

Now there's an ASN

This Tuesday, the editors (or co-editors) of mathNEWS, SciSoc News, Arts Lion and ESS News decided to form an Association of Society Newsletters in order to promote co-operation among the newsletters in the areas of photography and news coverage. One of the plans of the ASN is to ask for financing from the Board of Publications in order to ensure that we are able to provide a broad-based alternative to the regular campus newsletters. Due to the proximity of exams, the ASN won't be able to do much now beyond initiating these aims, but when January rolls around we should start receiving some of the benefits of being in this association.

Willis 68, Blunden 58 (?)

Kevin Willis defeated Peter Blunden by a vote of 68-58 in the Math-regular by-election held Monday. This result is not yet final as Blunden is challenging the results of the election. He claims that one of the poll clerks advised a voter which way to vote. The two poll clerks on duty when the alleged incident occurred deny this and further, they accused Blunden of electioneering during the polling.

ANTICAL

To all students and profs. If your class was missed and you did not receive the Antical questionnaires, please get in touch with Mathsoc ASAP.

FRIDAY, DECEMBER 3, 1976
VOLUME XII, ISSUE 10

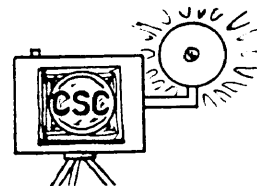
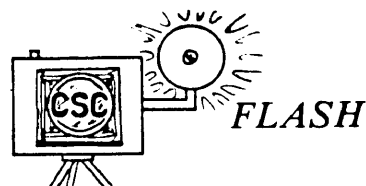
math NEWS

The University of Waterloo Student Chapter
of the Association for Computing Machinery

Well, it seems that something strange has come over our beloved, inactive CSC. Yet another meeting was held on Thursday, November 18, 1976. This time the club met in MC 5158 and listened to talks by grad student Tom Miller and Professor J. W. Graham. Although on the more positive side (inaction-wise), this article was originally supposed to appear in last week's issue, but wasn't ready quite in time for Photoning (since Wednesday morning is PM time). We won't have any problems with the Photon this week, though, of course.

Anyway, at last week's meeting Tom Miller gave a short talk on the "HUB" network. The HUB, however, is just beginning to get rolling, and although the plans are to have it revolve around the Nova and the TI 990 in the Minilab on the third floor, much of it is in the developmental/planning stages right now. Consequently, there wasn't a lot that Tom was able to say, although what he did say was interesting.

Basically, the HUB is envisioned as a system consisting of various pieces of interfaces which can be put together under user/program control--sort of a computerized "tinker toy"--to effect lines of communication between the various mini-computers on campus. Most of these, such as the Nova and the TI, as well as the Microdata, are actually in the Minilab, although plans include talking to UNIX. The Honeywell is frequently used for mundane tasks such as compiling programs for the smaller machines, but there are no definite plans to link it directly into the HUB as yet. The all-powerful master of this system is the portable operating-system developed in the Minilab. This is known as "Thoth", after a very powerful god of ancient Egyptian legend. ...continued on page 12



SUBSCRIPTIONS

Subscriptions to mathNEWS for the Winter or Spring terms will cost \$1 per term. Send, or take, cash to the Mathsoc office, MC 3038. (You can pay by check if you insist, but make it payable to "Mathematics Society".) Of course we will need your name and address including the postal code--or a note to the effect that you will send us your address when you know what it is.

Owing to the increased postal rates, mathNEWS will be mailed third class from now on.

Ian Milroy

J. Ian Milroy, a third year computer science student and a Rene Descartes fellowship winner, died in Alaska on November 14 as a result of a car accident.

Milroy was on a work term with the University of Alaska in Fairbanks and was driving with a friend in an area north of Anchorage when the car slid on icy pavement and plunged into a river where both occupants drowned.

Mr. Milroy lived at Village I during his last term at Waterloo. His parents live in Ladysmith, British Columbia.

— Gazette

JJ Long

FEDERATION

IL ACCUSE!

A byelection was held on Monday for one of the other math seats on Fed Council. Kevin Willis beat Peter Blunden 68-58. Blunden has protested the decision because he feels there was improper conduct at the polling stations.

Fed Council had selected me as Chief Returning Officer for the elections. (I didn't really want the position, but they couldn't find any other suckers to work for free.) I tried to get people to work at the polls. That was difficult in itself at the Feds pay poll workers only a \$2/hour honorarium.

One poll worker did inadvertently make a small mistake, but was promptly corrected by the other. He did not, as far as I know, repeat the mistake. Blunden, however, was supposedly told by one clerk to leave the polling area (as his presence could be construed as electioneering) no less than five times.

Polling clerks are humans, not machines, and I believe a small mistake should not be made to overturn an entire election and thus cost the Federation money. Rightly or wrongly, the math students have made a decision. It appears that Blunden, upset at the outcome, is causing trouble so that a new election, perhaps more to his liking, will be held.

At this point I have ruled that the election stands, pending Council's decision on Sunday. You are invited to attend and hear the story. You can contact me before then, if you wish, with any related (or other) comments.

In an unrelated development, the hack-of-the-week is W. J. "Bill" Pace (pronounced "Pace") of Unix fame. A justice on the Unix Supreme Court, Bill is one of those dependable people who "boot" the system. His past is rather uncertain, though he is reported to be an undergrad in Computer Science. Bill started appearing regularly on Unix this summer.

Bill defends the rights and virtues of all the decent women remaining on campus, and chastises those who make unwarranted attacks on such decent women.

A few rumors must be dispelled here. Franz Klingender is not this year's recipient of the Al Fuerbach award. Also, despite popular demand, the "free" chevron did not quite win the balloting for the 1976 Spiro Agnew Negativism in Journalism award. We should know next term who won the big awards of 1976.

It is unlikely that I shall be a candidate for re-election to Federation Council and there is a possibility that personal pressures may force me to resign before the end of my term. At this time I still intend to continue this column regardless of my status with the council. Math students still need to be informed and I don't feel my absence from council should deny you this unique view of campus news.

JJ Long

The people occupying the chevron office have a new mascot, a white mouse. It was named after J. J. for a while, but the name didn't seem to meet with much approval. Maybe they should change it to Mickey Maoist?

Dear mathNEWS,

I have just read the article submitted this week by Mr. John Long entitled Red (er, Fed) Report. As there appears to be a conflict of interest concerning the recent election in the math faculty for the seat on Federation council, I was sure that I would be contacted to give my side of the story.

Now I fully realize that mathNEWS is a totally unbiased, impartial, and objective paper and that the people responsible for it try their utmost to get both sides of the story.

I can only conclude, therefore, that the reason I was not asked for my side of the story was that mathNEWS was unable to contact me, or that mathNEWS was not going to print anything on this subject, or that mathNEWS feels that Mr. Long's column is entirely his own responsibility and that it doesn't matter whether what he prints is misleading or inaccurate or biased or incomplete.

I am fully confident that the people in mathNEWS are truly sorry that both sides of the story can't be printed, but that they will encourage students to come to the Students' Council meeting this Sunday where I will present my case for contesting the results of this election (and where I will also respond to the allegation by Mr. Long that I was electioneering near the polling station).

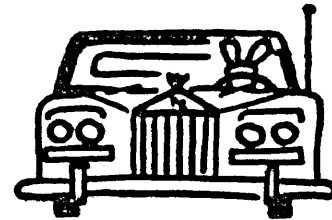
Incidentally, I wish your totally unbiased and impartial newspaper the best of luck in the upcoming libel suit which is being launched against it.

Peter Blunden

All talents and no-talents, come for a voyage on the Starship Enterprise in this year's version of the FASS show: Star Trek!

Auditions will be January 5 and 6 in the ML building. Watch for posters.

Bob Gerasch
FASS '77



Fotos Courtesy of Rabid Rabbit Studios
A division of Hedgehog International

{ $\mathcal{B} \in \mathbb{R}^2$ }

Dryden resigns Federation field-worker position

Well, I have had all the hack P.S. politics I can stand and I quit.

I originally took the Federation field-worker job to accomplish a few specific goals, but it has turned out that I have had to spend too much of my time defending myself from the hack politicians at the chevron, so I quit.

Since I do not believe I suffer from Motorama of the mouth (a disease contracted by many cellar dwellers), I will keep this last say as short as possible.

Blunden (defeated Math regular rep) claims that field-worker jobs should be eliminated because field-workers do not do anything.

Well, Blunden, here is just a small sample of what I have been working on. If you had not just parachuted into the Math faculty this September, you would have known that Math's course-evaluation book, "Anti-cal", was in very bad shape last year. It did not come out until December, because no one had cared enough about it during the summer to do anything. Also there were threats of law-suits from certain parties within the Math faculty because of its contents.

Well, I cared enough about it to do something. (Unlike my friends in the cellar of the Campus Centre, who sit tight, taking pot shots at the individuals trying to accomplish something, while accomplishing nothing constructive of their own and indeed obstructing the work of others).

I set up a committee amongst the faculty and students to pound out an acceptable questionnaire.

I then spent many months developing programs that would not only evaluate the Math courses, but could also be used to evaluate an Arts survey, when it has been set up. (The Arts survey is being handled by Phyllis Purke, another Federation bureaucratic leech, I presume).

Another criticism of me, voiced loudly and clearly from the CSC (Computer Science Club)

office, is that I should not have written an article in last week's mathNEWS, as it was a conflict of interest (presumably because Willis would protect my job). If it is a conflict of interest for me to downgrade in my own faculty's newspaper, a candidate who I felt had no interest in Math students, then what is it if the chevron supports its own candidates and continually downgrades anything and everything that the feds have done in the year since their candidate, Phil (where are you now) Fernandez was defeated by the students in an election?

Of course, according to a letter written to the real chevron by Patricia Gilbert (U of T student and ex-AIA member), "In their opinion (AIA), the electoral system is useless, any reformism is a non-solution, because they want the ultimate reform: a workers' state, or the 'dictatorship of the proletariat'".

And yes, "as chairman Mao wisely said, a revolution is not a tea party". Put I am not a hack politician: I don't need it. I have been accused of having a sex-change operation (in the chevron, by Neil Docherty). I have been accused of not doing my job during the housing crisis (when indeed the crisis was already over, according to the Housing office), again by Docherty. I've been called a fascist and a splittist. I think I have been called everything but a student who is interested in doing a job.

Well f--- it, I quit. Unlike some people, I have alternate sources of employment.

And to you the students of this university: Get off your cans and do something! Either get out and support your elected representatives (because they too are under a lot of pressure, let's face it, they are joe students out to do something: they do not need the continual fight against recall by a "group of students not connected with the free chevron") or sign the re-call petition on Shane Roberts and have a "dictatorship of the proletariat"!

Gary Dryden

The Math Society is looking for people interested in the following positions for the Winter term '77:

- Social Director
- 2 Athletics Directors
- Special Events Director
- mathNEWS Editor*
- Coffee & Donut Manager
- Coffee & Donut Assistant Manager
- Administrator
- Treasurer's Assistant

come to the mathsoc office, m&c3038 and see kevin for more details and to apply

* (Ed. I haven't resigned yet!)

NOTICE

LAST DAY BUFFET
AND PUB
DECEMBER 8

Buffet Noon-4pm
Cold plate \$1.25
Cash bar
Pub 8pm-1am
Cash bar
Both in MC5136

for staff
faculty and
students.

Sponsored by Mathsoc.

Math
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news

GET YOUR
T-SHIRT
MATH SOC OFFICE
MC 3038

Dog Shoots

BURLOAF

The free hot chocolate policy (for members) of the CSC was ended last week. Meanwhile, the free chevron issue drags on. When Larry Hannant voted against himself for the post of chevron editor, the editor of the Arts Lion took this to mean that Larry didn't want to be editor of the chevron. Not so! When the editor mentioned this in his paper, Larry got all huffy and dashed off a letter to the Arts Lion editor saying: "I do want to be chevron editor. In fact, I am chevron editor." (You can almost see him puffing himself up as he says that.) Poor Larry, there has often been a paper without an editor, but he is the editor without a paper.

After glancing through a couple of political papers available on campus, a saying I heard from someone comes to mind: The quality of journalism is inversely proportional to the number of exclamation marks contained therein.

Meanwhile the free chevrons got upset about being ridiculed in the Fucking Thing. Its things like this that cause one person I know to tell me that he never fails to be impressed by how the AIA always takes itself so seriously.

Meanwhile, on the home front, almost as if by clockwork, Peter Blunden, after losing the election, will enter a formal protest, claiming there were irregularities in the election. Watching all these free chevron / AIA type people in action would be quite humorous if it weren't so pathetic.

On the International scene: Mr. Levesque will be in charge of Quebec if it secedes from Canada, but who will rule Scotland if it secedes from Britain? The answer appeared Tuesday in the Globe and Mail:

"Radio Uganda says there is a movement afoot to make President Idi Amin the 'King of Scotland'. President Amin told a group of Scottish visitors that when Scotland becomes independent from Britain, he will attend the celebration with pipers from Uganda, the radio report said."

Now you know.

In the 1960's, people were building bigger and more powerful computers than ever. The trend reversed, and smaller machines started to proliferate. People were buying up smaller and smaller computers. Then microcomputers hit the scene. These machines, now with complete CPUs on one integrated circuit "chip", are becoming popular with hobbyists (and others). It seemed that the trend would soon have to stop, because if they made computers any smaller, they would surely end up with something as useful as a Turing machine. Any good computer scientist knows that a Turing machine is an incredibly simple (in fact the simplest) machine that can be set up to solve any problem that can be computed. However, such a gadget is the most tedious device to program. That is why they remain popular only as theoretical devices ("it could be programmed to do..."), but no one ever builds one.

Well almost. This month's Byte magazine (a magazine for computer hobbyists) contains an article on how to assemble your very own Turing machine! As would be expected, it is very

simple, requiring only 13 integrated circuits for the whole system. It processes an infinite tape of bits (it's actually finite, with the justification that it would take forever to process an infinite tape). The states of the machine are the addresses of a memory of 8-bit words. A word specifies the transition: one bit tells whether to write a 0 or 1, one bit tells whether to move the tape one bit forward or backward, and the other six bits specify a pair of states to which the machine transfers. Which of the pair of states it transfers to, is a function of whether it read a 0 or 1 from the tape before overwriting it.

Not only is it exceptionally simple, as you expect, the machine is painful to program. I tried to write a program to read a bit from the tape without altering it (i.e., not overwriting the bit); I couldn't do it with less than 13 states (instructions).

Humans are not the only animals capable of mathematical thought. Other animals are aware of mathematical concepts. To test your knowledge of this, we present this quiz. You are to fill in the missing words with the appropriate mathematical terms:

----- rapidly.
Amoebas -----.
Beavers ---- ---- ----.
Certain vipers are ---- ---- ----.
Hogs love to ----- ----.
Bison live in -----, forage in prassy -----, and when threatened, form protective -----.

You can mail your solutions to mathNEWS if you want. I'll publish the names of any people who get it all correct.

A recent survey of computer hobbyists reveal these as the most wanted languages for their minicomputers: APL, Snobol, Lisp, Pascal, Algol and Trac. An interesting feature of this survey is that these people who own computers that have minimal memory (4K-8K bytes, usually) want the language processors that are the traditional core plgs.

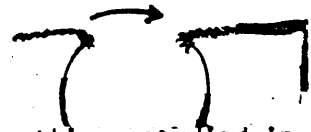
In our for-what-it's-worth department, we have the following quote, found in an article in Byte magazine which described APL: "I think (APL) is one of the best interpreters around, next to Basic."

This week's INTEGER_OF_THE_WEEK is
28

28 is the number of dominoes in a standard set. Why dominoes? One day I walked into Mathsoc and found everyone playing dominoes. A few weeks back, a rule had been passed that there would be no game playing in Mathsoc. I asked if this playing of dominoes was not a contravention of this rule. The reply I got was "What? What? Dominoes? That's not a game! It's a Recreational Activity!" Actually I think the rule was either rescinded or forgotten about three days after it was instituted.

28 is also one of those rare Perfect numbers, one whose factors, excluding itself, sum to the number. $1 + 2 + 4 + 7 + 14 = 28$.

$28 = 4 \times 7$. 4 is the first composite number; 7 is the only single digit with neither factors nor multiples (excluding the trivial 1) that are single digits (this impressed the Greeks, but not Randall Howard).



1. Prefix from 5 down
2. First syllable of the things studied in arithmetic
3. Journal for International Idlots
4. And so on
5. Preposition; two mints in one (2 unrelated words)
6. Stop standing (2 words)
7. You might be this if you rent 3 across
8. A type of memory
9. The name of a class of functions on 15 across
10. Profs do not like hearing this in class
11. These you do often in first and second year math
12. The first part of 5 across (in reverse)
13. Abbreviated state
14. International Alcoholics
15. A very general mathematical structure
16. This often appears after the end of a letter
17. This is what they try to make you after 11 across
18. Some animals have these
19. These annoy your roommate
20. The other other other computer company
21. Often confused with "may"
22. The other computer system
23. What you say when your diaphragm involuntarily contracts
24. Musical note
25. Letter
26. If there were this many of these Israel and Egypt would have more wars
27. You do this when your marks come back
28. 1/ohmic
29. This word goes along with syntax
30. Anger
31. Letter
32. Ontario Economic Congress
33. Our neighbor
34. Ununited Soviet Union



1. A 1-1 map
2. Some people are not ___ to math
3. Greek letter
4. A word for zero
5. Special case of 9 across
6. Geological formation associated with oil
7. What was done to mathNEWS this week
8. A radio band
9. Approximately hotels
10. We all do this sometime
12. A type of intelligence
13. "___ of Spring"
14. A region of the atmosphere
15. Needles without the holes
18. They help a lot of people
19. Article
20. A guy from the sticks
21. Threatening
22. A smash ___
24. Environmental Studies answer to Mathsoc
25. The bane of teenage good looks (2 words)
26. An item of apparel made from trees? (2 words)
27. Backwards province
28. Positive integers may be like this (2 words)
29. Greek letter; what you definitely are if you read 3 across (2 unrelated words)
30. The high student's mortal enemies
31. A flower
32. Letter

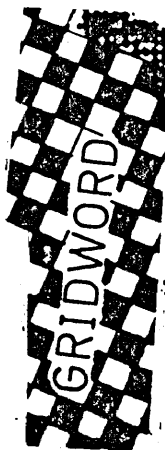
This week we received 15 entries, of which 8 were correct; the randomly selected winner was

*** Pam Altken, 72078229 ***

This is Pam's second win; her first was way back in February 1974. That long an interval is rare enough, but what is even more interesting is that she is the second entrant who had won for the first time during the winter 1974 term, to win for only a second time this term--and both these entrants were women!

Last week's grid was by jwbmacaulay (Will Macaulay) and Mark Hasselback. This week we present two for you; one winner will be selected for each Gridword sometime after the deadline, which is 2 p.m. on Wednesday, December 15, 1976. The results will be posted outside Mathsoc's MC 3038 soon after. Winning either will get you a T-shirt. Both of these Gridwords were created some time ago, and they have lain dormant in our files. The rectangular one is by Michael Fine (msfine), while Peter Schneider wrote the other. These people are now eligible for T-shirts. We wonder if Peter will collect his... he did graduate last May...

That exhausts our supply of unused Gridwords (except for a couple of VERY small ones). Why don't YOU write one after you've finished your exams, thus earning yourself a T-shirt?



A	B	A	L	B	N	E		C	A	L	A	M	A	R		
L	S	Y	N	B	D			A	L	I	V	E		U		
U	M	R	E	I	R	D	E						A	M		
M	I	L	E	T	T	M	I	J	C	B	B					
I	R	A	M	B	B			B	B	A	S	B	L			
N	E	S	B	U	R	B	U	G	H			D	E			
A	D	B	P	T	S	B		R	E	E	F	E	D			
		A	S	A	P	I	N	L								
R	E	G	I	N	A	E		E	D	I	C	T	S			
H	A	N	B	I	S	Y	L	N	X	A	M					
B	R	C	T	N	T	Y	E	A	R	B	I					
M	L	A	S	T	I	B	E	R	P	A	L	P				
B	Y	B	H	N	T	I	N	E	B							
U	S	W	U	N	G			U	D	D	E	R		U		
S	L	A	S	H	E	S		B	R	B	R	O	U	G	H	T

mathNEWS will print your ads free of charge. Just jot them down on a piece of paper and put it in our mailbox on the third floor across from the C&D lounge, or take it to Mathsoc and have them put it in our mail slot, or put it in the mail addressed to mathNEWS, MC 3038, or send them in the mail subsystem on TSS to userid mathNEWS.

WANTED: Girl to share 3-bedroom partly furnished house. Own bedroom, patio, rec room with fireplace. Right on bus line in Waterloo. Sonja: 885-8216 days, 884-4218 evenings.

WANTED: Copies of "Lifeline", or any other information on Life (Conway's game of) that has not appeared in "Scientific American". Contact jppattison via TSS mail.

LIVING in Montreal? 2B math student (female) needs person(s) to share accommodations on winter term (January-April) 1977. Phone 886-3855 or contact cmachinkiwsky via TSS mail.

LIVING in Ottawa for the winter term? I am looking for people to live with. If interested phone 742-9709 or contact rmmasse via TSS mail.

WE ARE looking for a townhouse in Sunnydale/Lakeshore area. Would consider subletting and/or taking over a lease. We need accommodation to start in May or September of 1977 for 8 or 12 months. If anyone could help us, send mail on TSS to rjkuckyt or bmperkin, or on Unix to brian, or as a last resort phone 884-4924 and ask for Ron or Brian.

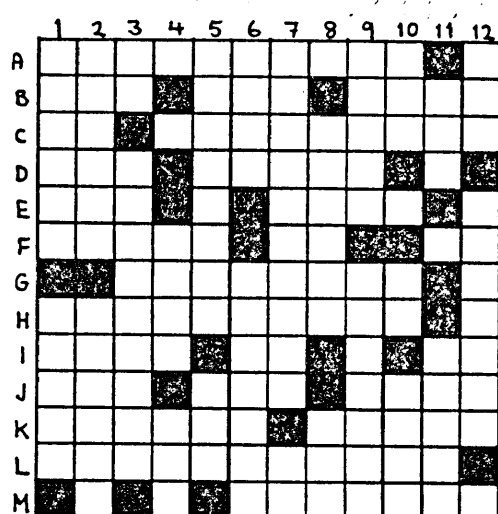
FOR SALE: Marantz receiver 2275--1 year old, 75 watts RMS/channel. Sleeve included. 2 Marantz-Design monitor speakers. 4-way with 12" woofer, 7" horn, 4" midrange, 2.5" tweeter. Air suspension. 1 year old. See JD at MC 3038 or phone 745-2027.

FOR SALE: Power amp. Harmon-Kardon Citation 12. 6 months old with deluxe walnut sleeve and 60 watts RMS/channel. Reason for selling--upgrading system. All offers welcome. Phone John at 745-2027 or see JD in Mathsoc MC 3038. (Asking \$350.00)

2 MALES need apartment in Toronto, preferably near subway. Will share. Call Chris, 743-3477, or Eric, 885-2637.

paragon?

polygon?



off?

chevron?

photon?

neuron?

jargon?

FOR TRADE: One slightly used FORTRAN text in return for 100 microcuries of CS 140. Lead shipping container will be supplied to conform to ICRP regulations. Apply to Institut fuer Kernphysik, Bonn, West Germany.

NOTICE: The fall 1976 CS 140 Book Burning party will be held on December 17. CS 140/150 BB'ers welcome. Meet by Laurel Lake fireplace at 5:30 p.m.

REWARD \$1: To anyone who can cut off the battery supply for Prof. Lastman's bionic chalk. Fred Fourreur.



- A1 Not carnivorous
- B1 Sphere of globe
- B5 Necessary after some Exams
- B9 One who does
- C1 Mr. Kettle's wife
- C4 Connects to foot
- D1 What capital's transportation system was
- D5 Straw (Brit.)
- E1 Neither
- E7 Unsubstantial
- F1 Flowers have this
- F7 Pertaining to medicine or fertilizer
- F11 Common Greek letter
- H1 First word held in second in ancient Greece (2 words)
- I1 A few eternities
- I6 Grass Roots??
- I11 what!
- J1 Tuition fees in September
- J5 Dialectical variant of your
- J9 Has music in her
- K1 To collect in condensed form on a surface
- K8 Happens to chances of passing after exams
- L1 Long and slender; beaver state (2 unrelated words)
- M6 Singer in Switzerland



- 1A Fruit goddess
- 1H Reward for good actions
- 2A Public speaker
- 2H Ammotragus tragelaphus
- 3A Erblum, to a chemist
- 3D Lookout on a ship
- 4F First half of H1
- 4K Resistance
- 5A Poultry race (2 words)
- 5J What you must do to solve this
- 6A Egyptian life symbol
- 6G High drawers on legs
- 7A Satirical poetry
- 7L Right On!
- 8C Philosopher's stone
- 8K flicks
- 9A Unless David Bowie Files Ransom??
- 9G State of being saturated
- 10A Sault Ste. Marie
- 10G Happen Now??
- 10J David Cassidy was one
- 11B What you wish this term would do
- 11I Leg joints anagram
- 12A .01 Krone
- 12E $r=a(\sin\theta)(\tan\theta)$

Kiddie Korner

Hi Kids!

This is a very special column this week. Not only is it our Christmas Special, but it is our very last column. So save this mathNEWS, folks. It could be worth a lot of money someday. The reason why this is our last column is that both of us are in co-op and we won't be back in January. We know that you'll all miss us next term when you're sitting in a boring class and you don't have any doodles or progressions to solve. (In fact this column is being written during a boring class!)

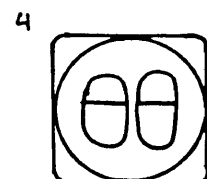
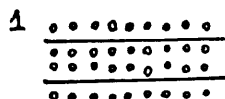
Since this is a Christmas issue we have a lot of goodies for you as our Christmas present to our readers.

First we have the solutions to last week's progressions. The only person to get the first progression was Rob Takimoto who correctly identified HHLBBCNO... as the periodic table. However Rob is disqualified because he is in science. Six people correctly completed the second sequence, BCDGJOPQRSU. This one went with the AEFHI sequence since none of the letters is composed entirely of straight lines. Those who got it right were Rob Takimoto, Owen Leibman, efnhrichsen, Jehoffman, ranash and W. F. Noordermeer. We apologize to W. F. N. for misspelling his name but we can't help it if the Honeywell chopped his user id.

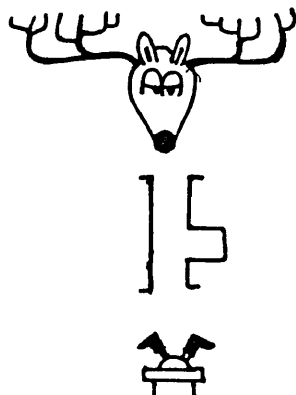
This week we have two progressions for you to solve. One has the Christmas Spirit but the other one doesn't. Here they are:

PFTCG
ROYGB

This issue we present the return of the doodle. (For one last time.) To keep you busy over the holidays, and also to ruin your concentration during exams, we give you some doodles to keep your gears grinding.



This week we also present the triumphant return of our amazing maze. And this one is really important! It's Christmas Eve and Santa has just begun delivering his presents to all us kiddies all over the world. But --horror! He's stuck in the very first chimney. Help Rudolph find his way to Santa so he can pull him out of the chimney. Hurry! Time is running out!



Before we close, we would like to comment on our NAME_THE_COUNTRY contest. No one entered! So we guess that we'll just have to keep the valuable prize that we were going to award. You may complain that we didn't tell you about this prize, but then we shouldn't have to offer some reward for a matter of national importance. Oh well. One thing is certain. If everyone in Quebec is as apathetic about separatism as you people are, then we have nothing to worry about.

That's it forever folks. This is it. No more Kiddie Korner. No more Sam'n'Tak. No more doodles. No more progressions. No more nonsense. Oh well, it was fun anyways. Since this is the last article, the solutions to our doodles and progressions are at the end of the column. Merry Christmas to all and to all a good night! (Chappy Chanukah too)

sam'n'tak



Solutions to the progressions are Partridge, Turtle Doves, French Hens, Calling Birds, ... (twelve days of Christmas Song) and Red, Orange, Yellow, ... for the colors in the rainbow. The doodles in order are (1) Tracks left by Santa and his reindeer, (2) Santa's sleigh from behind, (3) Henorah from above, (4) Santa coming down the chimney! ... If you couldn't solve Rudolph's maze, then you better start reading Uncle Nugent's column. Bye kids!!

ANSWERS

DOG TIPS CAR

PHOTON TIPS mathNEWS

LONDON (CP) -- Edgar Newton, who was learning how to drive, was slightly hurt when his three-wheel invalid car was knocked over on its side by a giant Doberman pinscher. The dog was unhurt.

Kitchener-Waterloo Record,
November 25, 1976

Speaking of the K-W Record, we notice that they have just completed their conversion to photocomposition, about nine months behind mathNEWS...

Oh, what happened to that? Well, the Photon Econosetter contains a Microdata minicomputer, which is booted via a paper tape reader attached to the machine. (That is also normally the data input device, but we have had a special interface built to attach the Econosetter directly to the Honeywell.) And the paper tape reader's motor is out of order and cannot be fixed for some time...

Co-op Surveys

The Student Advisory Council to the Department of Co-ordination and Placement is a representative group of students from each of the faculties offering co-operative programs. It advises the Department on matters of importance to co-op students, and on topics put before them by the Department. Donna Strangway and Brad St. Pierre are this term's Math reps on the SAC. They may be reached through the Mathsoc office or Honeywell userid wbjstpierre.

In September 1976, the SAC conducted a questionnaire for students having just returned from a work term. It contained 17 questions, ranging from evaluation of work term experiences, helpfulness of the Department of Co-ordination and Placement and the Co-ordinator, through to questions on out-of-town housing lists and feedback sessions. Of about 1800 students, 1288 answered the questionnaire. The students were also encouraged to write additional comments on the back of the answer card; approximately 300 were received.

Only 13.3% of the students felt the work term experience was of minor value as related to the academic program and career preparation. When asked if they felt they had been dealt with fairly and honestly by the Department and by the Co-ordinators, 75% of the students said they had. About 25% of students did not feel the Co-ordinator visit was worthwhile. Only 8.6% of the students felt that the Co-ordinator was ineffective in performing his/her duties.

There were 62 comments on student/Co-ordinator communications. Many were constructive. Other written comments included: Improve quality of job descriptions; improve number of jobs available; create a better balance of job offers among junior, intermediate and senior students; supply more information on writing of work reports; make the return-to-campus interview optional.

The SAC and the Department are working on improving the co-operative programs and are particularly interested in improving the method of display of job descriptions and interview schedules.

Co-ordinators have been informed of the detailed statistical analysis of the questionnaire, and have been sent any cards with individual comments pertaining to themselves.

The same questionnaire will be presented to the students returning to campus from a work term in January 1977.

ALGORITHM OF THE WEEK

We didn't get any further remote communications from the Trob, so we thought we'd better declare a winner in his algorithm contest and not keep everybody in suspense. There were 5 solutions submitted--one a week late--and the shortest was that of

*** Rohan Jayasekera ***

...the CSC's resident APList. He wrote two versions. This one is for APL's that support the "scan" operator:

```
R+(1 1Q<\MA.=QM)FM
```

And this one will run on just about any APL.

```
R+(A/(T+.≥T+11ppM)VMV.#QM)FM
```

They are origin-independent, too. Congratulations, rsjayasekera.

To \$STEVES:

As a creator and eater of GOOD FOOD with many years experience, I would like to congratulate you on your tutorial on this subject in your last mathNEWS column. However, I must make one small criticism and correction: You forgot the ...

```
GGGGG  AAAA  RRRRRR  LL  IIII  CCCCC
GG      AA  AA  RR  RR  LL  II  CC  CC
GG  GGGG  AAAAAA  RRRRRR  LL  II  CC
GG  GG  AA  AA  RR  RR  LL  II  CC  CC
GGGGG  AA  AA  RR  RR  LLLLL  IIII  CCCCC
```

Surely you must recognize the excellent qualities of this essential ingredient of GOOD FOOD. I trust that you will correct this lapse of memory in your next column.

Martin Taylor

To \$STEVES:

I saw your comments yesterday and since they were made after the sessions (rather than before) I decided to check them up.

1. your grapevine is somewhat behind the times. Gabriel's solo, which was recorded in Toronto (at Nimbus 9 on Hazelton), has been finished for some time.

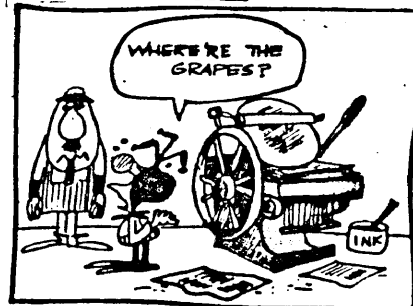
2. I still found it difficult to believe that Robert Fripp would perform on a Gabriel album, knowing the relationship between the two. I phoned the studio last night to ask who played on the sessions. You were correct in part. Fripp did perform; however, there was another guitarist. His name was Steve Hunter (I think; I wrote the name down on a hunk of paper on my table by the phone and promptly forgot it). The name doesn't ring a bell to me; does it to you? In any case it does explain how the two put up with one another for an entire session.

3. Before you make statements about the accuracy of someone's information, check their credentials.

4. If you're bored sometimes and I'm on, send me mail; it's about time we did something other than snarl at one another via (m0rk's) mail.

dconroy

mathNEWS welcomes your criticisms, comments, suggestions, etc. All letters should be signed, but if requested, a pen name will be used. Put your Feedback articles in our mailbox on the third floor outside the lounge, or mail it to us on TSS to userid mathNEWS, or mail it to MC 3038 and have it put in our mail slot, or put it in the mail addressed to mathNEWS, MC 3038. ...continued on page 10



Just a Colum

For the first time since I began writing for mathNEWS, I have begun to feel that at last something is being accomplished. Don't get me wrong; I thought that the absence of Burloaf, the Trob, and JJBT was just as disappointing as you did. However, also for the first time since I began writing, I have been able to take a look at the feedback from one week's issue before I wrote the column for the next week. This is a major step forward, as it means that instead of taking two weeks to reply to your letters, as it has in the past, I can now do it in a few days. The cause of this startling advancement lies in the fact that I am a rookie to the Honeywell system, and I still don't understand it too well, but I am learning how to use the mail system, which means that I no longer need to ask maddog or msbrader to read my mail to me. This is good, or as one observer said, "It's about time you learned to do something useful."

So now, a few comments. Firstly, I wish to apologize for my shameful omission of the word "garlic" from the last column. I'm sorry about this, and I must explain why I left it out. I, like most of the other odd people I know, have certain idiosyncrasies, which I am not exactly proud of, but which form an interesting (I think) part of my personality. One of these is the following: Whenever I come home from a pub type of night, I always scramble some eggs with peppers and onions, and eat them with English muffins and cheese. Since garlic generally does not mix well with a very full stomach, I don't put it in the eggs. It is, instead, a food which has to be enjoyed all by itself, or with other delicate foods (such as peppers and onions), as its taste can easily be ruined by the aftermath of beer. Well, last week's column was written at about 05:30 on a Tuesday, and I was not thinking along the lines of garlic. But now that I think about it, it certainly was a shameful omission, for which I apologize.

Secondly, I am pleased that the head-to-head confrontation between dconroy and myself has come to such an equitable end. We were both partly right, which is kind of neat. And this gives me my excuse to talk about music this week AGAIN, although I was going to do so anyway.

What I had wanted to talk about was the ballots for the Playboy Music Poll this year. Of course, being a fine, upstanding young University student, I don't read that garbage publication myself, but one of my more avid admirers slipped me a copy of the ballot. (Actually, I don't know why I even capitalized the name of the poll; it's not even half as classy as mathNEWS.) (Which is only half-capitalized.) In any case, the ballot is disgusting, and it doesn't have most of the good musicians of the English-speaking world on it.

This may be a digression, but the reason why I say "English-speaking" is that since most groups have singers these days, the only people that we in English-speaking areas of the world get to hear are the ones who sing in English. So while I don't profess to be an expert on English-speaking music, I do profess to be a dummy when it comes to Swahili Rhythm and Blues. You must see my point by now.

And although people say that my point of view is biased, I feel very strongly that nine of the finest musicians in the world are to be found in the bands called Yes and Genesis. The nine include Steve Howe and Steve Hackett (guitars), Chris Squire and Michael Rutherford (bass), Patrick Moraz and Tony Banks (keyboards), Alan White and Phil Collins (drums), and Jon Anderson (vocals). In

addition, Collins and Banks also sing for Genesis, while Howe and Squire join Anderson in singing for Yes. And of these nine, only two (2) (II) of them were even LISTED on the poll. This, to me, is sheer ignorance. It is also pretty rude.

Perennial winners like Elton John, Paul McCartney, and Eric Clapton are good musicians, but they are not the only ones on this earth. I have never heard anyone who can hold a candle to Steve Howe, including the guitarists in Playboy's hall of fame, which includes an Allman, a Hendrix, and a Harrison. And not too many drummers are a match for Collins (who also sings as well as most anyone) or White (who has jammed or recorded with almost everybody--remember Live Peace in Toronto?). And in the meantime, both Squire and Rutherford are so fast and so unorthodox that they have come to be regarded as musicians, not merely bass players.

During the last twelve months, these nine men have been responsible for the production of eight albums, which is not too shabby by anyone's standards. The fact that only Howe and Squire made the ballot is hereby deplored. But what can I say about a poll which listed Karen Carpenter as a better drummer than John Bonham in 1975?

Which brings me to Peter Gabriel. His album promises to be so interesting that I doubt it will be like anything else. Well, nothing he ever wrote for Genesis was run-of-the-mill. Gabriel is a very creative individual, whose lyrics alone are priceless. And he don't sing too bad neither.

If this sounds like "Let's Camp Outside The Record Store And Wait For It", then it's on purpose.

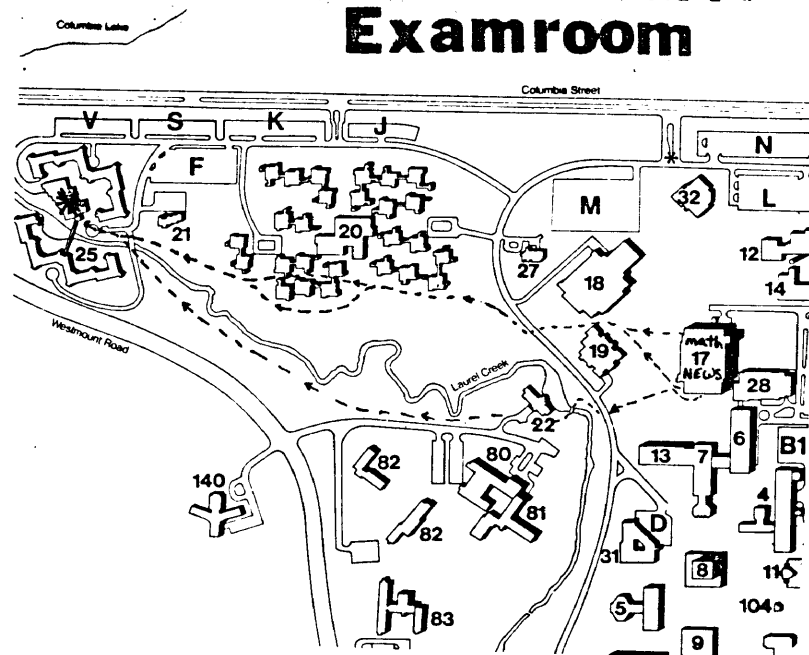
I'm sorry that there has been so much music here this week, because I know that there are a few of you out there who are very uninterested, but please remember that this is my column. Actually, I'm secretly upset that the (free) chevron took up so much space running down Rush. More about that next week, which won't come until next term.

So, until January, keep up the hard work, ace all your exams so that you can come back next term and read mathNEWS, and have a good holiday. I really am sorry about the garlic.

Say goodbye to \$ STEVE \$
Goodbye!

\$ STEVE \$

Examroom



AIA CRITICIZED FOR NOT SPEAKING

Dear mathNEWS,

Why are there so many anti alliances on campus? Why isn't anybody pro anything, publicly? Saying that one is anti something actually says nothing about what one is for. If I say that I am anti-Trudeau, that tells whoever I am talking to nothing about my political persuasion. I could be pro-Clark, Broadbent, Nixon, Castro, or Ian Smith.

Since it has been so widely publicized recently, the one that comes to mind is the Anti-Imperialist Alliance. I have heard that they are pro-Marx and/or Lenin, but I have never heard this from a member of the AIA. Why don't they say who they are for? Or is this another case of the American 1960's: the establishment is bad so it must be destroyed; it doesn't matter that we offer nothing to replace it, it is bad therefore it must go. I happen to be against Imperialism myself, but I am certainly not pro-Marx or Lenin.

I would very much like to hear from members of the AIA what it is they actually stand for. I offer them the challenge of publishing in any of the campus newspapers a statement of their purpose, function, beliefs, policies, etc.

It will say an awful lot about the AIA if they do not answer this challenge. Personally, I hope they do.

D. E. G. Hare
Student, UW

DRYDEN CRITICIZED FOR SPEAKING

Dear mathNEWS,

I am a regular honors student in the Faculty of Mathematics. Though I am a third-year student, this is my first regular session at this university.

I have not been favorably impressed by the recent activities of the Student Federation executives and some Mathsoc council representatives.

Specifically, I am referring to the "chevron" affair, and I am particularly concerned by the recent indiscretions of Gary Dryden, a paid Federation "field-worker" and Mathsoc representative.

In the November 26 mathNEWS, Mr. Dryden made a few comments re the candidates Blunden and Willis, who were both running to fill the math vacancy on the Federation Students' Council. I think it is improper for a member of a bureaucracy to make public his preferences with regards to those about to be elected to govern his activities as a bureaucrat. Mr. Dryden, evidently, does not concur. Mr. Blunden took a stand in the election campaign that, as the field workers are not productive, those positions should be eliminated. Blunden was concerned--and rightly so--that the student fees assessed for Federation activities should be spent wisely and not merely thrown to the winds, i.e. subject to potential political patronage. Mr. Dryden's comments must be viewed in a rather dim light when one considers that he opposed a candidate who was seeking to terminate his (Dryden's) own position. A definite conflict of interest is apparent.

Mr. Dryden's comment, "Willis is not a sheep," carries the direct implication that Blunden is a sheep. Such an assertion is contrary to fact. I will mention only one anecdote to substantiate my claim. Larry Hannant opposed J. J. Long's recent motion

(which I though was a positive motion, and I must commend Mr. Long) to establish a professional inquiry into the "chevron" affair.

What did Mr. Blunden do? Merely follow in Larry Hannant's wake? On the contrary, Mr. Blunden actively supported Mr. Long. Though not a voting member, Mr. Blunden advised at least one Student Councilor to support J. J. Long's motion. I think the above suffices to negate Mr. Dryden's hypothesis.

I would suggest to Gary Dryden that in the future he should think out his ideas and insure that he does not have any conflicts of interest. Mr. Dryden should be cognizant of the fact that he, too, is subject to the morality that we mere mortals are bound by. I will give Gary Dryden the benefit of the doubt. I will assume that his actions do not indicate that he is totally without principle, but that he merely fails to properly assess reality.

Phillip Cramer
75913740

Dear mathNEWS,

Having seen Gary Dryden's remarks on the math byelection in mathNEWS last week, I feel compelled to comment. After having been here for three years as a mathie and never having so much as voted in a Council election, in the beginning of October, I took up the cause of the chevron. I took it up because I saw the chevron editors receiving the same type of treatment that so many people had received in the U.S. during the era of McCarthy; people like Henry Hess who were not Communist were being branded as such and then summarily fired on this basis. Thus I undertook to get the support of Mathsoc for a reopening of the chevron and the rehiring of its staff to be followed by a dispassionate examination of the issue by students. In doing this I found that although there was little sympathy for my ideas in Mathsoc, all except one were at least willing to listen; that one was Gary Dryden, who it soon became clear had resolved to destroy the chevron and discredit anyone who supported it. As the day of the general meeting approached, I tried to make my fellow students aware of it and on the eve of the meeting I spent two hours circulating through the co-op residence informing students of the meeting. The next day I went to that meeting and saw three hours of stalling by Federation hardliners followed by an adjournment without a vote by the speaker. Afterwards came a Sunday night Council meeting in which Larry Hannant, grad rep who claimed to be voting according to the wishes of the chevron staff, voted against the rehiring of Neil Docherty and Henry Hess with no strings attached; I was incredulous at such an absurd hard line and went off to try and seek a solution through the Federation. I then came up with a motion for Council which embodied all the reasonable points of those on both sides. When it came up at Council, Shane Roberts asked that its consideration be postponed and then adjourned the meeting before it could be considered. Afterwards he assured me that the matter was of such importance that he would certainly not wait ten days for another Council meeting and Manny Brykman told me that he would cut the chevron's phones only after they refused to pay. Ten days passed without another Council meeting and the chevron's phones were cut in spite of their consent to pay. Moreover Shane Roberts initiated equipment removal from the chevron and when he involved himself in a brawl in the process, someone who could not have been other than Gary Dryden held up mathNEWS to add two pages of Shane Roberts falling with a



continued from page 10...

typewriter and a headline of "fed prez assaulted by free chevron goons". During this period I met Gary Dryden twice; the first time he accused me of stealing bundles of real chevrons and the second time he accused me of stuffing real chevron covers with free chevron insides. The Monday after the Council meeting Peter Blunden and Kevin Willis became the candidates for the regular math Council seat. Having seen that Peter Blunden was thinking independently of Larry Hannant and counselling Councilors to vote the opposite way from Larry Hannant on several issues such as the outside investigation proposed by J. J. Long, and that Kevin Willis had very little to show for as Mathsoc vice-president, I concluded that the way to vote was clear. This feeling was increased when on Friday, I heard the debate in which Kevin Willis stated that "there are no foolish people in the Federation therefore there is no misappropriation in the Federation". During the vote on Monday it was clear that aside from the Mathsoc clubs those voting for Willis were doing so purely because Gary Dryden had put the AIA taint on Peter Blunden. Willis won. Thus it seems that the time has come to criticize the campaign of slander that our Federation field-worker Gary Dryden is waging.

mshafroth

I want to say a few words about those two pages on the end of the issue before last. This would have been printed last week if I hadn't needed to take an issue off mathNEWS.

The pages were obviously created in a hurry, and contained little information. They weren't even done in standard mathNEWS style. (I was particularly annoyed at the headline calling the free chevron goons "free chevron goons". We don't do that sort of name-calling in mathNEWS.)

Gary Dryden had seen a legitimate news item that was too late for mathNEWS, and wanted to publicize it the best way he could. Personally, given that Graphic Services' processing of the issue would have to be interrupted, I would rather have remade the front page and kept the issue at 6 pages. It really only needed a couple of paragraphs to tell about the assault, and the pictures didn't add much. However, all 6 pages of the issue had already been printed, so rather than trying to find me, he decided to make up an extra page. Graphic Services didn't know any better than to accept it, of course.

I may have a dim view of the way he handled things, but I do agree that the event was a mathNEWSworthy item.

Editor

ASHBY'S COMMENTS ON CHEVRON AFFAIR

I feel I have to comment on the chevron affair, as it has gone on too long, and both sides are getting more entrenched.

The Federation handling of the affair has not been very good to say the least. It was closed down on vague suspicions that it was being overrun by Communist sympathizers. It was decided to fire the news editor and the production editor, but when this was defeated in council, the positions were dissolved instead. Phone lines have been cut, mail intercepted, and photographic equipment and typewriters removed from the office in the continual harassment of the staff. Finally, last Thursday, Shane Roberts posted notices around the Campus Centre warning of the eviction of the free chevron from "their" offices. The free chevron organized a meeting for the supposed eviction time, at which over 50 people showed up, simply by word of mouth. As may be expected, Shane didn't show up, and so the free chevron supporters were disappointed.

The free chevron, however, has had its share of mistakes. Any effort to bring the chevron back to life has not been applauded by its supporters, simply because it does not follow their method of doing it ("Reinstate! Investigate!"). There are advantages to having just part of the package at one go, then working to get the others. This however does not interest them.

We now have two papers on a campus that used to barely support one, and it shows. The "real" chevron is not very good. Apart from the fact that it is VERY unprofessional-looking, there is a hesitancy to cover the chevron affair, which after all is the biggest news item on campus in ages. It is time to bring the two sides together so campus news can be decently reported (the free chevron doesn't have the money, the "real" chevron doesn't have the expertise). Things have got to such a state that we should let the students decide what to do, in the form of a referendum. Both sides seem hesitant to take this step, as it may show that their support does not exist. It may be the only step, though, that will break the deadlock, apart from bringing in Henry Klissinger.

Graham Ashby for fieldmice

found in mathNEWS' mailbox:

Invest in some more ashtrays for the smoking side of the lounge

SICK AND TIRED?

I think that the majority of right-thinking people in this world are sick and tired of being told that they're sick and tired of being fed up with being told that they're sick and tired!

Well, I'm certainly not and I'm sick and tired of being told that I am!

I. Crok
Citizen, planet Mars
"Drink deep and never thirst!"

Once upon a time in Bell Labs there was a language called BCPL (Bell Computer(?) Programming Language). A successor to BCPL was the language B (for Bell and because it's the second letter), which was in turn followed by C. (Next: D. Really!) B is a popular language on the Honeywell (a new version is to be appearing soon, by the way), and C is the main language of UNIX. Now the language which the HUB is designed in and around is sort of like B and C, but smaller, so it was called A, except that since this is Canada it is spelled Eh. The compiler is table-driven, so it is easy to port from mini to mini. Other people working in the Minilab and on Eh and the "Portability Project", as it is known, are grad-students R. Braga (better known as renaldo, although really it should be spelt reinaldo (like it is on UNIX)), and Fred Young (myoung) and Gary Stafford (gjstafford), and professors Gary Sager (grsaper), Mike Malcolm (mamacolm), and Morven Gentleman (wmgentleman). Tom indicated that the main idea behind the system is to allow the little machines to take advantage of one another's good features, especially peripheral-wise.

Professor Graham gave a very interesting talk, concentrating on the development of computers and computing here at Waterloo since he arrived here in 1959. He revealed to the audience of 70 or so that there were actually "computer hacks" at this university at least as far back as 1961, relating some of the antics that they carried out over in the Physics building, before the present MC building was built. He described some of the earlier machinery the university acquired, and some of the hardware-modifications some of which were found to be necessary, and others which were carried out anyway. (Which in one case led to him arriving to work to find all his machines wired together into a sort of fore-runner of the "HUB"). He also mentioned some of the useful things that these "hacks" did. One name frequently mentioned in this context was Gus German, who, amongst other things, developed the WATFOR compiler which is the forerunner of the WATFIV we know today, in the summer of his third year, along with two of his fellow "hacks". Professor Graham also caused some amusement with his recollections of "little" Donnie Cowan and Paul Dirksen.

After the formal lectures, there were question-and-answer periods, and after that, even more informal chats over the traditional coffee and donuts. During part of this discussion, Professor Graham tried to persuade us that perhaps COBOL wasn't that bad, but we're still not very convinced.

At the end of next week, Thursday, December 1, 1976, Professor Ed Ashcroft is going to be talking to us about his "LUCID" programming language for the proof of program correctness. (Same room, same time--MC 5158, at 7:30 p.m.) Of course, this is sort of silly, since this was supposed to appear in last week's issue, and by the time you actually read this, the meeting will have been held yesterday. But right now, it's not even the day before

yesterday, and since we haven't ironed out all the bugs in our fortune-telling program, we can't say much about what is going to have happened.

Things look just as good for next term (Speaker-wise, not Inaction-wise). In addition to having Professor Graham coming back again to talk about his "pioneer-days" before 1959 (he told us he originally came to this university in an attempt to avoid computers!), we will have Dennis Ritchie from Bell Labs coming up to talk to us sometime.

It really makes me wish I were going to be here next term!

One last sad announcement: Due to misuse by a few members of the CSC, (sniffle, sniffle) the "free hot-chocolate, coffee, and tea" policy in the CSC office has been suspended indefinitely. I.e. we "CSC Tramps" can no longer sit around drinking free drinks in the CSC office when we should be doing all our assignments, etc. (Plans to form a "hot-chocolate club" are in the making, though that doesn't sound half as attractive, since it would involve PAYING a FAIR SHARE of the cost of the drinks consumed).

MATH BASKETBALL

The Waterloo Wizards, Math's entry in A league basketball, put up the best showing ever by a Math basketball team by reaching the league finals. The final game was played on December 1, and thus the outcome is not known at press time. I'm sure it was:

1. a one-sided display of basketball with the Wizards dominating and winning by a large margin;
2. a close contest that either team could have won;
3. maybe next year.

In reaching the finals, the Wizards attained an unblemished record (6-0) for the season with the second-best offense and the second-best defense in the league. The tenacious defense was led by steady Dennis Yearne (also owner and playing coach/captain of the team) with Lou "69" Aubrey and 6'5" (196 cm) Wes Kilparrick picking up anything Dennis let by. The big man on the team, Jim Davies (alias Stork), dominated the defensive boards and wins the best-dressed-player-of-the-year award. Consistent work by Rob Welns and Dan Scharf, combined with junior varsity caliber shooting by Norm, also played an important role in the team's showing. Other team members were Frank Timmer, who was at least second highest scorer on the team, and speedster Chris Uttley.

Season's highlight was the behind-the-back, through-the-legs, one-and-a-half-turn slam reverse dunk by Lou that didn't even touch the rim! Next term we'll be back (with OFFICIAL uniforms we hope)! GAME SET MATCH.

12

JJOCK

10:30 Wednesday morning and as I sit down to write the masthead I am handed a letter and it is a classified ad and since we are not using the phototypesetter we can actually put it in! Why not phototypeset? Read page 7. Signatories this time were MARK S BRADER as editor, MIKE "MADDOG" DILLON at first, J J LONG was early!, PERRY DOMZELLA who protested the number thirteen, RAY D BUTTERWORTH who had to leave at 7:00 but stayed until 7:15 anyway, G S ASHBY breeflee, and taping down page 11 was SYLVIA ENG. Mathsoc finances mathNEWS; but the content is solely the responsibility of the contributors; Graphic Services handles the 1200 circulation; the masters are usually produced on a Photon Econosetter, but this week on a carefully-selected IBM 2741 in MC 5172 ...anyway the Honeywell 6060 does the text editing. But not much longer! No, we aren't leaving it; it's soon being promoted to a Honeywell 66/60 (why the slash?)... THIS IS THE LAST mathNEWS OF THE TERM; the organizational meeting / first production meeting (hopefully) of next term will take place--oh, let's see--Tuesday, January 11 (since January 3 is New Year's Day: wouldn't want it to be the very first day of lectures), at 7 p.m. in MC 3011. Former editors Brader, Dillon, McDougall, Mullin, and Hipfner should all be on campus then--I wonder how many will want the task this time? Kathy adds a merry X-mas; I may too. CP DISCONNECTS