jjlong on Food Services and C&D

I'd like to state my position regarding a so-called sub controversy. There is a feeling to be gathered from the statements of university, union, and federation personnel, mainly reported in the chevron, that Math Society is anti-union. There is no general society policy or practice that would suggest an anti-union official stand. Indeed Math Society is an integral part of the Federation which itself is a union in all but official name.

I can say from personal experience that Math Society's relationship with the unionized custodians, both in the hallways at night or after pubs, is very good. This is understandable since Math Society officials were amongst the hardest fighters in the attempt, which eventually succeeded, to bring back the unionized custodians to the Math building after a year of low quality non-unionized staff.

Food Services may have a point with the illegality of the stands, though one would have to trace Federation Administration and Federation-Society agreements over the past few years. It is puzzling however that Food Services refused to supply these stands years ago. At that time no one threatened to close these stands down. The C&D stands, especially in Math, have over time become a very valuable service to the students. They have turned profits that have been used to benefit the math student-at-large. Perhaps due to mismanagement, perhaps due to other factors, Food Services is suffering from a large deficit. Maybe they view the C&D stands as a financial gravy train.

If one was to total up all the profits of the stands on campus, after expenses, one would not come even close to the amount of the Food Services deficit. If the stands closed Food Services would not recoup as much of their business as they may think. If they were to take over the stands they would probably not have as high a profit as the presently constituted coffee stands.

math NEWS

Toronto (WATERLOO) Pubs

As we all turn into the home stretch to wind up the term mathNEWS would like to take this opportunity to remind people of the MathSoc-sponsored Toronto (Waterloo) Pubs.

The pubs are a weekly event, normally wednesday evenings, at which waterloo students gather to drown their sorrows and/or dance/sing/getrowdy in good company. Principally math & n-jineer co-op students attend, but all faculties are represented, as well as grads, regulars, and non-students.

MathSoc sponsors a telephone in Toronto for information as to "this week's pub" — having a 1 minute recording available 24 hours a day. This phone number changes every term as a new organizer appears in town, but it is always listed with Information (411) under the name of Hugh Hexad.

The present organizer is Gregg Andrews, the HOTLINE 423-8913, and in the fall term (starting the end of August) it will be Bruce (bun) Mills. Bruce's HOTLINE number has not yet been assigned but will be installed by the end of August. When it does become available the operator will refer you to it if you phone the old (present) number.

The first fall term pub is being held at Nickelodeon on Yonge St. at Dundas St. on Wednesday Sept. 1.

If you do get a free wednesday in Toronto please feel free to call the MathSoc HOTLINE, trundle on down to the pub, and introduce yourself!

This is it! THE last mathNEWS of the term. This also means this is the last MathSoc meeting to report. It was good of all of you to attend so diligently end regularly (at least consistently).

Anyhow, here's how it went:

*The new t-shirts with the old designs have arrived. They come in four colours, powder green, light blue, yellow and beige, and one price: $2.25.

*The beach party on Sunday July 11th was an unqualified success. The weather was fine for the most part and a large crowd gathered to enjoy it.

The initial organization was rather chaotic, but as the day progressed things were running smoothly. A lot of hungry people were fed, seeing as we went through 477 hamburgers and 350 hot dawgs. There were no real unpleasant incidents, except a lot of people were chanting 'Disco sucks'. Poor demented people.

*Time for the Infamous Frosh Issue (which is sent out to all incoming math). Deadline for submissions is the last day of classes. Any and all articles will be appreciated. Push your department, write, write, write!!!

*The President of the Federation of Students, the illustrious Shane Roberts, dropped by the MathSoc meeting to discuss a couple of topics:

University of Western Ontario has a magazine called 'Campus Sports' all about campus sports (how about that?). Shane wanted some feedback as to whether this type of magazine would have any opposition on this campus and at WLU. We replied in the almost negative, 'Why complain?'.

Shane also launched into a lengthy discussion about the C&D situation, which is reported elsewhere in this issue.

*On Math day, Saturday, July 17th, a U of W student, Ken Rex injured himself severely at the Erbsville Kartway. In light of this occurring at a Math sposored event, the MathSoc council has ratified the spending of some monies to show our sympathy and our hopes that he has a speedy recovery.

*I would like to take this opportunity, on the behalf of me and my fellows, to thank you all for your support during the acclamations of the 19th. Those ratified to council positions were:
2a reps:
  Andy Mueller (alias AKFM)
  Dave Gillett (alias the Trob)
  Bruce Mills (alias bun)
3a reps:
  Steve Risto (alias Sir R)
  Mike Hollosi (alias Mike Hollosi)
*Thank you again for your enthusiastic support.

That's it for this term, people. I'd like to give a special thanks to: Trish, Core de Whore, Cat de Rat, Dr. Boz, Rovert, Nadine my favourite scoops/waitress, Snail, Mab, Ghost, Hexad and others too numerous to mention (you know who you are) for making this a very special term.

Have a good work term
    See ya in T.O.

bun

C&D

If Food Services were simply to supply subs to the stands then sales would drop and the profits, if any, would not be worth the effort, it seems to me.

Some of the alternatives outlined above would seem to suggest an increase in the Food Services deficit while other alternatives suggest a miniscule deficit decrease. This means very few union workers would be hired if the present system is changed, in fact more may have to be laid off to cut the deficit. It would seem that the union could very well lose by a change in the present arrangement. Yet they seem to be under the illusion that the students are against them. If students and staff can work together, instead of bowing into the administration and fighting each other, we both can find a beneficial solution. We have to live and work with each other so should try to co operate. Then we can maintain a service of benefit to students, staff, and faculty on this campus.

JJLONG FED REPORT

The last Fed council meeting featured an unusual format. Along with the usual two day meeting, a series of eight workshop sessions on various matters such as the CC Pub, Federation bylaws, financial policy, student aid and un-employment, the housing situation, the chevron and various boards. It was a good idea yet its implementation could've been better. Fed meetings should be shorter and occur more often. This can keep council in better communication and reduce the drudgery at meetings. Also it is best not to cram so many workshops into the same weekend as people need some time to relax.

The meeting dealt with the usual number of minutes and executive reports. The hiring (finally) of Franz Klingender was ratified. Bruce Rorrison gave more details on orientation. Council allocated $1100 to Pre-orientation this year as a record turnout is expected. Money was budgeted to again set up a student housing office. Ralph Torrie's Board of Publications received $2000 to set up a reading room. In all, about $3500 was allocated from unallocated funds.

In the workshops suggestions came out regarding more chevron autonomy and a Federation publishing house. It was agreed that Creative Arts and Entertainment should have broader based membership on their boards. Workshops discussed ways of publicizing the student housing problem. Also discussed were ways to better deal with long-range financing. There may be investment funds and possible fee increases in the future. Also

people thought either a standing committee of council or a Treasurer's finance board should deal with such matters. Bylaw review centered around the set-up of bylaws. Arguments for centralization and decentralization were given. Dave McLellan suggested a 200 member Council Assembly. Personally I suggested more elected executive. Perhaps the Federation should not be as central as I originally proposed, but I'd like to see perhaps 2 or 3 less executive positions and an elected Vice-President.

At the meeting the biggest controversy concerned the CC Pub, its name, its management, and PMAC. Tempers flared at times as people felt that PMAC had no "teeth" and were dissatisfied with Art Ram's management of the CC Pub. Two councillors resigned from the committee in protest to the inclusion of Management personnel on PMAC. Council decided to no longer have management reps on PMAC. Thus when council had to fill the vacant seats on the committee the two resignees were re-appointed as there were no others interested. Council had motions before it to add "teeth" to PMAC by dropping the "Advisory" and giving it the power to set policy. These could not be voted on as quorum was broken when Franz Klingender, present in the meeting room for a quorum roll call, did not answer the roll call. Since quorum was called, council could not vote on a motion to rescind the Orange Bombshelter name. So opponents of the O.B.S. including your math rep are working on a petition to call a campus wide referendum to decide the pub name.

Special Frosh Issue
of mathNEWS

Once again, the Math Faculty is sponsoring the production of an issue to be sent out to the math frosh in August.

All persons and special interest groups are invited to submit articles. Absolute deadline for material August 5.

Production for Frosh issue on Saturday Aug 7 at noon in MC 3010.
party following

hugh

2

SIRIUS SHADES

WATSFIC will be winding up for the summer with the showing of the film *When Worlds Collide* on Monday, July 26th. It will be shown in M&C2066 at 8pm and 10pm.

STARSONGS 2 (the club fanzine) is nearing completion and should be available at the movie. Estimated cost for this masterpiece will be about 25 cents a copy.

Our next meeting will be at 7:30pm in M&C5158 on Thursday July 22nd. We will be showing 2 short Apollo films. There will also be books available (same as the last meeting).

At our last meeting we decided that henceforth all **WATSFIC** members would be called watsfans. After a brief discussion of other topics the meeting broke up to enable members to purchase books at cheap rates from other members.

VIKING1 sucessfully landed on mars this past Tuesday (the 20th) at 7:53am(EST). A number of detailed pictures of Chryse Planitia (Gold Plain) have been sent back to earth. This marks a new phase in solar exploration. The only other vehicle to ever land on mars transmitted data for only 20 seconds before ceasing to function. That was MARS3 (sent by the USSR) in 1971. After mars, where?

Trob, Letters to the

Dear Trob:

AYE LADS. Note ye well that one Trob in association with the **Anti-Italian Alliance** has threatened the existence of one *"Quentin Vaselino"*. Now trob, surely ye be possessed by deamons and EUNUCHS' evil influence. Quentin and the *anti-irish alliance* will roast yer nookies to zitty cinders, and stuff Ramses covered cigars up yer nose. There be nae escape from a *vaselino*. Mr. O'donnell is actually a well-disguised *Jamaican Reggae-disco promoter*. And the same shall happen to ye, Trob. Be warned! A **DENUNCIATION** upon the TROB. Laung live the *anti-irish alliance*. And death tuh that hipfner lad. He's nae Scottish, ye know.

-Angus MacVee
Leader of the secret
anti-irish alliance.

Dear Angus:

I was so sorry to hear about friend Quentin's *accident*. Be warned! Some of our members do not restrict themselves to Italians, but also tend to express themselves forcefully to friends and contacts of Italians.

Speaking of which, nobody seems to have seen friend Antonio since the night a few of our boys paid him a visit................

Exil Q. Trob

P.S. Does "zitty cinders" imply that a certain Sergeant is with us no more?

Dear Trob:

Aye, lad 'tis a rather wild and wooley dream thaet the peppered zit be a corporeal entity nae more.........

-Angus

Dear Angus:

You could warn your *friends* that the **Anti-Irish Alliance** has branch offices in Acapulco and Lebanon.

Exil Q. Trob

Dear Trob:

This is in response to your article on the WATPCF (WATCOW) computer. I hope to clarify some points which your review did not cover completely.

1. The machine is a PDP-11/10 with 28k usable words of memory and one RK05 disk drive.
2. WATBOL-11 and WATFOR-11S are run under RT-11 while MONECS has its own built-in operating system.
3. A WIDJET system has not yet been implemented for the WATCOW computer. There are plans, however, to have a single user WIDJET system available as part of the package.
4. Your article contends that putting the processors on the same machine as the editor would cause editing response times to skyrocket. I would counter this with the fact that since only one job is run at a time, there will always be a fair amount of CPU time available to service the editor. Response times would admittedly be slower, but I do not think you'd find CHANGE commands taking 60 seconds to execute.
5. Finally, I would like to see something nice said about WIDJET for a change. The BURLOAF column says that it isn't that good; it certainly isn't that bad either. WIDJET is a very good alternative to Debug (it was not meant to compete with Honeywell), and I much prefer the former over the latter, even on bad days. If you think it's too slow, why don't you ask the Computing Centre to dedicate half the /360 to jobs run from WIDJET?

I can think of one advantage of WIDJET which even you WIDJET-haters would probably agree with. It wastes a lot less paper than Debug does. And that has to be a good thing for all of us.

d.a.s.
Computer Systems Group

Dear d.a.s.:

Yours is certainly one of the longer communications I have received. I shall try to deal with it point-by-point.
1. My information said WATCOW had 8k. Sorry about that.
2. I don't feel this requires any comment.
3. Nor this.

4. The simple fact is that editting is pushing WIDJET to its limit now. Effectively, putting processing on will mean that the CPU will alternately edit, collecting jobs to run, and executing waiting jobs. How you work it is not important; response time will suffer.
5. For once BURLOAF and I agree; and he doesn't even have to use it! From your grammar it is not clear what you prefer; the obvious but illogical conclusion is that you prefer Debug to the Honeywell. I don't think we have a /360; do you mean the 360/75??

As far as speed goes, I would like to relate something I tried today. My tutorial was from 12:30 to 2:30. I spent the time from 12:30 to 1:00 finding out what the problem set was and how to use the WATFIV random number generator. From about 1:00 to 2:00 I typed the program on the Honeywell and got it punched in KP=29 format at 2:14. I carried it to debug, typed a $ACC card, and ran it twice. Despite problems with the Debug printer, I had a finished printout for submission by 2:40. Total elapsed time: 2 hours, 10 minutes. Number of runs executed: 2+1 (to punch) Pages of paper printed: 6

The comparable assignment on WIDJET would take "at least 4 hours" (a user I talked to, lacking my expertise(?), estimated it would take her 10 hours on WIDJET!), probably involving half-a-dozen runs and printing an extra full-page header for every printout. Without page editting (not something $1500 terminals are designed for!), it is still easier to debug a printout.

The implication:
The use of mini-computers for editting of batch jobs is a good idea; batch systems are still fairly common in the "real world". However, even a good idea like this cannot excuse one from concern for good system design and software. Multiple small systems are definitely preferable to overloading any single system. And finally, WIDJET is by no stretch of the imagination a system for people trying to learn the right way to design a system.

Exil Q. Trob

P.S. Readers may feel I have been undully harsh on WIDJET; but despite the technicolour praises of it rising in chorus from downstairs, it is simply not all it was intended to be or all it should or could be.

Exil Q. Trob

BURLOAF

Welcome to Burloaf, the column that is full of features that are unlike all those other features of mathNEWS that are different from the ones in this column.

The roving Action Burloaf submits the following report...

HACKERS SCORE TACTICAL VICTORY

On Thursday, July 15, Science and Arts held a pub that featured "disco - rock". (Actually the signs were printed to just mention disco, but the word rock was added as an apparent appeasement to the public.) Now, a fair number of the Hacks enjoy things that are pleasures to normal people, and one of these things is a pub, so a few of these types showed up at the pub. However, although Hacks may differ on their attitudes to pubs there is one thing they unanimously agree on, and that is the fact that disco is the Curse of the Sound Waves.

Having already attended umpteen pubs where all that was offered as music was disco, the Hacks decided not to take it lying down. A plan was formulated. One of the hacks fetched an album that had Good Music ("Red Queen to Gryphon Three" by Gryphon, to be exact). He then went to the DJ (music was by Ghost) and requested that he play the album. The DJ was none too receptive and snarled at our Hack,

"Where's your T-shirt?"

"What T-shirt?"

"Your 'disco sucks' T-shirt!"

Anyway, the guy was finally convinced to play the album. He played 30 seconds of music and then cut it off. Suddenly the Faculty Lounge (scene of the pub) echoed with much booing. (Mainly by the Hacks applying well known AIA tactics.) The DJ relented and played a complete song off the album. A few of the hacks went up to the DJ, trying to look like innocent pubbers, to ask about the album and comment on how good it was. However, this wasn't necessary it turned out, for several other pub patrons not in on the Hack plan went up to comment on how they liked the music. It even turned out that a couple of these people owned the particular record.

So it seems that the pub was not entirely populated by disco-maniacs, but that there is a not insignificant number of people who like good music. In fact, a self-professed disco liker said that Gryphon was good. Yes, the masses are not *all* disco freaks as the music providers are trying to brainwash us into thinking. Although this wasn't a great victory (we only got about 10 minutes of good music in a multi-hour torrent of disco), it marks a tactical victory, for the will of the people has broken through the wall of imperialistic bourgeois (the AIA's better at thinking up these words) sound producers

of this society. Like the tiny leak in the dam, it will grow until one day people will be able to attend pubs free of the worry that they will go broke buying booze trying to drink enough to kill the sensation of the disco. (Maybe that's it: Ghost receives kickbacks from distillers in order to increase booze sales in this way.)

This pub incident is just part of the anti-disco campaign that is being waged by the increasingly militant Hacks. Future plans call for things that border on terrorist activities — a scheme to hijack a disco lounge is already being devised.

(A remark: The 'disco sucks' T shirt alluded to by the Ghost DJ was not a casual comment — an organization independant of the Hacks has had a supply of above mentioned T-shirts made up.)

The Canadian Radio and Television Commission and the Liquor Control Board of Ontario must have a little competition going to see who can be the most nuisance to the public. For example:

The LCBO has always been making itself a nuisance as far as the Oktoberfest celebrations here go. One year, they decreed that if beer was advertised on the Oktoberfest posters, then they wouldn't give licences for beer tents. Another year, they decreed that "beer halls" were to be called "festival halls". Apparently there are already problems with this year's celebration because the LCBO is finding yet other petty things to enforce.

Not to be outdone, the CRTC are working on a plan to move all musically oriented stations (both AM and FM) to the AM band, and use the FM band for commentary and news-like shows. This is just great — using the FM circuits designed for stereo (and quad) reproduction of high quality signals for voices, something which only requires minimal quality to be useable, and using monaural AM circuits, which usually don't give as good a signal (not to mention the AM band's inherent proneness to noise) for material that requires a lot more accuracy in reproduction to be fully enjoyed.

A few years back as a summer project, some students made and sold lighters which were made from used beer cans. The beer can was filled with sand and a lighter mounted in the top. The project helped students make some summer cash while giving experience in running their own enterprise, and it recycled a few beer cans. Good stuff? Yes — until the LCBO saw fit to step in and say "No more! It's free advertising for the beer! We can't have that! If you want to make lighters, use Coke cans instead."

Just a few days ago, the CRTC came up with another good one. Cable companies will not be allowed to carry American FM stations. In the future,

you'll turn on your FM, and if you can find a decent station, it'll be playing 30% Canadian things — usually stuff of dubious quality. (I can almost hear them chuckling in Ottawa: "We'll get those shmucks listening to garbage and liking it yet!")

Randall McDougall sent us a letter recently. In it he mentioned how, when a University he was at started selling cards rather than giving them out free, card wastage suddenly dropped and things were a lot cleaner.

However, at U of W, we are implementing the best solution of all to computer card wastage. The scrap is eliminated by eliminating cards in the first place. It is generally accepted that cards are yesterday's way of doing things. Time sharing, while drastically cutting down on paper wastage (both in the form of cards and listings), also drastically improves efficiency of computer users (assuming you have a decent time sharing system). The big reason antiquated batch systems remain is because companies like IBM haven't finished milking them for all they're worth. (Why do something better if the worse way makes far more profit?)

Given a whole number, we define its proper factors to be all factors of the number less than it (e.g., 12's proper factors are 1, 2, 3, 4, 6.). Adding up all the factors gives us a new number, let's call it the factor sum. If a number's factor sum is less than the number, the number is *deficient*. There are lots of these numbers, examples include 8, 10, 15 and all prime numbers. If the factors sum to exactly the number, the number is *perfect*. Perfect numbers are rather rare, I think less than 20 are known. If the factor sum is larger than the number, the number is said to be *abundant*. Abundant numbers are fairly common: 12, 18, 20, 24 are all abundant. While we can find oodles of small even abundant numbers, an odd one is not found. In fact we have to go all the way to 945 to find an odd abundant integer.

Because of it's elusiveness, this week's INTEGER_OF_THE_WEEK is:

945

— the smallest odd abundant number.

This week, special thanks go to **Maureen** without whose help this column would have still been as dull as it is now.

Disco Rebuttal

Dear mathNEWS:

Your last issue of **mathNEWS** (which is very likely the best publication on campus!) had a few comments about disco music. I thought you may wish to reprint the following article by Nancy Christopoulos from the March-April issue of *Alternatives to Alienation*. This excellent publication may be reached at Box 46, Stn M, Toronto, M6S 4T2.

* * *

You don't have to like sex to like disco music — but it helps!

Thanks to the gay culture, who got it from Motown, who got it from rhythm, blues and jazz, who did it in the 20's who learned it from the black slaves in America, who inherited it from their African ancestors — some sensual and primitive music still exists today.

The instruments run from basics — like drums — to sophisticated sounds like violins. The words will never put you in head. *"Do it Any Way You Wanna"*, *"That's The Way I Like It"*, *"Love To Love You Baby"* and *"Tiger Baby, You're Driving Me Crazy"*. This kind of music is hard to dance to without moving your body. You feel silly *not* being sensual, and that's *really radical*.

However directly or indirectly we relate to the music and however real an- or symbolic our response, disco music does touch a lot of people in western society. And, it touches on sexual/sensual feelings.

Our culture produces people nearly devoid of any feelings, particularly sexual. Disco music helps a lot of people feel alive; makes them move and want to reach out to other people.

The way people respond to disco means that feelings still exist in our culture. Some people are still struggling to be alive and spontaneous.

The *real* revolution will come from each of us liberating our feelings from the oppression inside and outside us.

* * *

So you see, there is another way of looking at disco music!!

Sincerely,
china

& Disco by Ghost

Hi, here is another in the continuing ra of DISCO at Math pubs. However, s article presents the alternative to *DISCO SUCKS*. Foreward: Cogent arguments contain and are based on fact, not elegant pursuasion techniques, so be wary: analysis is a tool not to be overlooked.

To begin "Brass Tacks", although a cliche, suits this situation, as you require the facts. At the core of this problem is the purpose of pub-goers. Pubs -definition- a social gathering with multi-purposes such as conversing, drinking, and dancing. Hold it! Did someone say dancing? You bet. Now what type of music is good dancing music? Beach Boys i.e. rock 'n' roll, Eagles i.e. rock, Tavares i.e. disco. Like it or not disco is good dancing music and the opponents, by claiming the contrary only portray their narrow-mindedness & inflexibility. It is purely a subjective judgment. Disco remains good music for dancing and to re-iterate, dancing is a vital component of a successful pub.

If the opposition to disco is being presented by rock 'n' rollers then a valid argument exists. 100% of the math pubs have been disco-rock and I, your summer social director, apologize for this oversight. I blew it and admit it. However, to the best of my knowledge, the past arguments have been put forth by 'acid' rock fans. Here lies their downfall. They have no basis for argument. Playing of 'acid' rock contradicts the vital dancing purpose of a pub. I should inform the readers that even though I like disco, my foundations are in rock and I can enjoy 'acid' rock as much as the disco-haters. Nevertheless, pubs are not concerts. If they wish to have a rock concert, come visit my rock collection as I'm sure I can satisfy many of their tastes. Acid rock had no place, has no place and hopefully will have no place in pubs. If the pub goers wish to have an evening on their butts listening to Pink Floyd, Led Zepplin, Genesis, Yes or whatever (all good bands i might add) this is easily accomplished, but I doubt that it would be well attended. Aha! attendance at the math pubs further substantiates the case for disco-rock. All math pubs have been well attended, and I might add by certain acid rock fans, who, if they want to oust disco have the option of boycotting the pubs.

FACT: Thursday July 15th there was an Arts-Science pub. I was approached by some attendants who presented me with their album and requested that i play it. This album was by GRYPHON and for those who know not of this group, they indulge in progressive rock. I knew what type of music it was (ie. non- dancing music) but since the pub was 90% empty I filled their request. No sooner than performing this fatal act I was approached by a pub organizer with the following request: "Could you play something a little bit more danceable?" That's odd, don't people attend pubs to sit and saturate themselves with acid rock? I rest my case. **DANCING MUSIC LIVES ON!**

GHOST

P.S. Point in case. Rock 'n' rollers' wishes should and will be filled. Acid rockers — maybe sometime in the future.

Salutations.

Being social director involves acquiring help without which the job could not be completed. I had adequate aid this term and now would like to salute these workers for their diligence and dependability.

Bun (a party'er at heart, yeah!) Thanks, AKFM and Chris (mr & mrs reliable), Hilary, Anthea and last but not least on anyone's list hexad (consultations plus).

Till Next Time
JD

PROBLEM IN INTEGER ARITHMETIC

It is common practice, when processing dates on computer, to use some sort of a code to record each date. The reasons for this are obvious. A common way of coding dates is to use an eight (or six) digit code such as ddmmyyyy, mmddyyyy, or yyyymmdd, where dd is the day of the month, mm is a numeric code for month, and yyyy is the year. When it is not important to know the first two digits of the year, these digits are often omitted from the code.

Another way of coding dates is to take a base date and, using it as a starting point, assign consecutive integers to each successive day following the base date. For example: If the base date chosen is January 1, 2000, the code for this date would be 0; the code for Jan 2, 2000 would be 1, and Jan 3, 2000 would be 2, etc. Each day has a unique code, and each code a day. For dates previous to Jan 1, 2000, the codes for the days are negative, for example the code for July 23, 1976 is 8562 since it's 8562 days until the base date, Jan 1, 2000.

The advantages to this type of code
1. A signed 5-digit integer records the entire date rather than an eight digit number.
2. An exact number of days between any two dates can be easily calculated given the code for each date.
3. The day of the week is easily computed from the code for any date.

One of the major disadvantages of this type of code is that is relatively difficult to convert dates by hand before inputting them to be processed. Consequently dates are input as ddmmyyyy and converted by computer to a base-date code. Thus remains the simple task of writing a subprogram to perform the conversion.

There are many ways of doing this, which brings us to our problem: *Write a single fortran expression which calculates the correct code for a date given the variables: DAY, MONTH, and YEAR.* The use of functions is not permitted, only the *operators* +, -, *, and /, brackets, and the variables *DAY, MONTH, and YEAR*.

The expression should take into account leap years which fall every four years except years divisable by 100 and not divisable by 400. Submit your solution to **mathNEWS** via the usual means. The shortest expression wins.

NAME: _____

Phone: _____

```
      1  2  3  4  5  6  7  8  9  10
   A  [crossword grid]
   B
   C
   D
   E
   F
   G
   H
   I
   J
   K
```
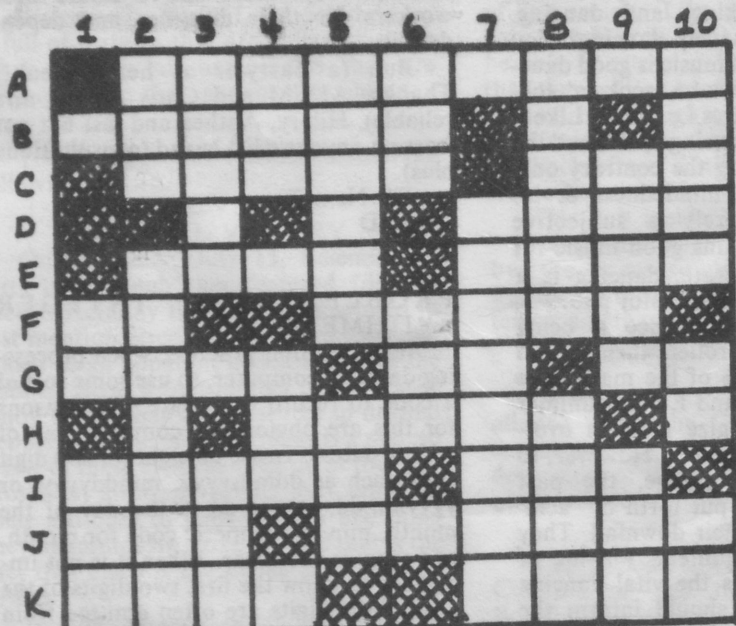
based on ANDY MUELLER's thinking

ACROSS

a02 Summation notation
b01 180 by pi
b08 gravity
b10 roman numeral for 11
c02 disputed occupant of math lounge
c08 contracted Black Hawks
d03 roman numeral 200
d05 roman numeral 500
d07 True _____
e02 Water
e07 Aquatic herb
f01 Gram of water
f05 mathSoc pubs with
g01 breed or grow
g06 name of WATSFIC fanzine(abrv)
g09 Approval
h02 roman numeral 300
h04 Brewer requirement
h10 roman numeral 400
i01 Electric _____
i07 the column supplied to mathNEWS
from the teaching option
j01 _____ fever
j05 Sounds used in speech
k01 First column in an N digit number
k07 Semi aquatic salamander

DOWN

01b medieval roman numerial 80
01f opposite of Ms
01i The _____
02a Liason between students & the Dept
of Co-ordination
02e one of the common people
03a potatoe
03g universal affirmative proposition
(logic)
03i oats, barley & _____
04a distilled 03i
04g a hardy cereal
04k scalar
05a WATSFIC president
05h a seventh sense (?)
06a junction
06f reversed fire remains
06j light gas
07a straight from hell
07d 2240 pounds
08a The Count's Mexican friend
08h a degree of sound
09a roman numerial 400
09c white knight of mathNEWS
09i C&D's fridge
10a English Prime Minister during
American Revolution
10g metric weight
10j street

We had 20 submissions for the last grid. Depending on whether you used the across clue or the down clue the answer to 27-across was either HOTR or HOTN (both were accepted). Only 3 entries were incorrect. We tossed our coins an selected **Rick Kular** as the lucky winner.

Of the entries 4 were from subscibers, 17 from the male side of the species and 13 had comments on them. Most of the comments said *because, why & why not*. Exil & Angela both had entries which seem to indicate that they are taking logic courses. Lorne's comment of *ALBATROSS & SIDEWALK* still doesn't make sense. And yes Dave, you do have the longest telephone number this time (15 digits).

Have your entries for this gridword in by Tuesday July 27th (the day after When Worlds Collide is shown). Winner's name will be posted outside math lounge on the last day of classes. Be sure and add your phone number so I can contact you.

The current C&D manager has indicated to me that the stand will be open during exams to provide you with fodder. Most of the quotes I managed to gather over the past couple of weeks seemed to consist of threats to my physical being if I quoted them. Therefore, no quotes. To Randall: Your account is still there. To Mark: Probably the frosh issue.

July 23 - 25 1976
TORONTO STAR TREK '76 Royal York Hotel, Toronto, Ont.
Guests include - Scotty, Sulu, Chekhov, Uhura, Harlan Ellison, Gord Dickson, Kelly Freas, David Gerrold, D.C. Fontana, BJO Trimble, and many more.
Featuring - panels, Star Trek films, costume show, **dealers, Bridge Mockup of the Enterprise** hospitality suite, computer games, etc...

GRIDWORD

JJ FEDRIP

This is the J.J. Long Fed Ripoff and you're not. Now the news.

⬤ In a surprise move, Fed council, by a to 11 margin, approved a motion declaring that the University of Waterloo is safe for human habitation. A pale Shane Roberts, obviously shocked by the second defeat of his forces this year, was escorted by VP McLellan from the meeting after the vote.

At the same meeting all executive members except Roberts and McLellan resigned their positions in protest over Art Ram's membership on the Mothers Restaurant Management Committee. Ram, reached on King Street about to order a pizza for Andrew Telegdi (a close friend), had this statement to our mathNEWS reporter. "I deny any skimming off the top (of the pizza) on my part and will resign from the MRMC. I am returning to a former less controversial occupation managing the CC Pub."

Meanwhile council had been unable to find suckers to fill the open executive positions. President Roberts, now recovered, proposed rule by Presidential Decree. When Ram's resignation was announced, council rejected that proposal and the former executives declared themselves elegible for the open positions. Council then re-appointed the whole executive but to different portfolios.

⬤ Council enacted a gag order as John and Robert White were appointed co speakers. A motion to rename the CC Pub from the Orange Bombshelter to Toad Hall Pub failed for lack of quorum, when five councillors in the room answered "absent" on the roll call.

One hundred CUPE members have been hired by Bob Mudie as Food Services has taken over operation of the Math C & D stand. A mathNEWS exclusive interview with one of today's five customers showed the customer was satisfied with the food. B. Matthews, despite rumors to the contrary, predicted he would survive the week.

Former Mathsoc president G.G. Dryden, recently denounced by AIA sympathizer Salah Bachir for splittist activity, has announced his opposition to another subversive group more dangerous than the AIA. A long opponent of "commie pinkos" Dryden is launching a campaign against the "disco-funkos" and the plastic rhetoric of UFO (United Funk Organization) led by Hugh Hepfner. Dryden was seen at the Federation Society-Concert-Picnic held on the grassy shores of a polluted pond (a "Beach Party") with a supporter wearing a "Disco Sucks" T-shirt, handing out WBUF bumper stickers. A chorus of anti-disco ⬤ ts erupted when the president of Ghost Inc appeared on the scene.

Our Fashion division reports that Fed pres Roberts will model men's swimwear in the fashion show at the PAC pool. To commemorate the U.S. bicentenial, Roberts will re-enact a scene from his historic past. He will model specially designed American flag swimming trunks.

In the U.S., Gerry Ford on a "trip" to his dentist to get his teeth treated with the J.C. smile, was advised to wait until August 20. So he went to his barber to get some black hair dye, as he realized that for now at least the wethead is not dead.

Returning to Canada and Montreal, home of Jean Flag and the Olympics, the AIA have replaced Taiwan in the Olympic games, after Trudeau voiced his disapproval of Roc music. Already they have two golds in disruption, 2 bronze in shouting and are hoping for a gold in team denunciations.

That's the Fed Ripoff for July 35, 1984. Good night and have a mediocre tomorrow.

SIR Risto

The recent C&D controversy has brought out some interesting points regarding unions. In particular there has been some discussion over the ethics of doing business with non-unionized workers rather than union members. I would like to comment on unions in general, and also on their position in society today, particularly with regard to a major concern which I feel they are posing. If the position is conveyed that I am against unions, this is not intended. It would be a ridiculus position for anyone to take, as everyone should be for human rights. However when problems exist they should be pointed out. It is well known that all parties involved in today's economy are partially responsible for the current problems. However, this week I wish to concentrate on one of these parties — the unions. Let's look at some of the facts.

Years ago, before unions ever came on the scene, the situation for the worker was simply incredibly dismal. Working conditions were unimaginably disgusting, workers were so underpaid that their wages just wouldn't be believed today, there was absolutely no job security for the common worker, and employers could control workers in any way they wanted to: black balling and discrimination were so commonplace and accepted, that they were ignored. In short, something just had to be done, as the situation was intolerable. Slowly unions started up and progressive action was taken. In those early days union organizers had to struggle through many battles: in the beginning simply for survival, and then gradually to gain their just rights. Today's workers owe much to these early leaders.

However, as time passed, gradually the plight of the common worker improved. Over the years many of the poor situations that originally led to the formation of unions improved to the extent where in most cases working environments, wages, job security, worker's rights, hours of work, and retirement plans are now excellent. However, over the years the power of unions has also increased to an incredible extent.

And now we come to today. Having achieved most of their goals, the machinery of the great unions still hold great powers. The union leaders who are elected are expected to perform. But what can they achieve to show their members that they are doing a good job? Unions have achieved almost all of the goals for which they were originally organized. So what is left? Wage increases, that's what. So wage demands have been great in recent years and unions are falling all over themselves in trying to catch up to themselves in wages. And they have all used freely their most powerful weapon, the strike, to achieve these demands. There have been many legitimate strikes in the past, however there have also been many unrealistic wage demands. The loss of production hours on account of strikes has been great. This has partially been the reason that the productivity of the Canadian worker is below that of his American counterpart. A faction of society just can't improve its standard of living simply by demanding and then striking for more pay. Other equally eager groups will simply demand more to catch up until the original group is worse off than when they started. Nothing is accomplished except production is lost and therefore the economy is hurt. Only through economic growth can living standards rise. Productivity is the key to this. But because of the abuse of the right to strike, productivity is being hurt. Thus by using the strike option so freely, unions are actually hurting their own position in the long run (as well as in the short run usually as strikes take a terrible toll on the strikers). Instead, to improve their position unions should be working towards the goal of economic growth.

However, what incentive exists for unions to head in this direction? Logical reasoning yes, but as already discussed, union leaders are expected to get constant and immediate results by the union members. Also, if a union even attempted to solely take this route, its workers would soon be buried at the bottom of the ladder as the other unions raced by with their wage demands. So what is the answer? Limitation of the powers of unions? A collective agreement between unions? Better liason between unions and business? A better economic education of union members? Government action? I wish I knew the answer. Unfortunately it appears that nobody does. Perhaps some sort of combination of the above would work. However, something must be done!

As stated earlier, unions are hardly the only problem. Big business must certainly be held responsible for many of our present economic problems. However every party responsible should be working to correct the problems for which they are responsible. Action must be taken now to prevent future economic disaster. Perhaps in the first issue of the fall term I'll talk about some of big business's responsibilities.

MainLine Trob

This week's topics, in order of their appearance:
-Legal gambling on campus
-errors
-simulations of "machine" languages
-COMPUTER_OF_THE_WEEK
-ALGORITHM_OF_THE_WEEK
-and the usual trivia

What's that you say?? *Legal gambling* on a university campus?? Yes folks, it's true!

For some time now, a group calling itself "Waterbottle of Canada" (an obvious front) has operated several slot machine facilities on campus. These masquerade as providers of garbage to hax and j00s to hax.

The typical sucker places a coin in the slot and waits. Wheels turn, gears grind, and lights flash. Occasionally, the right combination occurs and a small payoff is made. (The house, of course, always wins.)

The success of these establishments has prompted several innovative designs in slot machines which pretend to be vending machines. Some of these may begin to appear soon; we have been *told* that none have been installed yet.

One design is a coffee machine, containing no cups and only one cup of coffee. When the sucker places the coin in the slot, he stands helpless as coffee pours past the opening, being recycled in time for the next one.

Another alternative is a machine on which you select a subset of {cup, coffee, cream, sugar, ...}. The machine randomly gives you some subset of what you request; i.e.the odds of getting everything you want are precisely the same as the odds that you will get nothing at all.

---

trob fault at 0050175; core dumped

As reference a letter from atbowler printed elsewhere, there were a few errors in last issue. It is significant that the Trob column, and especially the *COMPUTER_OF_THE_WEEK* feature, originated in response to a perceived ignorance of many people regarding the real state of computing, not only but most especially on our own campus. It would appear that the problem is worse then was thought; the number and type of errors suggests that even those who *think* they know what is going on really don't.

I stand corrected on the details of multiple-processor systems, and agree that multi-tasking is the easiest way of time-sharing; but I still feel that for a non interactive batch application, such as PL/I is intended for, multiple tasking seems rather pointless.

10 is not a magic number, but an approximate limit for reasonable operation. See WIDJET remarks in "Letters to the Trob".

Regardless of its liklihood, when an operator tells me we're running on 102k, I believe him.

It used to be that students who wanted to find out how computers *really* work were taught SPECTRE. This was a simulated machine language, which I believe is still available on a 1620 on the second floor; the Bookstore is still selling the manual if you really want to find out about it.

As time went on, SPECTRE became obsolete. And begat (more or less) WATIAC, and its assembler, WATMAP.

And WATMAP, translating for WATIAC, which was written in WATBOL, which was written in COBOL, was slow.

A little more recently, as an attempt to actually *learn* something about computers, a pair of pseudo-hax wrote their own simulations of decimal fixed-point "machine" languages for UNIX. Last term, it was something called "peptalk", alias "adriac". It provided 200 storage locations and 17 op-codes, 2 of which were only recently documented. It was also redundant and deficient in several areas.

More recently, an anonymous entity going by the soubriquet "Mr. Gripe himself" introduced "g4". g4 has the same instruction format as peptalk, but proves once and for all that a useful machine language does not require many op-codes; at 1000 locations, the storage for g4 is 5 times that of peptalk and the power of the language is roughly proportional. With only 10 op-codes, g4 provides stacked returns, infinite indirection, and a single instruction to zero any location.

This is achieved at some cost, however. ADD is the only arithmetic instruction, and READ and WRITE the only i/o. HALT consists of clearing the stack, zeroing the index register, and doing an indirected branch.

But wait until g5 is ready.........

Our *COMPUTER_OF_THE_WEEK* is the IBM System/7 for the COMIT research project, which arrived in the "pit" last Monday. COMIT, as was reported by mathNEWS some time back, is a study of computer-aided instruction using a multi media terminal.

The System/7, designed as a process controller, will serve as a front-end processor between the 370/158 and the four prototype terminals.

Our ALGORITHM_OF_THE_WEEK comes from a recent 122a assignment:

```
PRINT,((0+((10**(4
J))+(J/2))*I,J=1,3),I=1,5)
```

This one-liner generates the sequence 1000, 101, 11, 2000, ..., 44, 5000, 505, 55. The "secret" is the integer divide (J/2), which gives 0 for J=1 and 1 for J=2 and 3.

The "0+" is required by WATFIV-S. The compiler will not accept implied loops which begin with more than 2 nested left brackets. In fact, this was submitted in a version which added a J at one point and subtracted it out at another and nobody noticed...

RETURNED. The Nova has returned to the third floor minicomputer lab after an illness.

Ciaran has announced his resignation from the ranks of the hax.

UNIX is coming up tonight...maybe.

And the Trob needs a place in Toronto to stash a warm body for four months. Mail dwgillett on 'bun or UNIX, or leave a message at mathsoc.

Teaching Option News

Another term gone by and it's that time of year again. We're half way there!

If you missed the seminar on July 5, we learned that Althouse is putting extra pressure on us to get our temporary teaching certificate. It was suggested by our faculty advisors that we get as much work experience this term as we can handle, especially at the grade 13 level.

Our new co-ordinator should be arriving around August 1 or 2.

Our psych course 242 ended in a pleasant way; the prof, Dr. Ritchie, bought us all a round.

SPORTS

The big news is that MTO is in the finals of the B league intramural basketball. A great performance from Gene Cassidy (29 points) got us by B.C. But it was the second half rebounding performances of Brian The Bean, Henry, and Dave Biehn that kept us in the game after the big fella, Jim Senn, fouled out.

Against St. Pauls in the semi-finals MTO put it all together and soundly beat St. Pauls by 20 points. It was a team effort victory all the way.

On Friday we have an exhibition match against the Mists, formerly of the B-league. That should be a good game as well as the championship game against the Basketballers on Wednesday night. Both losses were to these teams.

NOTES

Well it happened again. Another member of MTO, Dave Biehn, is out for the season because of torn ligaments in his foot. Rumour has it that this was a desparate effort by Dave to get more female sympathetic attention. Oh well, thanks for coming out Dave.

Something of a victory against the Softballers, the Coed slowpitch team decided to default the game! That was close.

That's all for this year. Fantastic, Incredible,...
HAVE A GOOD WORK TERM!

FEEDBACK

● ACCUTACY

Dear mathNEWS,

I am writing this letter because of a growing concern for the accuracy of the material in mathNEWS. There have been several cases of inaccuracies, but undoubtedly the worst was the recent article by the 'TROB'.

The article starts by telling us that the Honeywell is operating with 102k of memory. Since the machine has 256k and total memory is usually lost or added in 64k chunks, this number seems unlikely.

In the next paragraph, we are informed that the CDC 6000 series is the "classic" multiple CPU system. I believe that most computer people would disagree with this, as the CDC 6600 has one large CPU which does all the user computing. Around this are arranged a set of smaller peripheral processors (PPUs), whose primary function is to do I/O in a manner similar to the IOMs on the Honeywell or the channels on the IBM 360/370. The interesting thing about the CDC PPU is that it has a much greater programming capability than the IOM or channel and so it has been possible to move many of the functions of the operating system, such as the dispatcher, into the PPUs. However, each PPU is hardwired to a fixed set of I/O devices, so there is no large degree of interchangability between them.

What I consider the "classic" multiple CPU system is a system like the Honeywell in which you may have several identical CPUs which share the work, although it is usual to designate one as the master and let it handle interrupts and some of the other operating system functions. This avoids conflicts. The Honeywell allows up to 4 CPUs on one system, although we have only 1 at Waterloo. The DEC PDP-10, the Xerox Sigma, and the IBM 360/65 as well as the newer 370 series, support multiple CPUs on one system in a similar manner. IBM has not just looked at multiple CPU systems recently, as the IBM 360/65 and /67 multiprocessor systems have been available for over 10 years. The predecessor to the Honeywell, the GE 635, supported multiprocessing in 1964. The CDC 6500 and 6700 systems do, I am told, support 2 CPUs.

IBM and Honeywell also support arrangements of distinct computers linked through shared I/O devices (such as disks) and some intersystem communication to share the workload of a common job stream. This was called ASP by IBM, and has been incorporated into the job management facilities of JES-n (n=1,2...). Honeywell calls it multisystem support. I would not be surprised to learn of a similar capability in systems offered by other manufacturers.

Multitasking on a single CPU (whether supported by PL/I or not) is hardly a pointless thing. How else does the TROB think the Honeywell supports multiple users?

The designation of hypercube for the arrangement of microprocessors refers to the topology of the interconnection between the systems. The 2 hypercube arrangements I have heard of only resemble the ILLIAC 4 in that there are separate memories and it is/was hoped that both could solve large matrix problems. The hypercube proposals were designed to be much more flexible and hopefully capable of solving other problems.

One of the hypercube proposals was that of Dr. Gentleman, who has since changed his topology, but not the basic design. His new arrangement is not a ring, since such a system has a bad communications bottleneck, but rather is a type of torus.

The TROB may appreciate Walter Bank's generous offer to use the machines at CCNG, but promoting him to head of CCNG is a little much. Walter is lab director. The current director of CCNG is Dr. Jon Mark.

The interchange algorithm is definitely interesting, but the claim that it saves space is questionable as this will depend greatly on the initial position of the 2 operands and the addressing methods of the individual machine.

Does the TROB have any measurements to back up his magic number of 10 for the WIDJET system? What does he define full load as?

Choosing another target, in the BURLOAF's column he states that there was nothing the Computing Centre could do to slow down a CDC Star. The Star is an incredibly fast machine. It is, however, rather specialized, and lacking in basic software. It is not easy to program and not terribly fast at handling the sort of standard job seen around here, if we could write an operating system to get it to do anything at all.

Anyway I have been informed that what happened was a little different. The Computer Science department, not the Computing Centre, was offered the memory tester for the Star. This meant they would get the same memory as a real Star, and a CPU that executed the same instruction set, but ran at 1/1000'th the speed. There was no software in the package. The price tag was considered too high for what was offered.

In C.A. Corner there was the statement that only CS students write for mathNEWS. This is not true. On the masthead you list at least 1 physics student, and another in I.S. In the past there was at least 1 architect. It would perhaps be more accurate to state that most of the contributors have a strong computer orientation rather than changing their department, and/or faculty.

Finally I have read the mathNEWS version of the story of the pink tie several times and it is getting progressively less accurate. Promoting Stanton to Dean seems a bit much, however it does seem to be the tradition of mathNEWS which has also awarded several PHDs during its history.

I am concerned that if mathNEWS gains a reputation for inaccurate reporting, serious articles such as Mr. Hipfner's one on the Food Services dispute will be ignored, and will have as little attention paid to them as the occasional serious article in Enginews.

Alan Bowler

Dear mathNEWS,

The word MATHNEWS when spelled backwords gives SWENHTAM, which in the ancient Mayan language meant absolutely nothing at all, but would have gotten quite a laugh since they didn't understand a word of English anyway.

Tank-yu MATHnews,

A MATHstudENT

Dear mathNEWS,

I submit the following T-shirt suggestion:
    "ALGEBRA SUCKS"

                                    anon

Dear mathNEWS,

Congratulations on Your last issue. Your comments re the chevron, the c & d problem, timely "hack" news, make this paper the best reading on campus of any newspaper (published here, that is).

Peter F. Stevens   73168726

mathLETICS

Teaching Option Gets it in the Ear

Well, another term of verbal diarrhea has come and after this final onslot will be gone.

Checking the other columns in this newspaper for inspiration, I noticed that *Mongoose* or *Moogong* or what ever else *John Karam* prefers to call himself when writing *Preaching Option News,* forgot (conveniently) to write about the *Slow Pitch Tourney* held during that *Bang and Twang* concert which occurred two Sundays ago, so I guess I'll have to expose the sordid details.

It seems the *Teachers* although professing to be able to impart knowledge to others, never did master the art of telling time. The famed (of this rag anyway) *Sunnydale Hosebags* had a scheduled show-down against the purported *Teaching Option All-Stars* at noon that fateful Sunday.

By about 12:15 it became clear that either the *Teachers* were incapable of finding the Village Green or did not know what *the big hand on the 12 and the little hand on the 12* indicated. The *Hosebags* out of the goodness of their hearts (and because the wine was getting warm), donated a few players to get the game rolling.

The strategy of the game seemed to be to see how many could knock over *Dryden's* wine bottle with a baseball, as any *Teacher* with any ability at directing the ball was aiming grounders at short center where the wine cache was. [Note: even though I usually am a hard hearted editor, I can sympathize with *Dryden* as far as the wine is concerned].

One of the highlights of the game was *Bernice* of *Teaching Option* getting her first hit of the year.

In a post-game interview, *Dryden* spewed on about his distain for the tactics that had been employed by the *Teachers* in an effort to unnerve him and cause his game to fall off. "Those ruthless cads! Here it was, the day after my birthday, it was lucky I could move. That Saturday night I'd already guzzled down and brought up 3 of the 6 bottles of fine Canadian wine I'd gotten for my birthday (not to mention the *Crud Cake*). I was doing my damnedest to get rid of the other 3, and all that those teaching types wanted to do was bother me. Really, I wouldn't [typo error: should read couldn't, **EDITOR**] have caught anything, I was told that's where the spectators sit".

Fresh off the victory against *Teaching Option*, the *Hosebags* were challenged by the *Baby Ruth Candy Bars* (a lucious linoleum wafer, melded with only the finest Chevy nuts stuffed with fresh nougat and coated with a revolting layer of zit producing *ex-lax* chocolate).

Knowing that there was no chance of victory for themselves, the candy bars were forced to subtle psychological suggestion to put the *Hosebags* off.

The *Baby Ruth's* noted that a certain member of the *Hosebags* would place a bottle of expensive classy wine (only the best for $1.65 a gallon) on first base when ever he went up to bat, as an extra impetus to get there. The success of the ploy was over-whelming: three times at bat — 3 times on first.

The trap was set. The certain individual was convinced he could get to second, the next time up and therefore placed his bottle of *Magic Elixir* at second. As soon as this nameless individual grabbed the bat, the ruthless *Ruth's* went into action. *STEAL!* The wine had been snatched and the chase was on. It was like monkey in the middle. Each time the nameless individual could get near the person with the bottle, the person would hand it off to someone else. Little by little (actually, after about six chugs), the wine was gone.

That shot it. The nameless individual was *mad.* He reached into the stash and grabbed another bottle of wine and placed it beside his players bench. "You degenerated snot-gobbling push-up freaks won't get this one". The pitch came in, and went very far away. The nameless individual ran to the bench for his wine and headed around the bases. By the time the nameless individual got to third, the ball was being thrown into the infield. It was a race for home! When the smoke lifted, it was unclear whether the nameless individual was safe or out. After a vehement argument, a compromise was reached. The batter was out, but the wine was *safe.*

It was *Teaching Option's* turn to play the *Soft-Ballers.*

Reports from that game indicated that unrest was rampant at the end of the third and the rest of the game was cancelled.

The problems stemmed from the fact that quite a few members from each team wanted to listen to the *Band and Twang music,* while others like *Bernice* (realizing that she had just become a super-star with her first hit in the previous game) wanted to continue.

In an interview Monday, *Bernice* stated, "This was the first game all season we ever had a chance of winning and the rest of the team wanted to listen to a bunch of *hay-seeds* playing *cowboy music.* Jeez, I think all of them were born 100 years too late". On being asked if she would agree to the statement that her teammates could be accused of having a suckie attitude, there was what could be interpreted as a nod of agreement.

Anyway, there is a rematch of the *Hosebags* vs *Teaching Option* this Saturday during the *Intramural Tournament.* Hopefully the *Teachers* will be able to find the correct field, at the correct time.

SOCCER

The 'A' division rivalry between MATH and the hellenes continued into the final playoff round this past week, with the defending champion MATH team losing a heartbreaking 3-1 decision. The two teams again finished the season in the number 1 and 2 spots and it seemed inevitable that another playoff classic was in the making.

The MATHSOCCERS won their opening two playoff games by convincing 3-0 and 2-0 triumphs against the senior citizens and golden guys. The stage had been set for MATH to win their third consecutive soccer championship and retire the McKay bowl. Alas, it was not to be as fate decreed that MATH should lose the very close and thrilling final.

Hopefully, the glory days of the MATHSOCCERS will continue in the fall. We want that trophy back!!!!!!

Credit should go to all players for outstanding performances. They are Goal: Doug. Defense: Al, Graham, mysterious invisible barrier. Half-Backs: John, Dan, Barry, Tom, Roland. Forwards: Bernie, Garth, Terry, Peter, Burt, and Hendri. Our illustrious captain was Roland George.

Letter tuh **mathNEWS**:

It has come tuh they attention of this Scottish author of this letter, thaet a great scourge hae dropped upon us all! It be none other than the proliferation of these hair Irish lads which one disgustin'ly is findin' upon UNIX these daes. We all know, o' course, thaet UNIX is the very same as EUNUCHS exceptin' thaet it's spelt in Irish. These O'Learys and O'donnells and Dillons and what — they all be eunuchs thaet reproduce by splittin', which is why there hackin' each other up un Dublin, Lads. Ah've nae choice but to fight the drunken sots tuh the grave. And a DENUNCIATION to that hipfner fellab. He's nae Scottish, ye know.

Angus MacVee
Anti-Irish Alliance

My Dear CONnivering Angus (Bachir) MacVee : R.E. Yer letter dated TUESDAY July 13th Argh, ye be sayin' naught now I suppose. Imagine!, whisperin' obscene mail messages at Computor System Devices and slanderin' the good god-givin rules which all laerd fearin' IRISHMEN abide by. Why may the great potato let one on yer head, and be done with ya. All aye for that!

Tut' those of yer who han't had time to squander even a cursory glance at one accursed, vile note, here be the high and low of it!

A letter signed "Angus MacVee" appeared recently in said publication, pronouncing the relative stupidity (hah!) of the average honest hard working IRISHMAN. Sighted as signs of this ill thought contrusion were ...

[1] The lack of forsight in having, hanging a gigantic spud amidst a gailic occasion afore long yon gem took a hold on all good Guiness on tut table with its "cantankorous limbs"

[2] Outlawing all brothel houses

[3] Happily the average Irishman, amongst his veritable treasures, there lays his favorite potater in his upper front left pocket.

[4] (A shade o' the truth here) Yer average man (Irish) come that age, is teachin' naked children how to dance!

If I moight spare a moment or two here, rumour has it that Angus MacVee is in a cabal headed by that delapitating scum, one Antonio Vaseleno. Argh it is a sour and sad time indeed when such a Satanic group as the Anti Irish League freely roams about, and have thier unhallowed dissertations verbatim in print on toilet paper and/or newsprint. Why twere nae long ago tat I, beading my aim along the furrows of the Chevroon laid eyes upon a scrap of clap signed the A.I.L. Yer got tut remember, them _fed_ boys hae yet tut fix thier presses workin' as the bottom leg of tut 'L' tis' a wee might short.

If I may now be allowed to defend myself, and the Irish people against such cur.

Concernin' [2] first, I might say that there has to be someone whoes doin the brothelin, And a knowin the Irish ladies, I be taking nae such Shillelagh from me wife! As regards the big potato, and what a fine day it twas, Us Irish know that even potatoes like a havin' a wee bit o' fun. In fact it is common knowledge about the hoe that we all comes from potatoes, and are goin' to fed the potatoes when we pass by, so you moight say we were just givin' the little spud a morsel of the finer things in life! (and in the true meaning of the bible, us Lads take it literally. The part about the laerd bein' all about us. After [3] comes [4]. If Angus would have noticed these children were of tut' fairer sex. And they were about 3 feet tall when they

were lying on the ground lad (That be 5+ feet when they are lying against a sack o' potatoes). All I can say is that all said evidence hae been misconstrued, and that it takes the low, unimaginative, negligible intelligence not to see the inherent good in the IRISH way! Such an I.Q. who's total collection of thoughts approaches the null set, can only be indicative of such a sad alliance as the A.I.L., and any subset thereof. As it came to my attention such mal-suited articles hae no proper right in Mathnoos, and I can only make the sad statement the the AIL has taken over said publication.

Death to the A.I.L.

and I am proud to be a Irishman
Lyle Rufus Mcnurphy   Angus is not "the way"

We, the Chancellor, and the Commandeer-in-Chief of the Vaselino Federation swear ourselves, our spirits, and our lives to the extermination of the pernicious, lascivious, lubricious, stercoral, impotent, and Irish KARL FRIEDRICH GAUSS mob! We are committed to the end of their dynasty. The attack is based on Three Dynamic Principles of Lubrication.

1) Antonio Heironymous Elizabeth Vaselino is the guiding Father, the Holy Light, and shall be prayed to before each lecture.
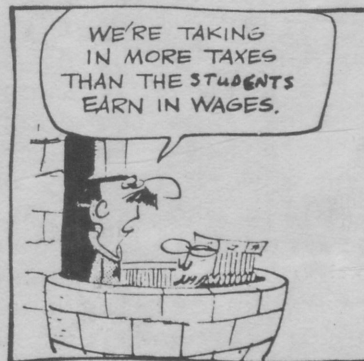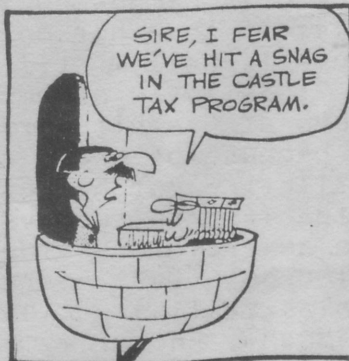
2) The Pink Tie is Lost and Destroyed.

3) Gauss Is Dead!

Upon these tenets we shall move as the green slime upon the land of Gauss to smother, digest, and excrete the Foundation into wormy Irish Stews. And then shall ye eat it, lads!

-Antonio H. E. Vaselino

-Angus MacVee

SIRE, I FEAR WE'VE HIT A SNAG IN THE CASTLE TAX PROGRAM.

WE'RE TAKING IN MORE TAXES THAN THE STUDENTS EARN IN WAGES.

THAT'S NO SNAG, NITWIT...THAT'S BUREAUCRATIC UTOPIA.

LUDWIG von ZOPFAULT

Congratulations, sloths.

Your complete lack of response to last week's article was exactly as expected. I really do wonder if any of you see the future, and are learning escapism in response.

Hmmm... that could explain the rising interest amongst the HACKS in the Psi Mind Institute courses being offered around here. Being, in the main, none too stable mentally and escapists in the extreme — anyone who can spend the time some of them do in front of terminals to the exclusion of other activities, such as lectures and xxxxxxxxxx are running from something — I suppose it is not that unusual to see them clutch at some straws that promise a better lifestyle with little or no effort.

Are the rest of you out there also so afraid of life? From what I have seen in the last term, it would not surprise me if this were so. The bulk of you seem to delight in anonymity, avoiding involvement, and unquestioningly following your peer groups. Are you listening, D. L. Hancock and you C. A. types? The reason that C. S. people (incidentally, that doesn't include me) dominate this paper is that they submit articles. They work on it. They expend effort to assemble this rag so that you toadies can practise escapism and get a very slight dose of news while you're at it. They, the few that there are (a typical masthead contains ten people or less (including two or three non-mathites) — which is pretty pathetic for 800+ math undergrads on campus this term), are willing to participate in the responsibilities of bringing this literature to you.

Surprisingly, criticisms of the quality of material contained herein is rather sparse, though the TROB is doing his best to remedy this. Probably this lack stems not from the inherent quality, but from the fear that the criticizer would be told to contribute something better. In fact, for those of you ancient enough to remember, a series was once pulled due to being utter and absolute garbage (the dreaded WATER MELON CAULLY FLOWER DOUGH). So, changes are possible. But not if you twiddle your thumbs.

But I digress. Perhaps this article can be explained by impending exams and a stack of overdue assignments as high as the CN tower. I doubt it, however. The more I see of the real world, the more my hackles rise. My primary reason for pursuing an academic career seems to be shifting from the sheer joy of learning to that of the repulsiveness and horror of the "real world" keeping me here out of pure terror.

I have been accused of being far too pessimistic and depressing in these last two articles, as well as revealing an addiction to tilting at windmills. Perhaps. I thought that I was being wildly optimistic in my preceding column, in that hope was expressed that we may yet survive. It is all a matter of how cynical one is about the future altruism of humankind. My ghostwriter has different views than I on this topic, and mayhaps next term will see some articles in this column that will not be written by me. No doubt the change of pace will do no harm.

Auf Wiedersehen.

TO THE NON-DETERMINISTIC GHOSTWRITER:

No wonder the fellow
is fast turning mad
with gloom and frustration
and doubt.
It must be unbearable
being so sad
with nothing to be it
about.

OTTAWA PUBS

Yes Ottawa Co-op students, pubs are on for Ottawa during the fall term. Our first jovial evening will be held at "L Quadrille" in the Inn of the Provinces on Wednesday September 8th. (Copy that date and location down folks — and don't forget it.) That date being over a month and a half from now, we don't yet know what band will be there. There will be no cover charge but don't wear jeans. It would be best if you arrive before 8:30.

For those of you who don't know Ottawa, the Inn of the Provinces is on the corner of Sparks and Lyon Streets — just a few blocks west of the center of downtown Ottawa. It is very easily accessible by bus as all downtown buses come within a few blocks of it. Parking is behind and underneath, being accessed from Queen St. which is on the south side of the building.

Within a few days all co-op students working in Ottawa should receive a letter giving more complete details of our fall plans. Please send your Ottawa telephone number and address to Steve Risto at MathSoc if you know it now. If you don't know it yet, feel free to call me in Ottawa at 731-7230. If you don't do this we will be unable to contact you once you arrive in Ottawa. So please respond!

All future pubs will be planned about two weeks in advance. Thus more complete details such as the exact entertainment will be available for these pubs. If the response is good for these pubs, MathSoc, as part of its present master plan, intends to install a phone in Ottawa and invest in a telephone answering machine which students will be able to phone each week to find out all the details about that week's pub (as is currently being done in Toronto). So come on out and participate and help make the fall work term a fun one!

Steve Risto

Good mornig!! (that's an exhausted person's way of greeting the new day)(eh?) Anyway this is the last regular issue of the summer term (volume 11), this being the 5th issue I've edltored (edltted!!). mathNEWS is paid for by MathSoc who, in turn gets its loot from mathies at the U of Waterloo. The content is the responsibility of our all-volunteer staff (this being the only campus publication to publish regularly with such a staff). We put this stuff together on tuesday night proceeding into wednesday morning. This being a huge issue I'm still here and the sun's been up for hours (that's a lie - it's only 7:45am). In a short while I'll finish the paste up, drag this over to the good guys at Graphic Services to make us 1000 copies. This week we were fewer in number because of exams approaching: bun (who flaked out at 0600 on a work table), dwgillett - got himself some very unexpected feedback; dennis mullin who is always the last to survive with me; Tom Keith, our regular typist, and this time wrote an article besides; Risto did finally decide on a topic to expound upon; Russell Crook (LvZ) - articles to order in just three hours!; gdryden telling the tales (tails) of woe; and a host of article submitters and hangers-around; and me *hugh*. End of my first official term as mathNEWS editor. be advised that the special frosh issue deadline fast approaches und we'd like to see the Stats, Pures, C&O's, AM's contribute as well as our loyal CS's, CA's, and Teachers. logout time is 0804 wed july 21. night.