## faculty council:

## RUSSIAN

The regular meeting of the faculty of Mathematics Council was held on Tuesday, February 18, 1975 at 3:30 p.m. in MC 5158.

The minutes of the meeting held on Tuesday, January 21, 1975 were approved. Business arising from those minutes was discussed:
(i)English usage: The topic was introduced by C. F. A. Beaumont, and a fairly lenpthy discussion ensued. Une prof felt that lofical explanations on math assignments should be marked for proper English. Another felt that foreign students would have problems, and that English should be "understandable", not necessarily "proper". There are actually two issues: (a)math language and (b)non-math language. Both are important. The first must necessarily be more precise than the second. It was also suggested that professors use proper Enclish in their classes instead of point form. etc.

There were two ideas that resulted: (1)an optional essay worth up to $10 \%$ of the final mark and (2)a policy statement should be issued every year. The first was voted down, and four
members were asked to draft a statement by the next meeting.
(i) Building access at night: This was tabled until the next meeting. Prof. Beaumont commented that since the building is open until 12:00 p.m., those who want to work all night can come in before then.

Peter Lee was supposed to do a presentation on the Anticalendar, but was not present (he walked in late), so J. J. Long, one of the MathSoc reps present, comented that as far as he knew, the object of the discussion was closer liaison with the faculty.
idext came "overhead Projectors: Considerable inconvenience has been caused by people who move overhead projectors from one room to another and then forget to return them. It has been suggested that Faculty Council discuss the possibility of assuming responsibility for audio-visual equipment at the Faculty or Departmental level. Perhaps overhear projectors should be supplied in every classroom." (from agenda) Again, a fair bit of discussion ensued, with the conclusion that people should go through audio-visual to obtain equipment, and then the problem would be avoided.

IS.SUE $7 . .6$ fritay, feeruary 28,1975


## cold \& silent:

## ANTI-CAL

This intrepid mathllews reporter got to the antical meeting in 1162060 ( Feb 20) early to find a cold (what ever happened to central heating?) and silent roori. Around 3:30 things started to liven un and by twenty to four we had a full room consisting of Dean Forbes, Dr Sprott (head of Stats Dept). Peter Lee, Howard LeBlanc, Janet liartin, Andy Haycock and Dennis llullin.

Discussion covered a wide range of topics going from design of the book to how to arrange when to have a class surveyed to changing the questionnaire.

It was decided to divide things into two areas of attack, with separate meetings to 1) decide how to analyse the data for this year and 2) desion a new questionnaire.

Some areas which are being, looked into are: 1) the fact that the bean of Engineering has, for two years in the past, hired a student in the summer to nrocess and analyse anti-cal information for the ensineers. This could be done for mathies.
${ }^{2)}$ a student might get a course credit for doing. this work.
3) a stats class could desif, $n$ a nuestionnaire as a project.

The meeting broke un after an hour with several neople staying afterwards to discuss questionnaire design.

If you are interested in helping, out or want to make suggestions talk to Peter Lee or danet ilartin UR send your ifeas to mathivelUS (we'll pass them along to the right hands).

## ELECTION

tIME


Un llonday, liarch 3 at 9:30 a.m. nominations open for the pusitions of:

President
vice-President
2nd year regular rep.
2nd year co-op "A" stream ren.
$3 r d$ year regular ren.
4 th year regular rep.
4 th year co-op "B" stream ren.
Nominations close on Wed., March 12 at 4:30 D.m. Elections will be held Wed., Harch 19 from 9-5. Hominations forms are available at the riathSoc office lic 3038.

## ont'd Prem pase l

Reports followed: (a)Curriculum Committee: Two jolnt honours programmes were approved: "Honours Mathematics and Russian" and "Honours Mathematics and German'.
(b)Executive Committee: $\wedge$ motion was passed "that to reduce the flow of paper announcing varlous seminars and colloquila, a Faculty Newsletter be distributed weekly, for distribution Monday morning, to Include advance notice of events the following week as well" after discussion.

Dean Forbes started his reports. At this time, Peter Lee arrived. He thought the meeting started at 4:30, not 3:30. The Dean gave him the floor and $P$. Lee covered a fairly large area on Antical. He asked the faculty for active participation: gave a history of Antical; explained the concept of Antical as a critique; named the students should be able to praise as well as criticize profs; there should be a tivo-way link through which professors can tell students and vice versa about how they feel; the critique should be changed to a survey; profs should also be able to make a comment; there is a problem with student apathy. He made the appeal to faculty to help him (1)in designing a section especially for profs (2)in changing the questionnaire and (3) helping in the handout of questionnaires by sending, a student to the Mathsoc office to pickup questionnaires, have them filler out, then return them.

The last suggestion was piven a fair amount of support.

Dean Forbes briefly raised four points: (1) There is a new policy for tenure. The members of the Tenure Committee should be selected in a manner determined by the Faculty Council. A motion was made and carried to ratify the present members for one year.
(2) Math convocation will be Friday, May 23 in the morning.
(3) Faculty members should consider persons qualified to be nominated for honourary degrees.
(4) Faculty were invited to the 4 B Co-on 'get-together' at the faculty Club at 8:30 on the $19 t \mathrm{~h}$.

The meeting was adjourned at 4:40.

## Village Ablaze

A few weeks ago village 1 councll conducted a smoking survey. They received a response of about $30 \%$. (Better than math's turnout for the last election).

The results were:

1) Set aside a non-smoking, area in the cafeterias?

Yes 202 No 152
2) Would you sit in such an area?

Yes 186 No 142 Don't care 25

## PRE REGISTRATION

All Regular and Co-on math students who have hopes of continuing their studies in the Fall of 1975 should pre-repister during the week of llarch 10 to 14, 1975.
math 2 无相
HOW MANY ANSWERED?
24 were submitted
23 read mathilEWS regularly
1 reads it almost regularly
Why no read?
results
3 read mathidEWS for the gridword
10 read it for everything else
11 read it for both the gridivord and for other reasons

HUW UFTEN?
15 want mathilEIS every week
6 want it every second week
2 would like it when it is convenient for staffers

1 doesn't care
mathIJEUS WORTIWHILE?
23 think that mathiNEWS is worthwhile
1 doesn't care
WORK FUR mathNEUS?
5 said that they would work for mathilelly but all 5 had reasons why they can't right now

18 said that they wouldn't, or can't work for mathivelds

2 said they already do (?)
mathSoc
think that mathSoc is doing an okay job
3 said they don't care
1 was undecided
$1_{\text {"n }}$ when asked what they thought of math Soc said, "What?".

NAIME Chainge
2 were were for the faculty name change
18 were dead against it
ClaSS leidgth
1 is for the lengthening of classes
19 are against the idea
SEMI-FURIMAL
$G$ thought that the semi-formal was good
7 thought that it was had
2 didn't care
SMOKI:NG
3 are against smoker's rights being. restricted

14 think that smoker's rights should be restricted

2 said they don't care

## LIBRARY HUURS

4 think that the library hours are okay as they are now

3 think that the hours should be extended (some say back to 24 hours a day)

CuHPUTIING
4 think that the policy on computer accounts should be less restrictive

2 said they don't really care
mathNELS
7 think that mathNEWS is great
3 think that mathIUEUS is good
1 thinks that mathNEWS is deteriorating,
UTHER
3 said that they think that the ildic building should be open longer at night

1 said that the course dron neriod should be lengthened to the last week of lectures

## BURGOAR

Recently, I took a trip through the Computing Centre's famed (infamed?) Debug terminal. I knew conditions were bad in there, but I had forgotten just how bad they were. Lucklly, at the time l went, there we'rent that many people trying to get work done so that I was able to keep my visit down to about six hours, getting an assignment done. one good point, I see they've gone to eight lines per inch of printer output, from the previous six lines. Not only does this save some paper, by having smaller pages, it fits better into standard 8-1/2 by 11 inch notebooks (you can save 110 columns as opposed to 80 columns of output) and as far as 1 am concerned it is much more asthetically pleasing.

They still use that ridiculous header page, though. If they're not going to print the job name in large letters (like downstalrs), but rather just the one line with the job name, they as might as well stick that one line on the top of the page and then start the complation on the same page. As well as consuming needless paper, it slows the terminal down, not by much for one job, however, the volume of jobs run causes a signifigant amout of time wasted.

Another cause of paper wastage is the unique ability the compilers they provide on Debug have of tyrning, one syntactic error into a page full of messages. When I first ran a two page Algol 11 program, $i$ had four keypunching errors. This cause the the generation of seventy-five error messages. (The compiler had many more messages to give, but it aborts after the first seventy-five.) Because a declaration was wrong, a number of variables were undefined to the program. Every time the compller encountered one of the variables in usage, it then gave an appropriate error. This meant I got told umpteen times that each variable was undeclared, when I really only needed to be told once. I had also left out an END, which had a rather cute effect. The missing EHD cause several errors to occur, but for some reason, the compiler insisted on putting in an EivD. The place it chose for it (not the end of the program, incidentally) was the wrong place, and only resulted in another avalance of nasty messages.

When I let my comments wander into columns 73 to 80, the compiler generates the silly message "garbage in sequence field", when what is in the "sequence fleld" is not garbage but valid comments. Why the blockhead who put in this feature assumed that I wanted to sequence all my cards, Ill never know. llost programs written on Debug are short enough that sequencing would be of no real value.

In one of the terminal rooms there is a computer printout tacked to the wall with a listing revealing three people playing spacevar on the Honeywell. All three userid's were "bellcanada". Below was scibbled the comment "The world needs iJellorphones!".

This week's morsels of knowledge deals with base one arithmetic. As most computer science students know, computers use bse two because it is simpler than base ten (for machines, that is). Well, if base two is simpler than base ten, base one should be even simnler. And it

Base one has one digit - 0. Following, is a list of some the real number representable in base one:

The basic operations are easily defined, in fact all the tables have one entry each.

| +10 |
| :--- |
| 010 |


| -1 | 0 |
| :---: | :---: |
| 0 | 10 |


| $*$ |  |
| :---: | :---: |
| $*$ | 1 |
| 0 | 10 |


| $1+0$ |
| :--- |
| 010 |

"*" denotes multiplication, "/" division. Although $0 / 0$ is traditionally undefined, we will fix it to be 0 for simplicity's sake.

Lots of neat mathematical properties hold in base l:

Commutativity: $\quad 0+0=0+0 \quad 0-0=0-0$
Associativity: $\quad(0+0)+0=0+(0+0)$
$(0-0)-0=0-(0-0)$
$(0 * 0) * 0=0 *(0 * 0)$
(0/0)/0 $=0 /(0 / 0)$
Distributivity: $0 *(0+0)=(0 * 0)+(0 * 0)$
(note: all operations are distributive over everything.)

Existance of identites: $0+0=0 \quad 0 * 0=0$
Existance of inverses: $\quad 0=0-0 \quad 0=0 / 0$
Although 0 raised to the 0 th power can be either 0 or 1 , we define it as 0 . The nth root of 0 is also defined as $n$.

We have the traditional heirarchy of sets:
whole numbers: $\quad 0$
$\begin{array}{lc}\text { integers: } & 0 \\ \text { rationals: } & 0 / 0 \\ \text { reals: } & 0.0\end{array}$
$\begin{array}{ll}\text { reals: } & 0.0 \\ \text { complex: } & 0+0 i\end{array}$
From this, it must be clear to the reader, the simplicity that can be obtained by using base one arithmetic.

## underwhelming <br> TURNIN

The llath undergrad Reps on the Federation of Students Council for 1975 to 1976 were chosen last week. In a hard-fought acclamation J. J. Long and G. G. Dryden were returned to the Fed councll for another year and Denis Richardson a first-year student and menber of the Federation Board of Education was chosen as the Hath Co-on Rep. Hopefully statements will be forthcoming from our reps in the next issue of mathNEWS. Elections in other Faculties take nlace llarch 5 th and the annual general meeting of the Federation will take place Monday llarch 10th. Any student can vote at this meeting and the new Board of Directors will be selected at this meeting. Un the same day the new council will meet to ratify the new executive and the election.

In another exciting acclamation of interest? to llath students, second-year student Harry Vanderzand was selected February 13 to be the new llath undergrad ren on the U. II. Senate. tiarry succeeds Joe Carpenter and takes office Hay ist for a tivo year term of office.

Hath still lacks a ren on the Camnus Centre Board, anyone interested should see the CCB. Hathsoc council elections take place on llarch 19th. As usual noninations are needed, especially for President and Vice- President (they don't want to sce anuther acclamation). Nominations open llonday and close llarch 12 th .


Clues down
a 1 Representation
a 2 Hale Erwin uses one
a 3 Same as 19 across
a 5 Arabian sheikdom
a 6 Three eighths of twice the radius
a 7 A Toad Ran In
a 8 Cash Register
a 9 Plate $\qquad$ (geol)
all Living space
al3 uwns a trolley
al4 Knicks Willis or
Vikings Uscar
al5 Its only human
b12 'You' Be Proud In
Seventy Eight
c 4 Dog command
clo Mean in disposition
d 3 A vitamin
d 8 Make sure you know it
e 2 Virile
e 6 CBC series
el5 Disrespect
f 5 Measures angles
f 7 Rabid Skunk
g 4 Pin-
gl3 Honourable males
h14 Derangement of 'Beantown's Bobby
17 Ceremony
i 8 Greek letter
j 4 Adolph's little woman
j12 Latin for behold
$k 2$ Almost a town in Nova Scotia
k 3 Lukewarm
$k 6$ Same as $k 12$ across
k 9 Composer
k10 Boy's name
114 Flat plate
n 6 Coin Exchange
$n 7$ _to, surjective
nll What politicians give
us a lot of


CLUES ACROSS
a 1 Earlybird?
al3 As opposed to the rock part.
bl It doesn't look like a fish
b 5 Type of joint.
bll Swiss mathematiclan.
c 1 Concerning.
c 4 West German river.
c 9 Shoe fixer.
d 3 Partial derangement of IHN.
d 7 Dauntless.
e 1 You need not do it.
e Girl's name.
$f 1$ North Amerlcan Airways.
$f 5$ A redemption value of a bond
f 9 Noun-forming suffix
f14 Babylonian city
$g 1$ Curves to the inside
g 9 In short, you take exlax for it
h 1 Switch on
h 9 Its almost the Central Intelligence Agency
h13 Before
i In Your Name
i 5 They often cover playing fields
113 A month to remember ; 4 British
j 73 rd person sing, he - in
j11 Arrangements of beats in a line of poetry
k 1 Enticing
k12 French for sky?
11 Molasses produced during, refining of sugar
19 Elevated railroad
112 Surrender
m 1 Power supplied to a machine
m 8 Prefix meaning three
ml2 Partial derangement of MIINE, reversed
$n 1$ S. American river
n 9 A quick, light touch
n13 Ethiopean Social Club

- 1 Its as good as a wink to a blind horse
- 5 That glorious era, artistically speaking.


## FEED <br> BACK <br> COMPLIMENTS

My compliments to MathSoc. Because it's about time someone got some credit for dolng something right. The Lighthouse Semi-Formal was an obvious entertalinment success. Definitely better than the "same old thing". MathSoc took a chance and tried to do something original, and it paid off (though perhaps not financiaily). Commendations are in order, especially from those pessimists who criticized this endeavour before it even happened. But I expect they never even bothered to apologize... While I'm at it, three cheers to the $C / D$ stand. I haven't found any little animals or hairs in my kaisers, and the coffee's ok, too! ... In fact, mathilEWS ain't doing such a bad job, either. Hell, I usually read mathllews first, and then maybe the Chevron, if $I$ can find one. (yawn)

Phipp, 3A IIATH

## COMMENT:

The usual(?) editor is back this biweek after a silght bout of midtermitis. Lewd comments indeed! Girls, I'm thinking of having, a Grid pet of the biweek. Applicants are welcome to come to any mathilells meeting.

Returning to matters more mundane, Alex Kowolenko is this bi-week's winner. There were only two other correct entries, both from Macdonalds. Shame on you two for breaking tradition by not winning a t-shirt. Chester Buczek almost made it but he forgot to flll in the questionnaire on the back and so was disqualified. Thanks to llark. Brader for his treatise of Richard Needham's puzzles, but, liark, mathileus is indifferent to foul threats and they roll off our shoulders as does the gentle rain from heaven. The most common mistake was putting the word ASS for Alvu. I guess most people don't know their.... well I will keep my lewd thoghts to myself.

I have thrown 47 snowballs at the liath building but it still refuses to fall down. Suggestions are welcome.

As you may know, to reduce errors in the gridword, the submitter must come in and tyne un the clues. The following, list is to save everyone out tinere a lot of tension about whether or not their grid has been accented. I will let each person know by phone when to come out and word on it.

List of Giridwords Submitters
Accepted: Lynn Helwig
:lorm llacdonald c/o Kathy llilson
Douglas liolmes
Graham Johnson and cireg llilliams
dote: Anyuody who wants their published gridmord back or wants to rewort their rejected sumission, come to a mathiNEWS meeting and picl: it un. tiurry--after a few weeks they will be thrown out.

Speaking of mistakes, there wasn't any mention of the nispositioning of a down clue in the across list. Even the corrections sometimes go astray when not belng, supervised by the creator.

Dig up: some chicken legs (drumsticks)
chicken hearts
chicken giblets
2 medium tomatoes
2 medium onions
1 large green pepper
1 zuccini
salt \& pepper
margerine
Hinute Rice (or other)
water (hard to find)
red table wine

Take a medium-sized casserole dish and melt about a spoonful of margerine over low flame. Remove dish from stove. Add drumsticks, chicken hearts, giblets. Add diced tomatoes, chonned onions, diced green pepper and diced zuccini. Sprinkle with salt and penper. Pour on about 1/2 cup of red wine. Place in pre-heated oven at 400 F for one half hourwith the lid on.

While this concoction is in the oven, take a look at the directions on your nackape of rice for 2 servings. Un llinute Rice, it is $3 / 4$ cups of water, $3 / 4$ cups of rice. What you do is take 3/8 water, $3 / 8$ red wine, $3 / 4$ rice, and follow directions on the package. Now, you have pink rice!

When your half hour is up, you take the casserole dish out of the oven, stir in the cooked rice, and put it back in the oven at 45 n F with the lid on for another 20 minutes.

VUILA. YOU'RE FIHISHEN.
A nice drink to go with this is Dubonnet on the rocks.

If you happen to have time, fruit salad is a nice dessert.

## unclassified

 mathliews, 145. 3n79.1

## For Sale - STEREO

one Pioneer $S X-727$ All-FIl stereo receiver (40 watts/channel rms) and one pair of ADC 303ax, 2 way loudspeakers, 10 months old. 1 ist $\$ 900$ sell for $\$ 650$ for receiver and sneakers. (both rated as best buys by Consumer Reports marazine) phone 884-5039 ask for Al.

HOUSE TU RENT from llay $1 / 75$ to Aug. 30/75. semi-detached house at 13 JA Weber St. H. Nat. Bridgeport and Weber, close to shonning plaza and bus. RENT - 5250/month. Call 8:5-2238.

## Happy Birthday Laura

Even though you're one vear older And Ricky says you're going srey He hope your nights will not grow colder. Cause we still love you anyway.
Best wishes from Paul, Rick, Ty, Al.

# fictetics 

LORRAINE DEFFCTS TH SCIEFICE
CHEMICALS IU PCOL. TOO MUCH FOR SCIENCE AS SEA-VHORES HANO THEM SHOCKING DEFAULT

Following last week's default by Science, liath Sea-Whores turned the tables and defaulted to the Boob-Tubes in Waterpolo un-action Sunday night.

In a rare and unprecedented disnlay of apathy, Sea-Whores declined to show up for the last game (allowing the Boob-Tubes a victory which otherwise would have been impossible), winding un the season with a 5-0-0-1 (wins-losses-ties-defaults) record (an impressive record considering, the quality of play disnlaved all term).

In the previous week's action Science defaulted to Sea-Whores, mainly because they were unatle to kid-nan enough girls to plav on a Sunday night. Where-unon LIBIDINNUS LORRAIVE defecter to science in an unsuccessful attempt to pick up some/all of the Scientologists.

As a result none of those plantwatchers could stay in their tubes long enough to receive a pass (the waternolo kind) let alone score (also the waternolo kind).

Science coach SANDY YATES commented after the game, "Godतamn you Mathies, you get those pool-attendants to nut so much CL 2 in the water it make us Sclence tynes puke, (a violent chemical reaction???-editor) and then we have to spend as much time fighting off Lorraine as trying to ston you guys from scoring."

The A.C. renlier, "Tough shit!,you guys wanna play, you gotta take what we give you. Besides we couldn't give you Nancy because she has to be on the team with the white hats since she can't see neonle wearing black."
A.C. GETS FIRST GMAL GF LIFE
$\frac{A}{S} \cdot \frac{C}{R O} \frac{G E}{G E}$ BECOMES $\frac{\text { HERO }}{\text { FINALLY }}$


In a tough 3 -game in 2 day schedule last week llath came out undefeater.

In Fridav's first game the Hacks managed to scramble for a tie in the closing minutes of the pame on a sunerb and well-executer goal by SCROCGE. "I Hon't lyon what hamened for sure, there I was nonchalantlv leaning on my broom in front of the onnosition net, trying to hustle this chick, when all of a sudden the broomball comes houncint off the end boards and richochetes off mv stick into the net. It really blew my chances with that broar, I don't mind telling you (slim as they were to start with)".

COASTER nlaver a great game considering the fact that he was recovering from an expensive $\$ 6$ transnlant oneration where his severed arms and legs (see last issue of Mathnews for details) were renlacet by 2 seal flinners and a cod-fish tail. He is still unable to grasn a broomball sticl., but his fantastic diving. saves and his ability to balance the ball on his nose, easily out-1eighs that disadvantare. The oneration seems to have given COASTER several other skills, such as his new-found canacity for raw fish and his ability to nlay the "ilorth-Atlantic squadron" on a series of bicycle horns.

In the following game the Hacks were recruiter to fill in for a team that had defaulted to the SUNNYDALE S!IFEPFRS (heirs of the Sunnydale Sluts and Hose-bags). Even though weary and exhauster, the Hackers beat the Vacuum Cleaners, sorry, Sweeners, 3-2 in a game which the A.C. scored the first and second goals of his 10 year career in Uofll broomball, along with his first-ever assist. It is rumoured that the Hacks are going to have a new election for A.C. (assistant coach) as the current one doesn't seem to be the worst nlayer on the team anv more. SCROGGE was nominated for the position but luckily he hat scored a goal the game before and no lonser had the necessary qualifications for the job. "I puess I'm just lucky, I know what has hannened to electer officials of this team in the nast, I just couldn't face another chainsaw after that fight $I$ had with one last summer."

When asked if she felt that scpnoge's remarks constituted a slur directed towards her, CATHY-X repllen, "As you all know Staff-Sargeant HIABERT-X cleared me of all charges a few weeks ago, but certain neonle have been known to have unfortunate accidents, for example, the old D.C. (dead coach) and until recently the incanacitated A.C. If I were a certain nartv I would watch where I was pointing my words if l knew what was good for me", while her annrentice psycho IRENE was bus" honing a fine edge on a new Rlack and necker battery-operated Skil-Saw.

Rleary-eyed from alcohol polsoning and a tough two-game spries on Friday, the Math Hacks went at it again on Monday nisht at the Naterloo Peonle's Barn and Irunk-Tank, for their final pame of the season, asainst the Sunnydale Vacuum Cleaners. Snurrer on bv threats from CATHY-X, the Prez (JIM LANGER) scored the only goal of the match earlv in the second neriod. Previousiv the Prez had been known as goal-a-game-Langer, but unfortunatelv, he neplecter to score in one of the games on Friday and has since become known as "万/7-of-a-goal-Langer".

RオSIF, our token jock, seemed somewhat surpriser to see COASTER back in net for the Hacks. Then asker by mathNEWS reporter CLARK KENT whether she still felt anv bitterness towards COASTFR she stated, "No, I never hold a grudge". However, Kent renorted that his susnicions were later aroused when he spied ROSIE in animated conversation with a renresentative of Ringling Brothers- Barnum and Bailey Circus.

Stay tuner for next issue's term-end summary and the second lst Annual Edsnl Awards.

## DEFICIT

The mathSoc meeting on Tuesday, February 25, was the first such meeting since the infamous semi-formal. All council menters were anxiously awaiting the renort, or, at least, a report from Jim Langer, who organized the affair. It is interesting, to note that both the treasurer and Jim Langer were absent at this meeting. Questions from rens about the monetary loss were deftly sidestepned since no one responsibility was there.

Both lathematics entries in the comnetitive hockey leagues this term apnear to have locked un nost-season berths by virtue of recent wins.

In 'A' division, Math currentlv holds down second place with wins, 1 loss record in the ten team set-un. Math ' $A$ ' were to face Kinesiolory in a rematch of the winter 174 finalists and fall 174 seml-finalists on this nast Vednestav and a victory would advance them to the semifinals on Sunday, March 9 at Moses Springer Arena.

Math 'A' latest two victories were hard fought 3-1 verdicts over West Alumni and llneer Enpineering. Against West Alumni, nicked bv some "experts" as on of the teams to beat this term, early goals by Dennis llacDonald and John Herklinger staked Math 'A' tp a $2-0$ first neriod lead and West Alumni were held to one shot on the Math net. However, a noor second neriod effort by the locals enabled West Alumni to rally, only to be thwarted by Jim Nichol's empty-net clincher.

Sensational netminding by Engineering's John Rutherford was in vain as liath 'A' clinched a play-off berth in a $3-1$ verdict over the plumbers. Scott Simnson tallied twice for Math 'A' with John Merkilinger's fith of the season being the insurance marker. Bob Mackenzie shone in the llath cage in lowering his goals against average to a creditable $2 . n n$ in 5 leasue games

## * * * *

In 'B' division action, Math 'B' rehounded from their first loss of the season against. Mursing, to thump Lower Engineering 7-1 and move close to clinching a nlay-off nosition. In the 2-1 defeat by Nursing, Ef Lebar scored the onlv poal and Lebar \& Jerry chlemelewski fired two each against Lower Eng. Kim Newman, Nean Hucci and Barry Ashworth also scored as Math 'B' unned their record to 3-1-1.

## IIATILETICS BASKETBALL

Last week co-op ilath and llath llucks lost their games. The llucks loss left them in fourth place but still in the playoffs. Pentagon ousted uptometry 57-37. The big upset last week was Sumer Rats over Kin $A$, creating a 3 -way tie for first place in the Sunday $A$ League.

In Sunday. Pentagon, Summer Rats and Kin $A$ all won, meaning the deadlock had to be solven by the points spread throughout the season. When the dust had settled, $k i n A$ was on top, followed by Pentagon an Summer Rats.

Unly 5 iluckers showed up for the game against Suminer fatas. The outcome could have been much different had the rest of the team showed. Go-op ilath had similar problems as cantain Chris figures their first win could have been had with the full roster playing. As a matter of fact, he could not field a team and had to default.

This term, there is no consolation piay; it is a single knockout playoff. Plavoff games befin this Sunday and continue for the winners next Sunday and itonday.

Pentagon vs E.S.S.
Kin i vs llath llucks $7: 45 \mathrm{~nm}$. Sunday llarch 2
nm . Sunday tlareh 2
Please practice this week for llath ilucks. Please phone me at 745-3079 if you cannot make it Sunday. If you don't phone I'll be counting, on you.
'B' Hockey Team Clinches(?) Playoff Berth
Team B finished their regular season tonight on a winning effort, beating favored Conrad Grebel by a score of 6-3. This win , olus the Sunday night slaughter of Engineering ( 7 to 1), should assure the team a playoff position. They finished the season with a 5-1-0 record.

The weekend triumph was accomplished thru sheer offensive might with less than 12 shots being directed at goaltender Ed Girabb. Ed Lebar and Jerry Chimo each racked up a pair of goals with Jim White, Kim Newman and Mr. Mucei adding singles.

Conrad Grebel, who were favored to win the league championsilip, got off to a fast two roal lead but fell apart under the B's patented comeback rally. Ed Lebar scored from every angle possible to pick up a HAT TRICK (that's 3 goals). Chimo potted a pair and white added the other.

The team could po all the way to a championship given a little moral support. Any and all playoff times will be listed outside the Lounge, so if you've got the time let's see you there. Lenny, Hel and the gang put on a great show. Don't miss it.

|  | Math | 'A' Sco <br> (League |  | a ders |
| :---: | :---: | :---: | :---: | :---: |
|  | rip | $\mathrm{G}^{\text {a }}$ | A | PTS |
| erkilnger | 5 | $\square$ | 3 | 3 |
| allon | 5 | 3 | 5 | 8 |
| impson | 5 | 3 | 4 | 7 |
| ilhelm | 5 | 4 | 2 | 6 |
| i chol | 5 | 1 | 4 | 5 |
| reatrix | 5 | I | 3 | 4 |

## MORE

## DEFICIT

The meeting got underway with a report from mathillus stating that the newspaper will be (is) overbudget if it continues to be produced. If published until the end of term mathiJEWS will incur a deficit of 300 to 400 dollars.

Peter Lee then gave a report on anti-cal.
Fed Rep J.J. Long felt that althourh MathSoc is "under financial duress" it should donate $\$ 200$ to the llike lloser fund. The motion was tabled until the account books could be scrutinized.

An election committee was formed by Steve McCabe, Howard LeBlanc and Gary Prudence. Elections will probably be held llarch 19.

Joe Carpenter asked for innut on whether President llatthews should be appointed for another term. Joe is on the University of Waterloo Presidential Search and idominating, Committee.

The next meeting will be held larch llth in IC1056.

## the PHANTOM returns

Take note all neatness freaks and/or people with neatness crazy markers for their computer assignments.... There are programmes available on the Funnybun for neatly formatting both ALGOL60 and FORTRASH. The Fortran one is SYSTEM?"FORM" and is written in Fortran. The one for ALGOL is called "SOAP" (Simplify obscure Algol Programme) and naturally is written in ALGOL. This suggests several possible projects for the computer science club (perhaps an ALTRAN formatter in ALTRAN)...

As a point of interest it is noted that there is a version of WATFIV around with error messages in Italian.
.. We've noted that some people have misinterpreted the words of that great mathematician who is well liked on the fifth floor (Rene Descartes): "Cogito ergo sum". It seems some people have deluded themselves into belleving this means: "I think therefore I am". Actually, anyone familiar with Descartes clear and distinct way of expressing himself would realize immediately that this is his way of showing the universal nature of mathematics and the perversity of Artsies. It should really be read: "I think therefore I ADD".

It might be noticed that both programmers of WATIAC \& WATMAP have now permanently left the university...anyone who finds a bug now may be asked to fix it themseives...

Speaking of unreal assembly languages here are some mnemonics one might find in an EIS-BOX (Extend Instruction Set - pronounced ICE-BOX which is probably where they belong):
rdi reverse drum immediate
bcr-backspace card reader
bsc-burst selector channel
pd-punch disc
po-punch operator
rwd-rewind disc
cc-chew card
rig, read inter-record gap
ed-eject drum
epn-erase punch
sdb-select drum â beat
sd-silip disc
ccp-chain command to post
slp-sharpen light pencil
bcs-branch in channel $: 8$ swim
ii -inquire and ignore
rt-reduce thruput
cd-create data
htc-halt tape acut
rpm-read programmer's mind
rwr-rewrite record
dve-divide $f$ conquer
xor-expulsive or
br-byte \& run
crn-convert to roman numerals tpd-triple pack decimal
bpo-branch on power off
bb-branch on bug
la-illogical and
cpb-clear parity bit
tpo-turn power off
tpn-turn power on
xno-execute nooperation
mbd-move \& drop bits
xop-execute operator
shf-simulate hardware failure
hef-halt and catch fire
lia-load ineffective address
pcb-patch core box
tpv-transfer nsw overflow
alp add logic to programine
acp add character to programmer
A special farewell to the last Argonaut
with hopes that he liked his cookie...

## HOW LOW CAN YOU GO?

Spring is approaching and its time to start thinking about income tax and, of course, deductions.
Une of the most important deductions for a student is tuition fees. The following are some important facts about tuition fees.
(1) Unly the student can claim them as a deduction. So regardless of who paid your tuition only you can claim those fees as a deduction.
(2) Receipts must be provided to back your claim. If you can't find your receipts, Financial Services will gladly provide you with copies (at $\$ 2.00$ per copy).
(3) The money you nay to $U$ of $U$ at the start of each term is not all deductable. In Co-op liath, for example, out of approximately $\$ 400$ only $\$ 372.70$ is deductable. So look carefully at your recelpt before filling in your tax form.
(4) You may claim tuition fees for any period or 12 months or less provided that the neriod begins in the taxation year. In other words, for the 1974 income tax return, you will be unable to claim any tuition fees which cover a period before January 1, 1974. The above rule can be used by co-op students to help level out their income by pairing each work term with an academic term.
For example, if you had two work terms in 1974, you can pair one of the work terms with the summer academic term. But how do you pair off the other work term? Simple. You use the present winter term. In other words you deduct tuition fees for a 12 month period beginning in Nay 1974.
Consult the charts with article for further information on the best way for you to use pairing.
(5) Tuition fees can be deducted only once. For some reason the federal government frowns on attempts to deduct the same tuition fees twice. So much for tuition fees. Next week I will attempt to deal with the OHTARIO TAX CREDIT.

## Prof ANTI

To the editor of mathNEWS:
I am writing an answer to the author of ANTI-PROF which anpeared in issue 7.5 of mathNEINS. I am one of the professors who is teaching second year algebra, and it may be that you are in my class. i might see the consequences of my words.

First of all, anyone (even a prof) can have a bad day. Un this point everyone should be lenient. Certalnly you expect as much when the prof makes out the final mark at the end of the term if you have a sequence of consistently high marks marred only by one low one: But I doubt that this is your problem, because I think that you would not have felt compelled to write if there had been only one bad lecture.

Secondly, for the sake of argument, I shall assume that you are not so completely lazy that you have neglected to learn the definitions, and as a consequence would not be able to understand any lecture on the subject.

Host of the professors in this faculty are very much interested in communicating their knowledge to students. That is why they are here. I know this from within myself and I know this of my colleagues, because I often hear conversations about how better to nresent one topic or another. There is also one other piece of evidence to support this clalm: that is the relatively low salaries pald by the unlversity compared to industry or government.

If you have difficulty understanding what is going on in class, communicate this to the prof. Durling class, ask for an explanation of the point or a clarification of an obscure remark. Or, after class, tell the prof that you do not understand, that it seems incoherent, that you can not see the relevance, or that he or she is covering the material too fast. If the problem is a foreign accent, ask the prof to repeat or to speak more slowly. I am sure that the teacher will respond, because no one is more acutely aware of the problem than the teacher relationship with the prof, you have the ontion of discussing the problem with several people: the prof in charge of the course, the undergraduate officer, the chairman of his department, or a deán. If your experience is not isolated, something, can be done, but before the University can take any action, someone has to know that there is a problem.

A letter to mathiJEVS may make you feel better, but it is no way to get action. First, the teachers are not going to change as a result of it. They are all walking around saying, "It must be Professor Dingleberry down the hall, not me, they are writing about this week." Second, the administrators can do nothing. They do not know if the letter represents a crank, a single isolated incident, or a legitimate problem. Yodar Critch


Note: Letters appearing in this cciumn represent the opinions of our readers. mathillus welcomes your criticisms, comments. suggestions, etc. All ietters should be signed, but, if requested, a pen lame will be used.

## Student ANTI

to mathnoos.

I feel sorry for the person who wrote the article AllTI-PRUF who was complaining about his second-year algebra professor. He must have somebody else besides Prof. nickey, because I do, and $I$ go to all his lectures and I think that he is great. llaybe the writer of ANTIPROF should shop around.
"I have a good prof"

## Dean ANTI

## Dear mathiJEISS:

I was sorry to read in your issue of Friday, February the $14 t h$, 1975 , your contributor's letter in "sound off", since this indicates once again that many of the students in llathematics are not aware of what should be done if they attend a class which is very noorly taught. What they should do is to complain to elther one of the ufficers of the Math Society. to a Department Chairman, to an Associate Dean, or to myself.

The implication contalned in your contributor's letter that the llathematics Faculty doesn't care about poor lectures simply is not true. Whenever a complaint is received, either from a student or from llathSoc, it is Investigated and followed up. Also, a record of the enquiry is kept in the files of the Instructor concerned. In addition, the AntiCalendar is looked at quite carefuliy by the faculty members and, more importantly, a Professor's teaching ability is taken into account when promotion, and salary increases are considered, in order to encourage sood teaching. Therefore it is difficult to see what more can be done administratively, unless students let us know when problens arise.

## U. F. Forbes <br> (Dean of Math.)

## Cornucopia

The following quotes are taken from the Royal Bank of Canada's February newsletter. Too often we say "in the beginning" and imagine that we have pinned down a vital noint from which everything else follows. But before long, we find ourselves asking: "what was there before the beginning to make it possible for the beginning to begin?
llathematics is referred to as "the queen of sciences" because it enters into and governs almost every other department of knowledige. It is the systematic treatment of magnitude, relationships between figures and forms, and relations between g̣uantities expressed symbolically. Plato wrote that among all the liberal arts and contermpative sciences the science of numbers is sunreme. Asked why man is the wisest of animals, he replied "because he knows how to count."

## WHY NOT?

This week we will deal with comments coneprning the question:
Nould you work for mathNEINS?
NO - TOO MUCH WORK ALREADY!!!
take a break---join us.
NG - IN ANOTHER FACOLTY we'v had neonle from Integrated Studies.
Sclence, Engineering--even Math.
NO - I TAKE SEVEN SUBJFGTS IH 2A AND GO A'IAY EVERY NEEKEND - I ALSO DCN'T HAVE:
THE STRONG DESIRE
for what?
NO - LIVE IN GUELPH! BIJT WILL IN FALL.
glad you're moving, just for us
glad youre moving just for us FREE AHD IN CLASS WEDNESTAY MORNING
If only I were so lucky
YES - IF I HAD THE TIME
see nrevious comment
HO - OTHER IHTERESTS (I.E. BESIDES PASSIMG COURSES, SOPIETIMES) DO NOT
COINCIDE WITH AMATEUR JMURNALISM
journalism? what journal ism?
NO - NOT INTERESTED IN WORKIVG FOR A CLOSEN SOCIETY
huh? what closed socirty?
NO - DUE TO VARYIMG NATURE OF ASSIGNMEHTS - LIKE
TO KFEP MY SCHFDULE FLEXIRLE
mathyEUS is very flexible
NO - COULDN'T BE A STEADY BECAIUSE GF MAMY HEAYY ASSIGNMENTS AND I CAH'T HRITE! (DECEHTLY)
you don't have to be a steady, many of our staff are not

NO - INVOLVED IN OTHFR ACTIVITIES
Involved in what-- we'd love to knove
NO - NO TIME
time stands still for no one
NO - GENERALLY IATY ( AS MOST OTHER STUDENTS ARE ALSO)
what makes you think math'JENS staff is different
What makes BIT I'M A GRAD AND MATHSOC. HOULDN'T GIVE
ME AN ANTICALEHDAR ST I DTH'T
we'll give you one
HAYRE - I HAVEN'T INN A GRIDHORD YET. AFTED I DO, I HILL
tough luck, Mark
HI - 33 SB ASSIGMMEIIT DUF WEDHESTAY MORPIIUG (CLASSES 8:30 to 12: in)
oh,well
NT - DN MY ASSIGNMENTS UH THESDAY IIGHTS
sure
NO - I'M ALREADY ACTIVEI.Y PARTICIPATING I'I UNIVERSITY ACTIVITIES
why don't you write an article about vour activitles
NO - HOT ThF TIME
too much TV
NO - I DON'T FEEL I HAVE THE TIME, IF YOI! DC ALL THE PONER TO YOU
thanks for the power
HO - TOO MUCH IURRK ALREADY!!! SOME TF IIS ARF WRITERS, CREATIVE., FTC... AND SCME GF US ARF IICT AND LAZY(PE!)
you think you're different
YES - IF THEY KEPT NFCEEIT HOURS
6pm to 7am is not decent? actuallv most of our staffers come out for a few hours only
YES - I ALREADY D
YES

This issue of 10 (?) napes is nroduced on camnus by an all-volunteer staff vho are resnonsible(?) for the contents therein. Printed at Graphic Services(who do a freat job). Financial support comes malnly from mathSoc. If you have difflculties retting a cony its because there are only around this zime.

We filiped a few coins and it was 19 to 12 not to have an issue next week, so we alnt. lle wll co to press on the following dates....march 11, march 18 and nerhans march 25 . For those of you who are confused mathilells never sald it was foing bi-veel:ly(every other week). We only said that we had ceased to be a weekly. He are nov overbucget with this issue. In 1973-74 mathincus snent about $\$ 100$. an issue. Last sent ve were riven a budset of $\$ 1600 . . .$. this is nur 17 th issue.....we mill leave the the mathematics with you.
So much for our financlal woes... on to other things...Dñf neriod ends llarch 4th... library building will be open until 2am weekdays starting liarch 2nd...lishthouse semi-formal...for a loan went---a galn; for those who did not---a loss. Rurnour has it that the Federation made mathe semi-formal to heln ease the shock of the seml-formal deficit.....CpD has offered to may hear something new in the future mathSoc offeregistration starts snon....a list of nch li....those nonle who created grids see grid comment.

Now some imontant events....this week the rhantom returned as did burloaf....the rierson who typed up the nre-registration article got so frustrated that he deleter his fi... Therisa kardos did not one paragranh on pre-reristration....fond of the weel were munch kar observer this veek was gary shov....mathletics sunnlied by ra/nf/acn....fictletics by fins.........correction to the last masthead prudence who stayed around so he could recover was jowo carie in and did some work even thouph its--->EL EUIllATICI.....our wonderman of the weer was jumber of active bodies decreased by f.e.c7! he planned to leave early(540am)........at niolirs the number nf act outside the mathbuildir......
 leaving onlv the back rape to fifi...the edo Granhic Services by 28901400 1530?:
Snecial thanks to those who helned in various ways: sary,judy, rregr, nat and (hrant fiohnny).
This week we vere....naul lear; our artistic director PAMDALE Smilinr meDCLCALL; PCTE timeless and rhymneless RAYMHAM; lincwman(who was onerating on aspirin \& contact c); GARY(feeling acclaimed)DRYDEil who was aided and atetted by Scronce; MPDILLAN(feeling frustrated); JJllili (who had freat staylng power ; RUHIPFIIER (who decided to continue an all-niter he started monday?);ACPALIDHøR(the manle leaves?); INGRID who $\because a s$ famished SPLETTSTOESSER; two characters who inputed, corrected, roffed as well as cut taned, titled until 0500 hrs were DON HALL and STEVE RISTO; and layout renortér DENNIS MULL!l!. We vere to tired to chasc the bun this morning.

