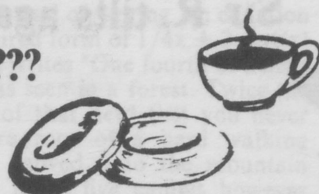
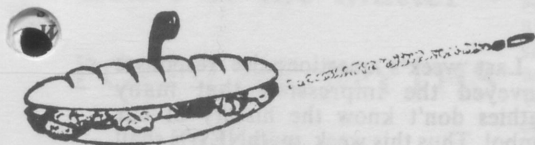


C&D TO BE TORPEDOED????



The Mathematics Society has operated a coffee and donut stand in the Math & Computer building lounge (MC #3001) since 1970 (reference **mathNEWS** special frosh issue #1, Aug '73). We quote: "At that time, the prices in the vending machines were increasing, and the quality of the product decreasing. The idea of C&D was readily accepted by all, and soon became copied by EngSoc and the Federation". The Feds have since gotten out of this business but Arts, ESS,

Psych, Optometry, and Geology have been operating similar stands recently.

C&D has supplied high quality goods like coffee & donuts, subs & kaisers (and even pens at one time), all at competitive prices. Originally our operation was running at a deficit, but as quality improved and efficiency increased we were able to realize a profit. These monies were and are used to support the summer deficits, improve the facilities, replace equipment used at the stand, support end-of-term sales, increase wages, buy stereo equipment for the student lounges, etc. Approximately \$250 in wages is distributed weekly during the fall and winter to part-time student workers.

Interesting occurrences began in the

summer of 1975 when R W Mudie, Director of Food Services, approached the Societies, wishing to supply submarines to the stands. There was a flurry of activity for a while then the decision was deferred by summer Councils to the fall. The next term, after Mr. Mudie made a presentation to a meeting of Society presidents, it was decided to continue with the present suppliers. Later in the year W Deeks of Administration came into the spotlight. He suggested to the Federation of Students that they would get a better deal in the negotiations for the price/availability of the South Campus Hall if the Societies switched to Food Services as sandwich supplier. Against the wishes of the Feds, the Societies decided not to bow to pressure. Later at a council of Presidents meeting Mr. Mudie asked if we (the Societies) would give him a trial, so the Arts stand was slated for a two week trial of his goods. Interestingly, that was the last heard on that topic as the trial was never executed — and the latest news

continued page 2

Wednesday, June 16, 1976.

Issue 11.2

math NEWS



MATHSOC

money is being spent

Another MathSoc meeting has come and gone. They are held in M&C 5158 every other Tuesday at 4:30 (unless otherwise posted).

And now to business:

*Steve Risto, Education and Internal Affairs, reported that by-acclamations are not necessary this term. However acclamations will be needed in July for representatives of 2a and 3a (presently 1b and 2b reps).

The posts on the Co-ordination Advisory Committee have been filled, but there are still openings for the Curriculum Committee for anyone who would like to volunteer.

*John Denham, Social Director, reported on the outstanding success of last Friday's Pub, and informed us of the date for the next one. This social gathering is slated for Thursday, June 17th, once again in M&C 5136, the Math Faculty Lounge. The price differential was effective in improving 'the ratio', so the

differential for the next one is so: Guys - \$0.00, Girls - \$0.00. That's right, absolutely free for all comers. Ghost will be rocking out the tunes once again, and a Cash Bar will be there as always. (end of free plug)

The Beach Party. The Engineers and Mathies will get together in *friendly animosity* on Sunday, July 11th at Lake Columbia. Along with two bands, the Good Brothers and The Original Sloth Band (from 3-6pm), provided by the Feds, there will be athletic events and competition starting at noon. Food and soft drinks (pity) will be provided by your friendly neighbourhood Math and Eng societies.

*A revision of the budget of two weeks ago was ratified by the council.

*Last **mathNEWS** it was reported that we were/are searching for a new MathScot. Well, after the not-overly-conclusive questionnaire, reported elsewhere in these pages, it was decided to form (another) committee to delve further into the question. One of the suggestions was to convert the Math building itself into our MathScot and to construct a scale model for a wieldy, more convenient symbol.

*Gary Prudence, feeling the crunch of his workload, has stepped down from his position as C&D Manager to the Assistant Manager's position, while the present Assistant Manager, Anthea English, has risen to the exalted position of Manager.

*Martha Coutts and Jackie Hearne [ed's comment: i don't understand]

*A humorous occurrence in the MathSoc office last Thursday. A vanguard of about 8 Engineers calmly occupied the office around 1:00pm and awaited the arrival of their compatriots. Upon hearing the Engineer's band approaching the Math building, one stalwart Mathie rushed into the room proclaiming: "The Engineers are coming! Shut the door!" only to be confronted with the visages of aforementioned Engineers. Approximately 5 seconds later yet another Mathie rushed into the room, saying the same thing, beholding the same scene. Shortly the Engineer band, in all their rancid glory, trooped into the office, resplendent with the Flaccid Tool.

continued page 2

Math Society Presents Another in a Series of BiWeekly Pubs

Thursday, June 17, 1976.

MUSIC is disco/rock
until it stops
EXECUTED by ghost
ADMISSION is free

TIME 8pm sharp
CASH BAR until 1am

that filtered down (in April) was that Food Services was no longer interested.

On Monday June 14 the summer v.p. of MathSoc, Ron Hipfner, was approached by the CUPE local president Mr. Liban. He expressed his regrets and informed MathSoc that if we didn't switch our sandwich supplier to Food Services he would ask Administration to charge Math for the use of space, electricity, and clean-up required by our stand. According to Mr. Liban CUPE has lost 30 workers recently from jobs in Food Services and that he was told upwards of 10 people could be rehired if the C&D stands contracted with Mr. Mudie. CUPE is currently in negotiations for a new contract with the University.

The way mathNEWS hears it those workers were laid off because the Village is semi-closed for the summer. CUPE people (Custodians asked on Monday) said that Food Services has been short-shifting their full-time help in preference of the non-union (& cheaper) part-timers. We also fail to understand how ten people can be supported on the business that is currently supporting 2 people (the staff of the sandwich supplier).

Math Society sincerely regrets this trouble but does not wish to be pressured. The C&D stand has operated for many years without complaints and provides an unbeatable service. It is not our function to provide jobs to anyone, we have certainly not taken any away. We do not appreciate being used as scape-goats in times of budget-balancing and union negotiations. The Math Society hopes that this action will go no further.



Sir R. tilts again

Naughty, naughty, naughty.... tsk, tsk, tsk,... bad, bad, bad. WHAT THE HELL DO THEY THINK THEY'RE DOING!! The Orange Bomb Shelter?? Yes, once again the Federation has shown how much they are out of touch with the common student. Yup, sure enough and true to form, against the opposition by the contingent from Math, they renamed the Campus Centre Pub "The Orange Bomb Shelter" at their meeting of May 30. As can be seen elsewhere in this issue, Mathies are overwhelmingly against this. Hopefully the Federation will smarten up and repent their sins at their next meeting on July 10.

Now a few other tidbits of information:

First a special message to all students who will be working in Ottawa next term. If there is enough interest we might be able to organize pubs, parties, and other activities for the coming term in much the same way as is presently being done by the Toronto Mathies. Anyone who would be interested in attending or supporting such activities should contact slristo at Mathsoc or on the 'Bun.

And now some words of praise for certain persons who are true heroes in every sense of the word. In the last few weeks, since the movement was started within Mathsoc for the bowdlerization of the Pink Tie, an underground resistance organization has appeared whose aim it has been to foil, frustrate, and sabotage the anti-pink group at every turn. These courageous champions have penetrated the very defences of Fortress Mathsoc in their divine crusade. Yes, periodically over the past several weeks, random objects within the Mathsoc office have all of a sudden, without prior warning, turned glorious pink. The top officials in Mathsoc have been totally baffled as to the identities of these pink-painters. There have been suggestions that the Education, and Internal Affairs Directors have information regarding these actions, but thankfully they have thus far remained silent. At the current rate the entire office will be pink by the end of the term if the anti-pinks don't refrain in their eagerness to oust our beloved Mathscot. There have even been rumours going around that the Vice President himself may soon be kidnapped and thrown into a giant can of pink paint!

What do you do when you have a \$1300 social budget but can only make a profit at your events? This is one of the problems facing us at Mathsoc. So at our next pub, Thursday, June 17, there will be no admission charge and, in keeping with the policy set at our last pub, girls will get in for half that price. So be sure to show up then for another evening of boogie and drink.

PINKIE NEWS

Last week's questionnaire responses conveyed the impression that many mathies don't know the history of our symbol. Thus this week mathNEWS shall attempt to correct this situation.

As the legend goes... Once upon a time (sorry, that's the fairy tale version). Like I said, as the legend goes, there was a professor of mathematics who just loved to wear outlandish, gaudy coloured ties. It just so happened that this prof was Dean Stanton, the founding dean of the math faculty. The Mathsoc members at that time chose a tie as the official emblem and pink as the official colour.

During the construction of the Mathematics and Computer building, just as they were constructing the sixth floor, a group of mathies decided that the building was an ugly monstrosity (funny, some people still say that). They came to the conclusion that it needed a decoration of some sort. Late one Sunday night, a couple of weeks later, if you happened to glance at the Math building about midnight, you would have seen five mysterious people working on the roof over the main entrance. Monday morning there was an eighty-five foot pink tie hanging down the front of the building.

The tailors of that tie have gone on to "bigger and better things" and we got stuck with an eighty-five foot Pinkie (just think of the dry cleaning bills).

Over the years the Pink Tie has had to weather many storms, having been kidnapped countless times. Presently it is quite battered and has a giant blue stain in the middle. Also its present location is not known. Although the Mathsoc detectives have no X-act knowledge of its whereabouts, they do have certain suspicions.

Finally, I was talking to Mathsoc's Internal Affairs director today. He told me that the Director of Education would like me to ask for volunteers for the Curriculum Committee. It seems that he needs two Mathies for this committee. He also said that last week's appeal for three volunteers for the Advisory Committee to Co-ordination was very successful as he received three responses. Anyone interested this week should contact the Education Director at Mathsoc.

A couple of final notes:

Martha wanted her name in the paper so here it is. (bun put it in his column too.)

To the person who marks my calculus assignments and sometimes put funny comments on them: be lenient...I need the marks.

SOConaBUN

Upon seeing cameras arrayed to record this desecration on photographic film, one Mathie attacked one such holder of said camera with his pen. But alas! it was to no avail. Their dastardly deed accomplished, they made their way through the egress whilst 'acquiring' two Math T-shirts.

Security, tracking down the 'powers that be' in Engsoc, convinced them that their wisest course of action would be to reimburse MathSoc for the two shirts. Receiving a \$5 bill, MathSoc gladly returned the extra 50 cents, possibly a down payment for the next bunch. We as Mathies are tired of playing silly games, for we have much better ways of spending our time.

*And speaking of T-shirts, next term we will have back the old style of T-shirts, and anyone buying a shirt accompanied by a frosh will get a discount.

*Finally, and most important to those avid card players, BRAND NEW CARDS ARE COMING!!!

Getting to the heart of the matter

POPULAR MYTHS

Strange things happen when you mention to uninitiates that you are a mathematician (student of math or budding mathematician are close enough). Those old high school friends that you haven't seen for years come along and say, "Hey Osgoood what you've been doing with yourself". "Oh I've been going to university". "Hey, hey, hey, heavy stuff man. Whatch you've bin takin?" "Math". Dead silence. Nothing. Nothing at all. Not even an intake of air. Then that old chum of yours, still eyeing you stangely, retorts (a bit too loudly) he never liked or was ever good in math and gives you the old "See ya". Or what about that 3:00 a.m. pickup hockey game with the old gang in the local arena. After a bit of small talk it comes out that your in math. Bang! The guys unobtrusively edge away. But worst of all, are the family gatherings where distant aunts and uncles and miscellaneous relatives start asking about their little nieces and nephews. Of course the old man proudly opens his big yap about how well your doing in math. "Math you say!!" Bang! Gawking old adies fawning over their bright little nieces and nephews.

Enough is enough! How did such a conspiracy arise? How can this myth be permitted to propagate? Suffices to look at your fellow students (well, this won't work all the time) or read the history books to dispel those silly notions that would have mathematicians be serious, staid, placid, stodgy and frail starvelings studying that panacea of knowledge, MATH. We are human too. Contrary to popular belief we don't camp on the fourth floor. In fact a lot of us are downright lazy. This trait dates from way back. The Rhind papyrus (1800 bc) asserts, "a complete and thorough study of all things, insights into all that exists, knowledge of all secrets, etc.....". Actually all it contains is a bit of elementary mathematics that offered the guy who mastered the stuff a cushy job as a royal scribe. We also have Descartes who spent all his mornings in bed because of "ill health". Coming from a good family he chose a career in the army. Even on military campaigns he managed to spend a good part of his time in bed. He was so accustomed to this life that when he started to teach Queen Christina at six in the morning he died.

And who says mathematics is not relevant?! Flog those disbelievers, quell those yapping dogs, denounce the charlatans. Mahavira (850 AD) tried hard to give social significance to his

equations. Instead of writing an equation in the uninspired form of $1/4x + 2\sqrt{x} + 15 = x$, he writes "One fourth of a herd of camels was seen in a forest. Twice the square root of that herd (bet you never saw a square root of a herd walking around) had moved onto the mountain slope. Three times five camels however were found to remain on the river bank. What is the number of that herd of camel?" Truly 'tis poetry. Mathematicians have also been known to throw light on economic and social history. Let's look at Bhaskara (1114 AD), "A female slave of sixteen is worth 8 oxen who have worked for 2 years, her price declines as she grows older." Or what about that dude in Ancient Greece who got pissed off at the stories of his and other mathematicians absentmindedness and went on to prove that were no less shrewd than businessmen. He cornered the market in olive oil and made himself rich.

Then again you hit upon some real characters. Empedocles claimed to be a god. To prove his immortality he leaped into a volcano. This was not the first thing he said or tried but it was his last. The belief in one's godhood seems to be an occupational hazard. Pythagoras also claimed to be a god. To ensure his claim to fame he made all the Pythagorians ascribe their discoveries to himself. One guy didn't. He died in a shipwreck in just punishment for his sin. In the Middle Ages when competition became too fierce mathematicians were not above intriguing and disposing of their rivals in unmentionable ways. Such earthly conduct should surely dispel those slanderous myths ascribing lofty pursuits to us.

There you have it fellow math students. The whole and unabashed truth. The unexpurged disclaimer of those foul myths. Wear your buttons proudly and put those stickers on your bumpers. **MATHEMATICIANS ARE HUMAN TOO.**

From the Capital

OFS

On the weekend of June 4-6 the OFS (Ontario Federation of Students for those who don't know) held their annual conference at Carleton University in Ottawa. The schedule of workshops, special sessions, and general meetings was so tight that there wasn't even sufficient time for a tour of our fair capital!

Unfortunately, it was generally felt that the conference was mediocre in terms of its productiveness, partially due to time restrictions. Perhaps a simplistic way to sum it all up is to state that innumerable committees and several task forces were set up. How much they will actually succeed in accomplishing is anybody's guess.

The structural organization of the conference left something to be desired. The basic problem was that many of the workshops were not planned well enough

so that direction for discussion was lacking. Also, one or two of them, such as the one on entertainment, pubs and drinking age, seemed unnecessary or else were allocated more time than necessary. As a result, insufficient time was left for the general meetings where all the decision-making took place.

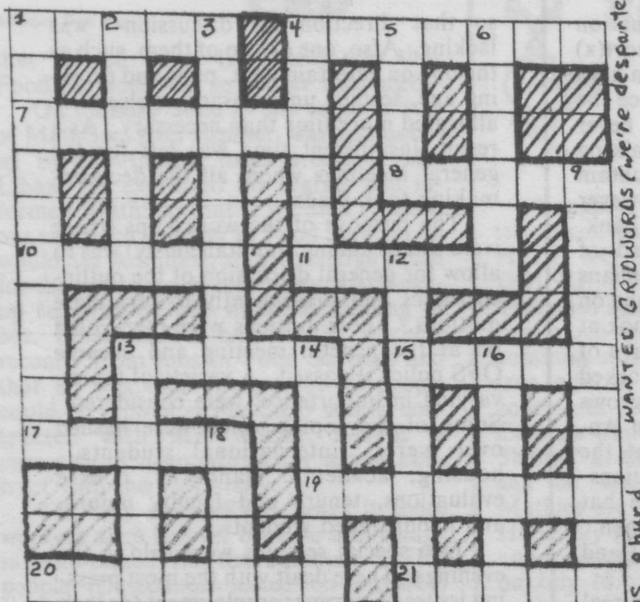
The purpose of the workshops (there were three running simultaneously) was to allow for general discussion of the outlined topics and subsequently to formulate motions. These motions were then voted on at the general meeting and became OFS policy if passed. A variety of topics, varying in importance, were considered. Some of the topics which were hashed over were: international students, housing, academic standards, course evaluations, tenure and faculty unions, and handicapped students.

Two special sessions were held in the evenings. These dealt with the most pressing issues of summer employment (or lack of it to be more precise) and National Student Day. Although the latter won't be held until November 3, it is urgent that a general plan of action be formulated right now so that specific details can be worked out by the fall.

The significance of N.S. day, if it comes off successfully, cannot be underated. To my knowledge it is the most adventurous undertaking which the OFS has ever attempted. It could considerably alter the credibility and importance of the OFS if it succeeds in drawing the government's attention to the problems faced by students. It is also aimed at emphasizing the integral role of students and post secondary institutions in the community as a whole. People have to realize that many of the problems facing students, such as housing and government cutbacks, are also problems shared by other sectors of the community.

At the session on summer employment, attention was focused on the extremely high student unemployment rate. As well, the little known fact that many people who have managed to find summer jobs are working for the minimum wage (or close to it) was brought up. The fear was expressed that many students will be unable to return to school due to financial reasons. The problems with OSAP policy were also discussed and action was planned to lobby the government into relaxing OSAP requirements for the coming school year. Whether or not much can be done to alleviate the unemployment situation for this summer, plans are already underway to try to prevent a repeat of the situation next year, since present forecasts indicate that things will deteriorate next year, rather than improve.

Amazingly enough, many delegates managed to endure the excruciatingly long general meetings held Saturday morning and all day Sunday. The budget was passed, the new executive was elected, countless motions were voted on, and (as previously mentioned) many committees were set up. A few delegates were forced to leave early (no, not by bouncers) to return home.



The Solution

TOMIAOW ■ A0000000
 AMASTHEAD ■ 000003
 RATE ■ ■ LIT ■ 01968
 ■ THEFALLOF1975 ■
 EHS ■ AP ■ EYE ■ 1 ■ ■ I
 SNOWYAIR ■ DREAMS ■
 SECA ■ T00 ■ SEARS ■
 AW ■ TOHUNT ■ SET ■ H
 ■ SHEY ■ ■ ANT ■ ■ LI
 PIERS ■ MAKE ■ BEAK ■
 ESPLANADE ■ SIGMA ■
 NB ■ OLEOS ■ PIT ■ ET ■
 CENOTES ■ MUSES ■ H
 ISO ■ EDITOR ■ RACY ■
 LT ■ GRIDWORD ■ PAX

djm

GRIDWORD COMMENT

My apologies for my bad typing last issue which caused several of the clues to be incorrect (but what's new?). We had 10 entries which broke down into 3 correct, 1 correct but late (faster Graham), 2 in error because of my mistakes and 4 incorrect because of their *bleep*. The winner after a few flipped coins was **Stephen C Locke** with Ray Butterworth and Mark Brader runners-up (better luck next time).

Now for some comments on the contestants. Mardy, how can you say that the clues are vague? Especially when you misspell *miaow*. As for Ted, I will admit that NO KATHY-X is more reasonable than HI KATHY-X as a greeting to said subject. John, I know you told the truth since both you and your brother got the same clue wrong. To Owen: Don't you know how to spell KATHY-X's name yet?

The best on-time answer to the truth came from msbrader. "Truth comes more easily out of error than out of confusion." -Francis Bacon. Exam markers please note.

So much for the past, this week we have a cryptigrid (look that one up in your dictionary!). You have until Monday June 21st to puzzle it out. If you do it correctly and submit it to:

mathNEWS,
 M&C 3038,
 U of Waterloo,
 Waterloo, Ont.

OR simply stuff it in our mailbox on the 3rd floor and you may become our next gridword winner.

If you would like to win your t-shirt (regularly \$2.25) the easy way then create a gridword and send it in to us. We will give you a free t-shirt if we use your creation.

Now for the odds and ends..... We have another proof (this one lifted by Ron).

PROVE: Hallowe'en = Christmas
 PROOF: Hallowe'en = October 31
 October 31 = 31 Oct
 31 Oct = 31 octal
 31 octal = 25 decimal
 25 decimal = 25 Dec
 25 Dec = December 25
 December 25 = Christmas

Here are a few quotes I picked up in and around campus. "I worshipped the sun last year, but it wasn't worth it." - mathSoc V.P. "I'm not in love. I'm in lust." -WATSFIC treasurer

When ordering pizza on a mathNEWS night it is interesting to note some of the likes and dislikes. For example Sir R. refuses to eat pizzas with "ice cream, bicycles, clocks or any type of pepper". One suggestion for pizza was given by i.c.c. as "green peppers, onions, olives and a well-boiled mathNEWS".

NAME:

Phone:

Reason:

Gridword DEADLINE is June 21st

Across

01. ARRANGE AND/OR RED
04. BELIEVED IN TOTAL WORTH IN DERANGED MARQUIS
07. MONEY MAKES A LOT OF SENSE, WE HEAR
08. HEADING FOR NOTHING INDEED.
10. FLOWER TAKES A REST.
11. WICKED NARROWING.
13. IMPLIED FRACTION OF TIC-TAC-TOE
15. LOCATION OF TIN DIAMONDS.
17. HIMALAYAN RECLUSE
19. CAN'T BE OUTSTANDING
20. ANNE SWEARS TO THE RESPONSE, WE HEAR
21. PROUD WALK GIVES SUPPORT



Down

01. OF KISSING, (WITHOUT A FRIEND)
 A CALLOUSLY CONSERVATIVE ENDING.
02. FROM FRENCH WINE, TOSS OUT.
03. THE ART OF SPEAKING WELL ABOUT
 HERDIC TRADES WITHOUT REFRESHMENTS
04. TO POSTULATE - THE END AT THE BEGINNING
05. THE FIRST ACROSS IS THE FINAL
 CHARACTERISTIC (RESULT)
06. A TEACHER OF TEN MORE LESS
 A NOTE
09. THE BEGINNING IS JUST AN END,
 OF SHOWING MY LOVE.
12. THESE ARE NOT FOUR-STAR GENITALS.
13. TO SALT UP THE SUMS
14. THE NET SIN MAKES NOTHING OF LOVE.
16. HESITANT ENDING WITH A STUPID MUTE.
18. A CERTAIN RUSE.

CSC on a TRIP

At last week's Computer Science Club meeting, the details of the field trip to the CDC mainframe manufacturing plant in Mississauga were revealed. The trip will leave here at 8:00 a.m. Friday, June 25th. People still interested in going should sign the sheet on the door of the CSC office. However, since a maximum of 20 people will be allowed on the tour (CDC's limit, not ours), if we are overbooked CSC members will get first crack at places on the tour.

Next week's meeting will be at 7:30 p.m. Tuesday June 15th, in M&C 3005 and all those who wish to go on the CDC trip should attend the meeting or get someone to go for them or contact one of the executive.

Half Duplex (Son of Full Duplex)

LUDWIG von ZOPFAULT

Today we shall discuss one of the more famous (or infamous) organizations on campus - the Department of Coordination.

Since this is the summer term, I assume that most of you are co-op students, and as such already have your own private collection of horror stories in which Coordination plays the heavy - such things as having them lose resumes, job cards, giving you interviews with employers you never considered, changing interview times and dates without a word of warning, etc. In fact, it has been suggested that the Coordination motto is "Two wrongs don't make a right - but three do". Leaving these aside, let us consider how the Department of Coordination affects the average (co-op) student.

First of all, it costs \$60.30 more per term in tuition fees for co-op than for regular programmes. Coordination persuades large numbers of otherwise sane students to go through the ritual of interviews (which usually entails being garbed fit for a funeral), to be raffled off as low-cost, high grade employees for such jobs as elevator counterweights, hydro pole insulators, and (shudder) keypunchers. Finally, they supply a lot of jobs - not just to students, of course, but to the coordinators sitting in Needless Hall as well. Now, *there's* a job a lot of students would like to get their hands on. Come to that, *there's* a lot of *coordinators* students would like to get their hands on. But back to the topic at hand.

For this money, Coordination attempts to find jobs related to one's field of study, so that students maintain at least a little coherence between their field of study, and what their job is related to. "Attempts" is as close as they usually get, too. Many are the persons in co-op I know who have gotten such jobs as trekking around Northern Ontario on foot and living in tents, working in mines, updating COBOL programs, etc. However, the Math Faculty seems to do better than most - percentage of unplaced students after interviews in Math is smaller than in Science or Engineering. Mind you, the Math coordinators have some very nasty habits, too. They have been known to advise first year mathites to drop all physics and chemistry courses because they are "too hard"; sometimes this is done before the student has written a midterm or before they have any idea how well they are doing in the courses. If one sits back and looks at the typical first year mathite's course selection, with those science courses it is possible for the student to switch to the Faculty of Science - along with his B.I.U.'s. And without them, the student has a far more difficult time transferring out of Math, if desired. So much for the theory that coordinators are interested in the student's welfare.

In fact, one could easily take the cynic's view that Coordination is far more concerned with the employers than the students. After all, it is the employer who gets to say which student is wanted for which job, and *not* the other way around. Not only that, but the employer gets to say whether the student stays in co-op or not, by means of the "unsatisfactory" evaluation.

Idea! Suppose we graded coordinators the same way as employers grade us! Think of all the cushy jobs that would then be available... **TO MY ORTHOGONALIZED GHOSTWRITER:**

Problems worthy
of attack
prove their worth
by hitting back.

ROOM FOR RENT: Share 2 Bedroom with two 4th year math students. Will have own room. 125 Lincoln Road (Weber at Bridgeport). Rent is \$70 or best offer (per month) Call (Larry or Eric) 885-4846 Available **immediately** until Sept 1, 1976.

WATSFIC (University of Waterloo Science Fiction Club) regular meetings every Thursday in MC5158. Everyone is invited to drop in on these active and gamey meetings any time after 7:30 pm. For more details contact
WATSFIC,
M&C 3038,
U of Waterloo.

THEATRE! The Waterloo Summer Theatre Company will be presenting *A Day in the Death of Joe Egg* in the Theatre of the Arts on June 17th to 20th. Start time is 8pm. \$2.50 per student. For more information phone 885-4280

KW Canada-China Friendship Society Programme: Walter Miller, Vice President of the National Farmers' Union, will give a talk and slide show entitled *Agriculture in China* about his 1971 trip to China. Admission 50 cents. Refreshments. Trinity United Church, Frederick Street & Market Square. Monday 21 June 8 PM.

HOUSING WANTED: 3 or 4 girls are looking for a townhouse close to campus for September. Please call Rob 885-1379 Evenings.

THANKS: We would like to thank all those involved with our party on Saturday, June 12th. It was a delightful surprise. Your gift will be put to good use. Pat and John

ADS

STARSONGS2 deadline is June 21

FOR SALE: One 39" mattress and box spring. Fairly good condition. \$10.00 Also, one single waterbed. Excellent condition. Fur-lined headboard and frame. New \$75. Asking \$50. Willing to negotiate. Phone 884-6952

WANTED: Recorder players for an amateur group. No experience necessary. Will teach. Phone h at 884-7534.

Σ { cheap booze, stereo, reading room, colour TV } = FUN

All this (and more) can be yours at the *Grad Club* for a mere \$10. per term (or \$15 for two terms). An associate membership entitles you to:

- full access to the club and all its services (legal aid, photocopying, etc.)
- take up to four (yes, four!) guests into the club at any time

Features of the club include:

- Bar open from 12 noon - 1 a.m. Monday - Saturday
- Cheapest drinks in Kitchener - Waterloo (we beat the C. C. Pub by \$\$\$'s) and the best subs and sandwiches on campus.
- TV and reading rooms

Memberships may be obtained from the *Grad House* (adjacent to the South Campus Hall). The number of associate memberships is limited, so don't be disappointed. Your membership will pay for itself in weeks!

BURLOAF

There were a couple of false alarms last week in the Math building. In response to the recent number of false alarms that have been occurring over past months, someone has come up with a suggestion for a false alarm system.

The false alarm system would be wired up alongside the regular alarm. It would look for fires all over the Math building, and when it failed to find any, it would turn in a false alarm.

While on the topic of fires, a few years ago a volunteer fire department was tried on several charges of arson. Apparently, this crew of people was in the habit of setting a fire in some remote building and then rushing out to put it out.

Another story comes from a usually unreliable source: A computer company had a sprinkler system installed in their computer room. By having the sprinkler system, they got better insurance rates. Now to hold insurance rates even lower, they did not connect the sprinkler system to any water supply, thereby negating the need for insurance against water damage.

Recently, a New York publisher brought out a book called "The Nothing Book", which consisted entirely of blank pages. A Belgian publisher accused the New York firm of plagiarism, because it had a similar book out, entitled "The Memoirs of an Amnesiac". The American firm rejected the claim, saying that blankness is in the public domain and therefore not subject to copyright laws.

If you live within your budget, you will be without worries, and many other things as well.

mathNEWS received a communication from a faithful reader, Mark Brader. He tells us of an interesting court case in California. A man got charged with passing counterfeit money when he tried to spend a phoney bill. The defendant successfully argued that he had stolen the bill, and therefore had no way of knowing it was counterfeit. He was then charged with theft. He successfully argued this time that since the bill was a fake, it was of no value, so no real theft had been committed. The guy therefore got off scot free.

The fibonacci sequence is that well known string of numbers where each number is the sum of the previous two: 1, 1, 2, 3, 5, 8, ... It's one of those number theory phenomena which appears deceptively simple but refuses to be easily made the subject of theorems and formulas. If, when generating the fibonacci sequence,

each new term is taken mod 10, we end up with a string of numbers between 0 and 9: 1, 1, 2, 3, 5, 8, 3, 1, 4, 5, ... This particular sequence will repeat itself after 60 terms. Using a different pair of digits to start the sequence, namely 2 and 2, we get a difference sequence: 2, 2, 4, 6, 0, 6, ... which cycles after 20 terms. If we add these two sequences together, term by term, we get the sequence 3, 3, 6, 9, 5, ... which has a period of 60 which is what we'd probably expect ($60 = \text{lcm}(60, 20)$); in fact 3, 3, 6, ... generates the 1, 1, 2, ... sequence. However, there is a clincher: adding the two original sequences together again, but this time with the second sequence moved over one digit, we get a new sequence: 1, 3, 4, 7, ... but this sequence has a period of 12. Weird.

For what it's worth, your CSC president, who is an ardent disliker of APL, was doing his Physics 360 assignment on terminal 44. (This was brought to my attention by an amateur computer numberologist who only comes out at night.)

Zap! Zapppp! zzzzzpp!

viva la revolution

This week, the Burloaf received a suggestion for an INTEGER_OF_THE_WEEK from a person who signs himself SCL. It's this week's integer because it's sort of neat and I lack any better numbers. Here it is, our INTEGER_OF_THE_WEEK:

169
169 is the sum of one square, namely 13^2 . It is also the sum of two squares, $5^2 + 12^2$. It is also the sum of three squares, $3^2 + 4^2 + 12^2$. Not only that, it is the sum of four squares, $2^2 + 4^2 + 7^2 + 10^2$. (Just to show how interesting this is, I leave it to the reader to find any sizeable quantity of integers that are the sums of four squares.) But it doesn't stop there! $169 = 2^2 + 4^2 + 6^2 + 7^2 + 8^2$ (five squares), $= 1^2 + 4^2 + 4^2 + 6^2 + 6^2 + 8^2$ (six squares) = ... Where does it stop?

Not only is 169 a perfect square, but so are two of its cousins, 196 and 961.

JJLONG BANS THE ORANGE BOMB

At the May 29th meeting Federation Council endorsed the OFS position opposing a \$900 fee increase for foreign students. It was felt that those most hurt would be students from underdeveloped countries who could least afford the increase. Council believed that the Federation ought to protect minorities since students are a minority themselves. If students don't stick together we leave ourselves open to more government attacks.

In regards to foreign professors, there was no definite decision. Though it was felt desirable to see more Canadian professors, it was pointed out that it would be hypocritical to support foreign students and attack foreign profs. In areas of a technical nature such as math we should have the best professors available. The real problem is to open up the selection process so that a small clique doesn't select its friends. Students should be involved here.

In other business Council approved the hiring of former Chevron editor John Morris as a part-time fieldworker for the summer. A full-time researcher for the Board of Education will be hired in August for six weeks. Reports came from Bruce Rorrison regarding the three phase 1976 Orientation and from Doug Thompson and Shane Roberts about their activities/views of the N.U.S. conference in Winnipeg. A plan was approved to recognize the National Union of Students sponsored National Student Day on November 3rd. Plans to integrate OFS and NUS were discussed.

The renaming of the Campus Centre Pub disturbed me the most. You probably know what it is [see elsewhere this issue] and I will not stoop to repeating it here. I will still refer to the C C Pub, as will most people.

It seems to me that the whims of Doug Thompson and Dave McLellan in regards to the pub name weighed heavier in Council than did the wishes of the students as expressed in a recent survey [see another survey elsewhere this issue]. President Roberts, despite earlier plans to go along with the students' views, decided to side with the Thompson group. There is still hope as there will be an attempt to rescind the action at the July 10th meeting. Anyone wishing to join this movement can send inquiries or advice to "Ban the Bomb(S) Committee", c/o Ron Hipfner, MC3038 and the information will be directed to me.

In other news I'd like to congratulate Hexad on his new position on Fed Council as co-op rep and his appointment to the pub steering committee.

There has been talk lately about a new MathSoc symbol. You may know that I find the Pink Tie distasteful. I disagree with Steve Risto's remarks about the tie's tradition. I don't believe in change for its own sake, but I feel that a tradition is not worth keeping if that tradition (i.e. the tie) was not very good to begin with. If the tie is kept then it should be cut down to a manageable size under 10 feet. Whatever the decision I hope that there is a change for the better, something that more math students can identify with.

myth



LETICS

Sports fans! Welcome once again to Mythletics. Have we got a pack of Mes some stories to tell this week.

The *Sunnydale Hosebags* started out the co-ed Slow-Pitch season in fine form three weeks ago, playing against the X's. [Are they co-horts of the mysterious *Kathy-X* ?]

The *Hosebags* made a seemingly strategically intelligent move when they traded *Dryden & Ralph* (not his real name, he acquired it one night lying under a table at the *Kent*) to the X's for future considerations. [Note: the X's were mostly girls]. *Lady Booth* (a woman of the night) & *Libidinous Lorraine* contributed greatly to the *Hosebag's* cause, by striking out about 5 times each. Luckily the *Sunnydale Scummers* had fellas like *Gardener*, *Gilligan* (his real name's Duke, but I think some girl stuck him with Gilligan), and the *Big Fella* to pick up the infield slack caused by drunks like *Rudy* (*Harriet House-wife*) *Alphabet*. [Rudy when are you ever going to get a job, instead of making the boys pay for your cooking.]

The game was neck and neck until *Dryden* pulled a particularly asinine move. He hit a home run ball down the third base line, but stood at home plate to see if it would land fair or foul (being a notoriously lazy S. O. B., he wasn't going to run if it dropped foul). Well, it landed fair, out on Columbia Road somewhere [By now he could have walked the bases twice], and *Dryden* was off. Screaming

past first base, screaming past second base, sort of trotting past third base, and put out at home.

In a post game interview, *Scrooge* was asked why he traded *Dryden* off to the X's: "Well I figures the only place I hits to, is centre field, and I knows that that's the position *Dryden* plays at (and pretty crumbily too). *How* was I to know that I'd be unlucky enough to hit two fly balls square into his glove, without him having to move an inch.

The only two high-lights of a dull second game against the Computing Centre's *Real Machine*, were *Blackie's* hotdogging-it and catching about 20 fly balls into the outfield, and an anonymous second base woman for the *Real Machine*.

Change of shirt time and we become the *Math Sea-Whores* Waterpolo team. [*Lorraine* wasn't there as she was out working. As the *Hosebag* t-shirts say "2 - bits a hit"].

We did a lot better in this game as we played *Larry & Eric's "Boob Tubes"*. I'll tell you, its a good thing the the *Sea-Whores* are not known for their excellent defensive Waterpolo skills. Old *Sieve* in net let in about 14 goals. Luckily, *Dryden & Scrooge* scored 5 and 10 goals respectively (*Lorraine* scored once, but it wasn't in the pool). *Scrooge* said after the game that lately he's been lucky if he scores once a year.

MATH Popularity Rises

Warm Bodies Abound

Population EXPLOSION! As promised in the summer's first issue (#11.0) here are some numbers to prove that there really are more warm bodies in your classes. Figures are courtesy of Computer Science and pertain to their courses, although the results are likely applicable throughout the university.

This summer 1380 seats are being filled in computer classes as opposed to 1088 in summer 1975, an increase of 27%. This increase, broken down by level: 1rst/2nd year — 567 vs. 469 (up 20.9%); 3rd — 583 vs. 436 (up 33.7%); 4th — 230 vs. 183 (up 25.6%). In term of densities class sizes went from an average of 93.8 to 113.4 persons in a first/second year course; from 54.5 to 72.9 in third year; from 30.5 to 32.9 in fourth year courses — an overall average size rising from 57 to 69.

A spokesman for computer science attributed the inflated numbers mainly to regular students continuing school with the returning co-ops rather than not getting a summer job.

Following are the actual enrolments as of press-time (we retain the old course numbers, of course).

Course	Spring/1975 Enrolment	Spring/1976 Enrolment
122a	291	331
132b	70	79
240a	108	-
240b	-	157
320a	114	130
314a	-	128
334a	91	-
340a	90	115
371a	110	150
372b	31	60
470a	4	20
471a	27	66
472c	16	10
474a	43	37
474b	-	30
474d	48	37
479a	45	30

Teaching Option News

by Moogong

The news from the feedback meeting was that there are 16 people applying for 12 jobs with everyone else placed. However, there are still jobs coming in so everyone has a good chance to get placed.

Our new co-ordinator starts work the first week of August. More about him later!

There will be two seminars for teaching students during this term. Dates and times will be announced later. Remember the sign-up sheets on the Teaching Option Bulletin Board on the fifth floor outside Mr Dunkley's office. These are for interviews to be held with faculty advisors. The talks will be about marks and difficulties that we may be having with the program.

A unanimous complaint was raised by the class in reference to our compulsory course PSYCH242. There were many complaints registered namely that the workload was too heavy, course material irrelevant for our purposes, and that the class size was too large. The matter is being looked into.

SPORTS

The teacher slow pitch team went down to bitter defeat in their first game. The score was 33 to 21. It was described as a pitchers' duel but somehow we have our doubts about that.

Our men's basketball team emerged victorious in their first game, trouncing a very disorganized Civies 79 team. The highlight of the game was a goaltending call against Dave Beihn, one of two non-teachers on the team. The game was stopped and everyone on both teams congratulated him on his accomplishment. Jim Senn, Gene Cassidy, and Mike Watton played exceptionally in the 38 to 10 win.

The bubble burst in our second game when we lost to kin 39 to 26. After breaking out to an early lead, MTO (that's us) lost the momentum and kin went on to win. Gene Cassidy was high scorer for MTO.

TRUE FACTS

Last Monday night an IQ test was administered to a WLU business class. The average IQ was measured to be approximately 20. This proves all those opinions we've held about the little red highschool down the road.

Burt Matthews (UW president) is leaving Waterloo this fall for a more southerly climate. But don't fear he will return in the fall of 1977.

FYJM R USPC EXIL Q TROB

Yes, readers, this week's *thrilling(?)* episode is all about codes. Why? Well, let's just say the subject came up ...

Probably the simplest codes are the codes used to represent numbers. Everyone is used to decimal and binary, and common codings like hexadecimal (IBM) and octal (nearly everybody else), which are simply numeric representations in various convenient bases.

Somewhat less well known is Binary Coded Decimal (BCD), in which each decimal digit is stored as a hex digit (4 bits). Thus a hex dump of BCD looks like the decimal value represented. Unfortunately, it turns out that it is faster and easier to store values in true binary and convert to decimal digits on output.

Another unusual numeric code is Gray Code. This was developed for numeric control of devices and processes, and is almost impossible to calculate in. It was created to provide that the difference between two adjacent bit patterns is the state of one (and only one) bit. Needless to say, it is not widely used.

A considerably more interesting field is presented by character codes; sets of bit patterns corresponding to letters, symbols, digits and communication control symbols. Fixed-length bit pattern codes are common, with names like ASCII and EBCDIC; variable-length codes, like Huffman encoding (see *expl/huff*) are less common because they are harder to use, but are more efficient in bits. This efficiency is obtained by making the length of bit pattern of a given character roughly inversely proportional to the frequency with which it is used.

Then there are a few oddballs (typeballs?), like 2741 Correspondence code and Z code, the APL character code, which includes overstrikes as single characters.

What most people refer to as a code is really a cipher, some sort of representation of one set of characters by another. A simple substitution cipher, like that in the title (which is simpler than most!), is a direct mapping of an "alphabet" onto a reordered version of itself.

Such simple encodings are relatively simple to decode, so more complex encoding algorithms have been developed. Typical is the Viginere (I *think* that's how it's spelled!) cipher, which is encoded by reference to a simple table. The principle is that the mapping of a character depends not only on its position in the alphabet,



but also its position in the text to be encoded. Unfortunately, this code will, eventually, repeat itself and become subject to analysis of character frequencies, allowing the code to be broken.

In an attempt to improve on Viginere's table-generation procedure, I found the following:

```

abcdefghijklm
bjemacdfghikl
jhalbemcdfgik
hfbkjalemcdgi
fcjihbkalemcdg
cehgfbjkalmd
eafdcghjibklm
abcmefdhgjikl
    
```

The second line is a semi-random rearrangement of the first. Subsequent lines are generated by mapping each line as the first maps onto the second. Notice that the sequences (vertically) "abjhfce" and "dmlkig" repeat independently; the first line is eventually reproduced (in the 42nd line...).

Now here's the really fascinating part: take a writing implement, or better yet, several of different colours and shade in the letters d, m, g and k. Notice any pattern?

Certain types of ciphers can be used inversely to decode. Special cases are algorithms like "bash", with the rare property that one encryption with an arbitrary "key" will undo the previous encrypting, if it was done with the same key.

Other algorithms, especially where there is no one-to-one correspondence between input and output characters, CANNOT be reversed. This sort of algorithm is used by UNIX to code passwords.

Everyone has heard of converting letters to the numbers which index them into the alphabet. One of the 'bun's brighter users tried going a step further: adding the element of the Fibonacci Sequence corresponding to the position of each character in the message (mod 26) and reconverting to letters.

Homework:

I. Assume "exilqtrob" was produced by this method. What was encoded?

II. Prepare a table as shown above for the entire ASCII character set, including control characters. The second row is generated by taking a random subset of the character set, and adding the remaining characters *in order*. It is highly recommended that you write a program to do this.

And now, on with the trivia:

A mouse was recently seen running across the floor of the third floor math lounge.

In Vancouver, there is a sign at a major intersection which reads: "To cross Pacific, press button and wait for walk signal"

The University intends to market WIDJET as a software system. The Royal Bank is seriously considering installing WIDJET as a system. Need we comment?

Meanwhile, somebody suggested a combined editor/job-submission system for UNIX. Proposed name? MIDJET

Graffiti (seen on Red Room walls): IBM is the pit(s)!

University of Alberta recently installed Canada's first Amdahl 470 V/6, replacing their 360/67. The Amdahl is a totally 4th-generation, LSI (large-scale integration) CPU, with an 8 MegaByte storage capacity. It is totally compatible with IBM software and peripherals, priced competitively with the 370/168, but from 2 to 8 times as fast, depending on the /168 configuration. Typical time from delivery to on-line operation is 36 hours.

A nice Amdahl feature is the mini which serves as a console. If the resident CE (customer engineer) can't fix a bug in the hardware, a team of experts at Amdahl headquarters can check it out from there by phone, connecting *their* mini as the console. IBM, mo-o-ove over!

I see by the n00s that "p" has been rewritten to follow UNIX standards. Contrary to what one might expect, Ciaran claims somebody else did it. [Snarky Comment: CHF did it, obviously]

There is a profile of Professor Graham in the May issue of ComputerData, a new Canadian data-processing magazine which seems to have gotten off to a good start. While largely business-oriented, there are reports on computer law, consumer issues related to computers, and announcements of new products and innovations.

And now the moment you've all been waiting for: the **COMPUTER_OF_THE_FORTNIGHT!**

And this week, it's the Arts Computing Centre's Xerox XDS 530. The machine serves mainly for remote debug entry to the 360/75; it has a capability to do its own processing in the background, but insufficient core.

What makes this machine really unusual is the reservation of the bottom 64 core locations for "favourite" numbers.

This means that a portion of memory contains what appear to be random integers, but if you change one (or more) the machine's arithmetic goes all funny.

Letters to the Trob



Dear Trob:

I was wondering if the balcony around the math lounges will be opened this summer so that the students can go out there. Why was the balcony built around the lounges if it is not to be used?? Couldn't some tables be moved out there so it would be possible to sit & work or eat your lunch outdoors?

(Signed) Depraved

Dear Depraved:

Check the doors to the patio; there is usually one or more which are unlocked. I am told that the doors should not remain shut because that would strain the air conditioning. If you want tables or chairs, move them from the lounge. Personally, I doubt there is room for a table.

Write again and tell me you know what your pseudonym means; I suspect you don't.

Exil Q. Trob

Dear Trob:

arpepper is a zit;
and he is also is half-wit !
People's nerves he really tests !
Because he is a total pest !

A. R. Pepper

Dear Sarge:

I totally agree!!

Exil Q. Trob



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

Dear mathSoc:

Not being a stats major I am not well informed of all the theoretical aspects of designing a questionnaire. (re: your comment of unbiasedness (*sic*)). Therefore please accept my apology for inferring (stats word) that mathSoc was not perfect regarding question#1 of the library questionnaire.

However, I would like to point out that last week a slight typographical error occurred in the spelling of my last name. It is spelled **BECEVELLO** not **BUEVELLO**.

Yours truly,
John Becevello

Comment: The questionnaires are being run by mathNEWS not by mathSoc and it wasn't a typo, we just couldn't read your writing.

Dear MATHNEWS:

I think computers must like oral sex because they are always go down on me.

Yours truly,
anon

Comment: anon the correct spelling is mathNEWS. Every intelligent person should remember that important fact.



Zap! Zapppp! zzzzap!! argh!

shades of SIRIUS BUSINESS

In the beginning there was **WATSFIC** (the UOW Science Fiction Club); and **WATSFIC** begat **STARSONGS** (the club fanzine). And the first begating was in the month of April last.

The begating deadline for **STARSONGS 2** is June 21st. So far we have an article on the evolution of **Pierson's Puppeteers**, an article on the **Hugo** and **Nebula** awards, the second part of **Handful of Gods**, an article on **Startrek** computer games, a **Concalendar** (a listing of sf conventions), some artwork, and several book reviews. We are still after material. If you have anything which you think might be suitable, bring it in to any regular **WATSFIC** meeting or mail it to us in MC3038.

We showed *War of the Worlds* on June 7th in MC2066. The production was attended by between 60 and 70 people. Subs, kaisers and donuts were supplied by an over-stocked C&D as movie munchies. It was decided that we would not show *Clockwork Orange* as it is somewhat outside the range of our budget. So we decided that we would show *When Worlds Collide* on June 28th in M&C 2066. There will be two showings, one at 8pm and the other at 10pm. Non-members will be let in for \$1.00 (members have to come to meetings to find out what they pay).

The rest of the regular meetings for June will be held in MC5158 (a very comfortable spot) every Thursday at 7:30pm.

COMPUTING CENTRE COURSES

June 15 17 22 24

Introduction to SPSS (Statistical Package for the Social Sciences). 3:30pm on all 4 days.

June 21

CMS Exec Files (requires knowledge of CMS). 10:30am to 12:30pm

June 22

Introduction to SPEAKEASY 10:30am to 12noon

The Computing Centre is offering to students, staff and faculty, a programme of non-fee, non-credit courses during the Spring term. If you wish to register for any of the following courses, please send your name, departmental address, building code and a list of the courses you would like to attend, to:

Dianne Hart
User Services
Computing Centre
MC 2008.

A memo stating room numbers for the courses will be returned to you via inter-office mail. Enrolment may be limited and classes may be cancelled if response is insufficient.

mathNEWS

on another Quest

Seeing as our first **mathNEWS** survey generated such great response we've decided to continue with them. So survey #2 was placed on a secluded non-descript table outside the third floor lounges to await the teeming masses. This time we had 3 topics: our math mascot (mathscot), Mathsoc t-shirts, and the CC pub name.

Our current mathscot is an 80 ft. pink tie. (currently missing)

Do you like the current mathscot?
Yes - 37 No - 41 Neutral - 32

Should we have a new symbol?
Yes - 55 No - 27 Neutral - 23
[Ed comment: It should be noted that 4 of those who wished a new symbol stated that they just wanted a shorter tie.]

What do you dislike about the pinkie?
The colour 26
The size 25
The fact it is a tie 30
Dislike nothing 27
Other 1

Interesting comments: perfect complement to my favorite sculpture (the cute fiberglass one); what the hell does a TIE have to do with math, pray tell???; exhibit the damn thing now and then, I've never seen it; it casts sexual aspersions on the entire faculty!!; it's inappropriate as a mascot. It is too bulky to have at math

social functions and as a consequence is never seen. Is there really a pink tie?; Dislike 80 ft. of it; Why are you belittling our beloved P.T.; Mathsoc summer council doesn't have the right to mess around with our 10 year old traditions. If you promoted it more then **people would like it!!**

Suggestions for a new symbol (or improvements of the old): Abacus (Chinese computer); metric; dry clean it; pi; smaller size; fly it from the engineering flagpole; how about a pink bow-tie; perhaps a bust of Euler or Descartes or a giant sigma or a Mathsoc flag (almost anything else is an improvement); an improvement for the pink tie is to burn it; a calculator or a slide rule; something more portable, and symbolizing math - a variable speed slip stick; giant sigma; pink lunch pail; a white pigeon (very much a part of our building; change colour and size; superman (or woman) or anything; a large wooden integral sign; a surface with only one side (ribbon). I forget what they call it; [a mobius strip - dummy]; giant slide rule; klein bottle; pink CRT; used-up teletype ribbon

A few questions about the current mathsoc t-shirts were posed. Criticism and suggestions were solicited:

make designs small like they were before; size is excellent; the co-op dollar implies co-op students are money grubbers. that is not the image I want to project by wearing one; lettering on co-op is poor. i.e. IOOP; get rid of 'therefore I add'; Descartes is a rather clever idea but ugly drawing; enshrine mathematicians on t-shirts e.g. Euler, Gauss with a witty saying under the

picture; how about a large capital pi?; mathie t-shirts should possess quiet dignity, not unlike the mathies themselves; mathNEWS t-shirt has too many small items instead of a single bold symbol. looks like a HI-SKOOL newspaper cover; not enough imagination, designs are too simple; keep it simple. we mathies are humble souls, you know (although we are pretty great).

[editor's comments — it always seems a matter of "nobody wants to do it but everyone complains when it is finally done". Such was/is the case with the t-shirts (which were designed in the fall). If anybody seriously wants to help I'm sure the co-ordinator would be glad to receive art work. Question: why are mathies so damned overworked?]

And there was one final question about the name for the pub in the campus centre. (The Federation Council changed it to the Orange Bomb Shelter last week.) Just to prove that they are not following student opinion (once again):

What name would you like for the pub?
cc pub — 63 orange bomb shelter — 7
other/no answer — 34

Included in the others were the following names: pub, haven, c², the pub, don't care, gypsy inn, the pusillanimous piss pot, the other, the orange pit, the pit, the hydrant, the hovel, cannabis centre, none, rock pile, louch emporium, the watering hole, pink tie cocktail lounge.

And so ends another **mathNEWS** survey, information is essential for efficiency (sounds like a famous quote to me). Anyway next week's survey is still under wraps, if you have a topic worth surveying, let **mathNEWS** know via mail (on 'bun) or mailbox in mathsoc and on third floor.

.....And now the infamous MASTHEAD

hi. it's kind of frightening being infamous. This is **mathNEWS**, financed by, but independent of MathSoc. **NOTE** we are campus-wide this issue, having produced 1200 copies and dropped them all over the world. We started putting this issue together on tues june 8, but due to hardware problems beyond our control (really) we couldn't get it all out until mon june 14. so this issue includes the late-breaking news as well. 156 hours in the process. We had a fine cast of persons out this past week: bun (whose deliverings are obvious), dennis mullin (always the second last one to leave -- incredible), Sir Risto (trying to PINK too much), goddryden mything us, Mr. Half Duplex himself = zofault, Tom Keith who ended up typing half the issue into the 'bun for us, exil q trob (what more can be said?), Roland George notably for his protection of mathies' image, selma sahin who does not want to be known for her OES article (toooo bad), sny (a proof reader who said he didn't want to be mentioned in the masthead - but what are mastheads for?), randall s mcDougall the artist, bon voyage; thanx, mdillon who sort of wrote a part of an article that made it in, antonio h.e. vaselino which is a pseudonym!, and myself *hugh*. jeez i've still got inches to go and nobody left.. sorry, I can mention johann and mamalcolm who attempted to help us out of our hardware fix, and rib who returned and saved the day. Right now dennis and I are going to get the ~~WAX~~ heck out of here, grab a pizza, and get to homes (respective). Logout time is 0039 tuesday june 15. hope you people out there that don't normally read **mathNEWS** like us -- please let us know. address = **mathNEWS**, MC 3038. night..