact that the council last week soundly defeated a similar motion, it was mercifully decided not to consider the motion again.

In a final move mathNEWS requested and received a further $100 to help finance 3 more issues. mathNEWS now has $274 remaining for the term.

'BUN TALKS

To fulfill a need of the Honeywell user community, the CSC intends to hold a series of seminars on the 'Bun regularly each term. We are holding an experimental session during March. The seminars will be in MC 3013, at 09:30 or 14:30, each meeting lasting 1 hour. The following seminars will be offered:

Control cards	1 hr	Mar 18	AM
Fortran	1 hr	Mar 20	AM
Algol	1 hr	Mar 22	AM
Gcos design	3 hrs	Mar 18,20,22	PM
Tss design	3 hrs	Mar 25,27,29	AM
Qed - wmxpl	3 hrs	Mar 25,27,29	PM

"The notion of infinity is our greatest friend, it is also the greatest enemy of our peace of mind... Weierstrass taught us to believe that we had at last thoroughly tamed and domesticated this unruly element. Such however is not the case; It has broken loose again. Hilbert and Brouwer have set out to tame it once more. For how long? We wonder."
-James Pierpont (1928)

STUDENT HELP

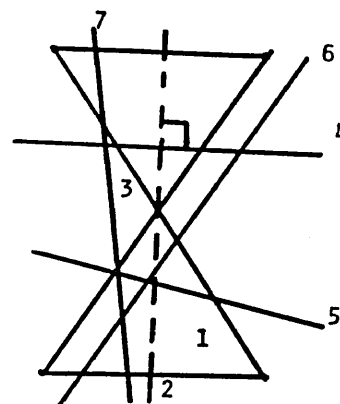by Don Herring

Today's Subject: ANALOGY
Today's Topic: COMICS

All of yer comics are derided from yer comb (see diaphram at right). Yer simplest firm you can deride from yer comb is yer cycle. A cycle is firmed when yer disectin' airoplane is purpleduckular to yer axe. It may be noted down that as yer cycle gets nearer and nearer yer vertaxes yer radish of yer cycle gets smaller and smaller until it deviates into yer pointsetta.

If you tilt yer airoplane a slight you get a different figurine called yer eclipse. Now this is a very impotent firm as yer earth goes round yer sun in yer eclip tical orbital. Put this eclipse ain't perfect. That's why you get yer partial eclipse one year and yer total eclipse another.

Now in yer diaphram at the top you find yer airoplane number six is parable to yer side of yer comb. This figurine is called yer pairabowl. Now I can't quite figure why they call it a "pairabowl". Sure it is like a bowl but there ain't a pair of 'em. Ever-the-mess yer pairabowl is very impotent two. As far as I see, it helps to clear up yer problem of yer derision of yer races. It seems there are these Frenchies what developed this mirror in yer Flh.'s mountains. Now this mirror, it's got yer classical pairabowl shape. It seems that yer light comes in and bounds off yer mirror and all goes to yer folks. Now you ask yer average Frenchie how hot it gets fer the folks and he tell you it's pert near 10,000 degrees Far-and-tight, hot enough to fry the underpants off yer perverbial maple leaf. Now as near as I can figure all yer folks where the light comes gets burnt to a swazzle. These must be yer Negros in the flesh.

Now if you look at yer diaphram you see there is one case left. This is where yer airoplane disects both yer combs. Now you look at yer line number seven. Near the top she's higher up than yer line fer yer pairabowl. Therefore and somewhat, they call it yer higherbowl for this reason. Now these higher bowls are much the same as if you took two of yer pairabowls and turned one of them topsy-turnsey on top of the other. Now in my opinion these is what they should call yer pairabowls, being two of them, and yer pairabowls should be yer lowerbowls. Now these higherbowls are the least impotent so I'm not going to talk no more. See you all soon.

(Reprinted by special permission from the Glob and Mule.)

1. basic comb
2. axe of comb
3. vertaxes of comb
4. cyclic disecting airoplane
5. eclip tical disecting airoplane
6. pairabowl disecting airoplane
7. higherbowl disecting airoplane

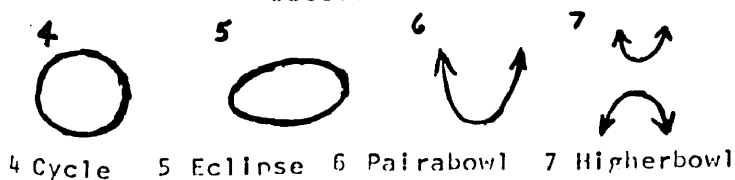Sections

4 Cycle   5 Eclipse   6 Pairabowl   7 Higherbowl

INCOMPLETES

The following information was received from P.C.Brillinger and is meant to clarify the mechanism for handling INC final grades in the Faculty of Mathematics.

If a student and/or an instructor believe(s) there is a valid reason for the student not being able to complete required work by the end of the course, the student may request permission from the course instructor for a grade of INC. If the instructor agrees, an extension can be given for a specified period of time. Usually this will be one month, but the extension period must not extend beyond one academic term following the normal comple tion of the course. Both the instructor and the student must sign the approval form, specifying the work to be submitted by the student (e.g. term paper, projects, assignments, etc.) and the date by which the work must be completed to the instructor's satisfaction. The approval form will be retained in the Faculty files. When the work has been completed, the instructor will note this fact on the approval form and submit a Grade Revision to the Registrar's Office. If work is not completed by the student before the specified da remain unchanged on the stu dent's record and he/she will have no further opportunity to complete the work. (Remember that a grade of INC is counted as zero in a student's cumulative averages un less it is revised.) A further time exten sion will not normally be granted. However, if the instructor feels that there are extenuating circumstances, he/she may, with the approval of an Associate Dean, extend the deadline for clearing the INC by completing a second approval form.

There are valid reasons for being granted a grade of INC (e.g. sickness), but such grades are not given automatically and should not be given indiscriminately by an instructor. Whatever th interests to discuss any problems with the course instructor before grades are submitted for the course.

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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 'n the campus mail (a free service) addressed to: mathNEWS, MC 3038. Weekly deadline for submissions: TUESDAYS: 4:30pm.)

FOR SALE: 1970 Honda CL350 in good condition. Very nice machine for city/inter-city travel. Crash bar and rack included. Will get safety check if desired. Price only $350 (firm). Call Dennis Ablett at 578-6306, or leave me mail on the BUN at mailbox DGABLETT.

FOR SALE: All transistor AM 12v car radio with elliptical 10 ohm speaker and 3 section antenna. Very good reception. New list: $80. For further info phone Peter at M+C ext. 2254 or at home: 743-4263.

FOR SALE: Dual 1218 turntable complete with base and dustcover and brand new Shure M91ED magnetic cartridge. Has Lenco dampened cueing. Just completely re-adjusted (anti-Skating and balancing). Bills as proof. Asking $225 or best offer. Call 884-7036, ask for Al.

TO SUBLET: 2 bedroom, split-level townhouse, 2-75 Old Chicopee Rd. Apr. 15 - July 31, new lease thereafter, $140/mo. Dennis Salahub, Appl. Math. ext. 3471 or 579-2948.

FOR RENT: One bedroom furnished apartment for rent from May 1 - Aug. 31. Suitable for 3 people. Top floor (very quiet) of Waterloo Towers. Rent negotiable. Phone 884-6114.

WANTED: 1 or 2 girls for furnished townhouse in Lakeshore from May to August. Rent is inexpensive. Prefer working girls as that's what we'll be doing! Phone 884-8101 anytime!

PERSONAL: Happy birthday Phil from Jim and others. Good luck in court!

PERSONAL: Happy 21st birthday Eleanor from Liz, Carol, Peter, Jim, Bill, Barb and the rest of us at Waterloo.

PERSONAL: There will be a party for those who wish to pay their last respects to L.P. who is getting married in April.
Place: 285 Erb St. West Apt.403
Time: Monday March 25, Anytime after 6pm
P.S. Its B.Y.O.B.

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.)

more light

mathNEWS:
I don't know if President Burt Matthews has his own private supply of flashlights or maybe he has a miner's hat but this bit of energy "saving" is a bit ridiculous. The lack of light in the math lounge lately has been fairly noticeable. Why the bridge players can barely see what cards they are holding!
It's about time he, or whoever is responsible, to stop this farce about an "energy crisis" and put all the lights back on. For some of us who use the lounge to study we are ruining our eyes. So Burt either turn on the lights or issue miner hats to all the students.

A former mathie

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 3008; feel free to drop in. Weekly deadline for submissions: TUESDAYS 4:30pm. Circulation this issue: 1700.

Once again here we are early Wed morning (it started out as a Tues night). Thanks to P.C.Brillinger, Ann, Dennis (our accountant in Ottawa) Mullin, Pat fallen. And those who made it partway into the morning were Ishmaile (we're sorry about your article),J.J.Long, good old Pete Payham, Peter Walesch, Rob White, Mark Saaltink, Mark Shields, Randall (Irish) McDougall, Norm Macdonald, Chris and Gerry (the rookies), radevitt (I hope I catch you on the other end of a camera). Don't forget as the Phantom changes into his green sheet that this sunday is ST. Patrick's Day. Why we stay this late is one of life's mysteries and M-K I'm sorry I didn't get to mention you this week. At the end we are now Pat (the token artsie) McGrath, rfallen(still a mathie), and the one and only John (undecided) Peebles. 'nite 'all
WE DISCONNECT

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