

# LIVERPOOL FILLS SCH

Liverpool played to enthusiastic crowds during last week's two-night stand at the South Campus Hall Pub. Thursday's crowd was in excess of three hundred, and all 450 tickets for Friday's pub were sold by Friday morning.

As the name suggest, Liverpool is a rock group that bases most of their act on Beatles material. Though augmented by Liverpool's Moog synthesizer, the Beatle sound was quite evident throughout the performances. The elaborate sound system allowed the music to carry with little distortion.

Liverpool started both nights with a collection of early Beatles songs, such as "She Loves You", "Help", and "Hard Day's Night". The second sets were the highlight of the shows. During the second set the band members came on stage dressed in Sgt. Pepper uniforms, and played songs from the Pepper album and some of the Beatles' later works. The concluding set consisted mainly of Liverpool's original material, and gave them a chance to show their heavy metal style.

The Federation paid Liverpool \$2750 for the two nights. Board of Entertainment chairperson Nick

Redding expects that the Federation will make a few hundred dollars profit from ticket sales and bar sales. Redding said that this was a big weekend for Liverpool, as they played in the Breslau Hotel in Kitchener Saturday night.

There is no SCH Pub this week. The Federation was hoping to keep the weekend free for the Blue Oyster Cult concert. Those plans were scuttled when Concert Productions International cancelled the show. The next SCH Pub is Thursday March 16th, when Sweet Blindness performs. Tickets should be on sale soon for that pub.

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Friday, March 10, 1978.

# math NEWS

Volume XVI Number 8.

## LAST DAY OF PREREGISTRATION

## INTRAMURAL AWARDS

NOMINATIONS FOR THE JUDSON WHITESIDE (excellence in skill and participation in men's intramurals) and the ROBERT ALLAN McCORMICK (most significant contribution to men's intramurals as a competitor and/or administrator) trophies will be accepted in Mathsoc MC 3038. For more information contact GEOFF HAINS in Mathsoc or via tss gmhains.

## BRIDGE OVER TROUBLED CARDS

There will be a sanctioned duplicate BRIDGE TOURNAMENT on Monday March 20, 7:00 P.M. sharp in the third floor math lounge. Everyone is welcome. (If you don't have a partner, we will try to find you one.) Entry fee is \$1.00 per player, and if you are a member of the math society, mathsoc will pay \$.50 of this. All entry fees will be returned as prizes.

## The SATURDAY WARZONE

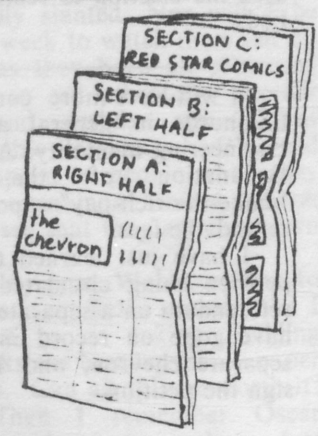
On March 11th at 10am hostilities will commence. Yes, WATSFIC will be holding another wargaming session. It will be held in M&C3009 (or nearby). All interested persons are welcome. Even if you don't have experience come on out. People will be there until 5 in the afternoon.

## C&D NEEDS HELP

Application for the position of c&d manager and assistant manager for the terms of summer and winter 1978, applications are now being accepted.



the chevron solution





## Federation

We lost again. We have once again failed to end Docherty's domain. As you may already know, Dave Carter defeated Nick Redding for the chevron editorship, and we are in for another year of the same from the people in CC 140.

Do not be dismayed. While I doubt I'll attend a staff meeting for twelve hours and hear the AIA attack Redding for trying to make the chevron more of a student paper, I do intend to continue writing for the paper. If you want you can guess how many times a week that I will be called a fascist. Mail your answers to **mathNEWS**. If the response is large enough, I may award prizes at the end of the term.

While Docherty is no longer editor, his associates still control the paper. It is expected that Carter will continue the "Defend the Basic Interests of the Students" policy, but the paper will still not be working in the interest of the students.

Actually Docherty himself had a few kind words for me tonight. He said that he was thinking of beating me up and taking my clothes off, and then hanging me from the rafters in the Campus Centre as a negative example for celebration of the Body Week. I have no similar plans for Neil. I feel that he does a good enough job of scaring people away from the Campus Centre in his present condition, and already sets a negative example for us.

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I now have some words for my second favorite group of people. There are some people around who think I hate the Enginurds. This is a blatant exaggeration. To tell you the truth, they are not all bad. Perhaps they had a bad press, but more on this next week. This week I intend to talk about one Engineer and my disagreements with him over refundable fees.

Some people have referred to Engsoc president Pete King as arrogant, while others have called him a weasel. However we all have a bit of vanity, and Pete King is not the first president to be called a weasel. I don't like to make personal attacks on a person. I'd prefer to attack the actions of the person and his or her positions on various issues. This is why I am writing about Pete King and refundable fees.

When John Tromp mentioned the idea of a partially refundable Federation fee in his campaign for the Fed presidency in February 1976, King said nothing. He neither supported the move, nor attacked it for not going far enough. However, out of the blue, one day last March, King went to the chevron and Burt Matthews with his plan. He later went to Fed council and had a referendum called. Though he

attempted to push a one-stage referendum on the Federation for the summer (when most of the votes would be from Engineers) he later relented. A fair referendum was held in two stages and I must give him credit for doing his homework, as he convinced enough people to support him in the referendum for refundable fees to win. While he won, the students (excepting the Enginurds) lost.

While I credit the organizational skill that allowed refundable fees to win I find King's logic questionable. He may've given a short-term benefit to the Engineers, but he could hurt the Federation, and indirectly the Engineers, he was supposedly trying to help, in the long run.

If the Engineers were dissatisfied with the Federation, why didn't they pull out of the Feds, instead of forcing the other faculties to implement a fee structure that basically only the engineers wanted.

However King said that implementing a refundable fee was a better way to change the Federation, than by quitting the Feds entirely. The argument was that the Feds would be more careful with refundable fees, and thus more responsible to the students. In theory this may work, provided that the system is used as a safeguard and not as a tool for blackmail. One must remember, however, that the Federation is not a nebulous body up in the sky, it is the students. It only works if students, and that includes Pete King and the Engineers as well, get involved and make it work. Unfortunately I have not seen Pete King at a Fed Council meeting since last spring. I know he is busy with his society, but he can at least show the Council that he really does care. After all refundable fees were his "baby", he should at least try to make them work.

Lest one say I am persecuting Mr. King, I will be fair and give him some credit. Despite his distrust of the Federation, he was wise enough not to endorse Janet Rokosova for president, this year. He held back any feelings of revenge he may've had against the Feds. If he wanted to he could have used the election to really screw up the Feds.

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I will have more comments on the Enginurds in general and the whole Engineering mentality. Also perhaps an explanation of the Federation's "make-the-rich-pay" policy towards refundable fees.

I have just learned that there is a petition being circulated calling for a referendum on a separate chevron fee. I have gone on record in support of a separate chevron, and I urge you to sign the petition.

j jlong

## Plus ça change dept.

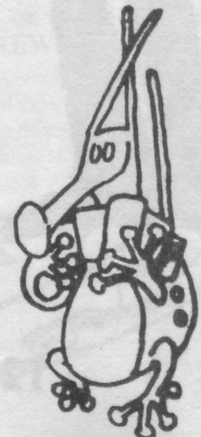
The concept of university education has come full circle. Originally it was a means to instill in upper class male certain social graces. The teaching of facts was tolerated as long as these facts improved the quality of the students' conversation. Even today, when we refer to someone as "educated" or "ignorant", we are usually commenting on behaviours rather than knowledge.

Of course, in those times, the students didn't have to worry about getting jobs afterwards—they automatically went into the diplomatic service or were gentlemen of leisure. When the University became accessible to all, the average student didn't have this security, and the teaching of job-related skills was introduced. Now that there are no jobs, teaching such skills just leads to frustration, since the whole exercise of attending university seems pointless. And so, ironically, universities are being forced back into their old role of teaching social skills, since these are useful even if you are unemployed. Moreover, with enrolment dropping, in order to survive, the universities are going to have to really try to promote these courses, to attract students. I can see the university calendar of the not too distant future containing things like:

Don't know what to do with yourself? you will if you take Sex Education 101: Introduction to Masturbation. A course for the individual who wants to "go it alone".

This is a useful, but not compulsory, prerequisite for Sex Education 201, Introduction to Introduction (male students only, except by permission of the instructor). This is related to, but not to be confused with, Etiquette 110, Introduction to Introductions. In fact, Sex Education 201 often applies techniques of Etiquette 110 but in new contexts. For example, at the appropriate time, the question "May I introduce myself" can have devastating effects, but the skills taught in Sex Education 230: Take your partner, are essential since these effects can be constructive or destructive, depending on the partner...

E.A.A





## Ramblings, Ravings, and Incoherent Mumbles

9:02, my watch resolutely blinks at me, 9:02. I look once again around the room, and the pieces of paper posted all over clamor for my attention. From filing cabinets, pillars, desk sides, walls, windows, even dangling from the ceiling, they give me a glimpse of the microcosm the people who frequent this place have built around themselves. This is CC140, the home of the Chevron, and I have been in this room for almost exactly eight hours.

"We're pasting him!!" I hear someone exclaim in a low voice behind me, and look up to focus on Nick Redding, sitting in a chair under the blackboard with the agenda on it. He looks for all the world like a tired leprechaun, the chairs of his inquisitors arranged beside and opposite him. Neil Docherty sits beside him roughly two feet away, directing questions at him from a six-page letter he had previously xeroxed and distributed to staff.

"You want a watchdog press, not a lapdog one, yet when I handed you a first draft of an anti-Federation editorial, no, not even that, an editorial against Rick Smit, the first thing you do is run up and give a copy to Smit," he says, in his brogue.

"I've explained the point before: I took it upstairs to have it copied and brought it right back down here."

"But you copied it for Smit."

Smit is leaning against the other side of the block of filing cabinets that forms the Almighty Black Monolith in the centre of the room. He has wanted to interject several times in the last five minutes, but has restrained himself until now.

"Goddamn it, it wasn't for me! I wasn't even around at the time!!!"

Someone behind the cabinet tells him to shut up.

"You can just f\_\_\_\_\_ off!! He is telling an outright lie!!!"

Redding interjects calmly. "I showed the article to everyone in the Federation office."

"And were you behind Don Salichuk reading it on CKMS?"

"No, he did that of his own volition."

Smit has subsided, only his head visible to me. He was manning the desk when I went up this afternoon to get my refund as part of the continuing conspiracy to prevent me from seeing Blue Oyster Cult in concert. The office looked like a perfect life-focus to me, a habitat for a clique to identify with. I suppose all governing bodies form small cliques around their environment; some are friendly, like MathSoc and the Feds, and some are actively opposed,

like EngSoc and the Chevron. Docherty's Scottish and Redding's English weave themselves back into my consciousness again, a deadly game of point and counterpoint, darts in a war of attrition.

I arrived in this room at 1:00, just in time to hear three unidentifiable people cutting up jrbakker's rather crude analysis of last week's Chevron meeting. They conduct things here in a naturalistic way, no repressive Roberts' Rules, no quorum; the meeting is convened when the chairperson feels like it, which in this case happened about 1:30. The discussion of how to conduct the meeting started immediately, the speaker's list growing two names for each one taken off. At 2:35 a motion was made to extend the vote over three days; attempts to put the question were greeted with cries of "bureaucratic maneuver!!"; the motion was defeated at 3:55, 19-24-2. The editor for the coming year is to be decided by those voting members left in this room when the matter comes to a vote; and now, five hours later, I have been out of this room twice for five-minute periods and they are still questioning Redding.

Heather Robertson and Tom Cody laugh periodically at what he is saying, mocking him as they have been all evening, and the words are streaming out of my saturated ears. I close my clipboard in defeat, the impartiality I had early this afternoon hanging in shreds at my feet.

From where I sit I can see fifteen people who will vote for Carter, four for Redding, and four unknowns. None of the rhetoric has changed anyone's mind, which brings me to a paradox I haven't resolved yet: how these people, dedicated to social change and revolution, have let themselves become the reactionaries they accuse others of being. Redding, who here has shown himself to be a capable and literate man, is being hit with hairsplitting questions about events of last summer, while they spoonfed Carter with general questions and let him go with openend answers. I won't wait around to see what they do to Ciaran O'Donnell's survey of 400 students, which concludes that most students feel the paper is unobjective and editorially slanted. Nor will I be around next week to watch them cut up this article as they have all criticisms before, or to sit through another afternoon and perhaps evening of unrememberable dialogue. It's sad what can happen to people when they gain power, even in a limited sphere; they cannot see that they are their own worst enemy.

As I get my coat, Wahlsten, who to my disappointment looks exactly like I expected him to, is asking Redding what he thinks the best university paper in Canada is. Can all this be worth it? I think. Then I remember Oscar Nierstras' words to me earlier: *Just*

*because the Chevron is controlled by a political clique doesn't mean we should give up on it. In fact, that's the worst thing we can do. It's by sticking with it, working personally, that we can change things slowly.* I guess that's why people like Sylvia Hannigan and Jayne Pollock stay with the paper; like a controlled uranium reaction, it needs moderators to keep it going. I take one last look around the room; at two o'clock it was full of people, the far side leftists, the near side rightists, like the French Legislative Assembly 200 years ago. Now the seats nearest me are almost empty, and I walk down the short corridor and through the door to the outside world, closing it softly behind me.

-plragde

*postscript: the final vote, taken at 12:40, tallied 21 votes for Carter, 13 for Redding. W.Reed Green didn't stay around to vote for himself. This is subject to ratification by a majority of staff; results on this will be in Thursday.*

## unclassifiable ADS

**WANTED:** Bachelor apartment for May - August. Preferably furnished. Must be close to campus. Call (514) 727-6789 evenings and weekends.

**WANTED** Young, about-to-be-married couple is looking for an apartment, or other accomodation, near the U of W campus, starting in September/78. Would like rent to be reasonable. Please contact klstaunton or eamacneil on the 'bun. Or, if not possible, call Karen at 884-7969 or Ted at 884-5385.

**FOR SALE** SONY TC-377 reel-to-reel tape recorder and 27,000 feet of tape. Asking \$425. Contact Mark at 885-0595 or *mrhaselback* on MAIL.

**WATSFIC:** The University of Waterloo Science Fiction Club holds its meetings every Tuesday at 7:30 pm in MC 3011. New members and others welcome. Free donuts for members.

**GUITARS!!** for sale. One El Degas cherry sunburst dreadnought (acoustic), with soft-shell case. One El Degas Telecaster copy (electric), black, with hard-shell case. Also Hohner practice amp. Best offer. Call 885-0595 and ask for Wil, or mail *jwbmacaulay* on TSS.

**WIDJET** lovers (likers?) here is a serious ad. If you are interested in buying a "Wonderful WIDJET of Oz" T-shirt contact *pkelly* or *jwbmacaulay* or phone 885-0595.





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.

### *chevron dissected*

Dear **mathNEWS**,

Enclosed please find my solution to the chevron problem. Divide the paper into 3 sections, one for each faction and a third for common use. Section A and section B are self explanatory, really. We can all imagine the sort of material which will appear there.

However, I see great possibilities for section C, the Red Star Comics. This would be sort of an 'Entertainment' section which would contain such features as Feedback and would allow both sides of the staff to have it out in print, tooth and nail.

People could save the section 'C' part of their papers over the year, or else the chevron could issue a hard-copy vellum edition of 'the year's best feedbacks.' A considerable portion of this could be collected under the heading 'The AIA vs. Stanislav Reinis - A continuing Debate.'

Yes, the possibilities are endless. With this solution, I feel Peace Is At Hand.

S.H.

(S. H. who are you?? We've been getting cryptic contributions but we don't know who he is --ed.)

### *pogo stuck?*

Dear **mathNEWS**,

Enclosed please also find my solution to the Pogo Ragde problem. This is a serious one which has plagued the newspaper ever since he made the disturbing assertion that Bruce Springsteen is God.

I realize that **mathNEWS** is *fais* and open-minded, but to print such sacrilege is going a bit far. The title of his column perhaps best describes the contents.

On the other hand, I feel it is surprising that a basically misguided soul would do such a Good Thing as go to a chevron meeting and take an active involvement in the chevron problem. Bravo to Mathies and others who are **really** working for the students' good.

Now if Pogo could just clear up that thing about Springsteen....

S.H.

### *column suggestions*

Dear **mathNEWS**!

We would like to comment on the vastly improved quality of last week's issue of **mathNEWS**. The articles were interesting, coherent and relevant. We were also pleased to see the nth return of J.J. Long.

This improvement can only be due to the new editor, Wil Macaulay, who did an excellent job putting together the paper. (It's about time someone congratulated the **mathNEWS** editor. After all it's a thankless job).

However, we would like to offer some suggestions. First, the person who proofread the articles should brush up on his/her spelling. (*ever tried proofreading at 5:30 am? --ed.*) Secondly, Marcia Mathie should put her replies in italics to set them off. (We offer this suggestion based upon our experience with 'Dear Sam'n'Tak' in Spring 77.) Finally, please refrain from using hard-core profanity. We refer to the 'F' word in a letter to Marcia Mathie. We suggest 'F\_\_\_\_\_ ' as an alternative. A high-class publication should know better.

It is very gratifying to see that you have taken many of our concepts, such as letters, trivia, contests, problems, etc. and expanded them to fill the whole paper. No wonder this issue turned out so well! We would like to compliment RuMar who have followed in our footsteps with their interesting column. However, we note that they left out the 'n' in the middle of their pen name. Since they offered to print the names of the people who submit the correct answers to their questions, we now present our solutions. In the problem of the week, the lady was buying house numerals for her street address. The definition of 'HIRSUTE' is: what the feminist co-op student wore to her job interviews. As for the number of seats in MC 2066: the answer is many. We would also like to offer the following extended assembler instruction **BOW Branch On Whim** (The computer performs the branch only if it feels like it.) If you people are really serious about writing a good column, how about giving us some droodles and progressions to work on? Keep up the good work.

Sam'n'Tak

### *...and never a drop...*

Oh where, oh where have the fountains gone?

Oh where, oh where do they hide?

When we want a drink,

We must use the sink,

Hence numerous mathies have died!

bwlutek, acpatel

### **ZAP!**

This is a column devoted to reviewing recently published books. The books will tend to be mainly science fiction and fantasy. If you want an opportunity to talk about sf books come out to any Tuesday **WATSFIC** meeting.

**The Chaos Weapon** by Colin Kapp (\$1.50). There is so much pseudo-science in this story that I have to classify it as fantasy. Colin has written much better stuff than this. It suffers from gaps in logic and poor characterization. It does contain some interesting ideas (how would you like your own personal god?). Score: 44 (AVOID)

**The Multiple Man** by Ben Bova (\$1.75). This is a novel about the presidency of the United States around the turn of the next century. What would you do if you were the president's press secretary and dead bodies which look exactly like the president start turning up? Well written. Score: 86 (RECOMMENDED)

**Close to Critical** by Hal Clement (\$1.50). This is another of his *strange but possible* planet stories. This story was originally written in 1958 and has been rereleased. The only detail that reveals its age is the mention of engineers whipping out their sliderules to do calculations. Score: 90 (RECOMMENDED)

**The Anything Box** by Zenna Henderson (\$1.50). This is a collection of 14 stories by Zenna between 1951 & 1963. There are stories to delight you; to scare you; to make you think. (RECOMMENDED)

That's all for this week. Send any comments to **mathNEWS** or to djmullin on the 'bun.

-djm

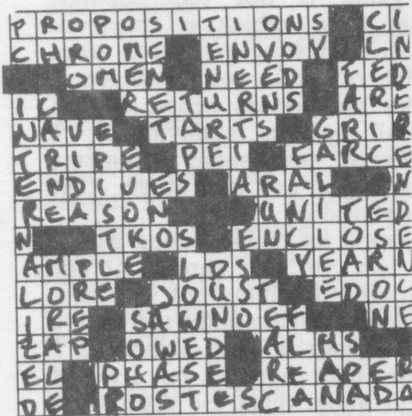


*The Pogo Ragde Solution*

2-1



SHCIHWNIVEKFYOU  
 WRITINGHETTOTMG  
 OHOTONCOLLARREN  
 HEASSEMBLEREMYI  
 YOURSTORONTOLDH  
 NTEREMOHKSLEES  
 AHSCOTCHRIIONVI  
 GETPDLUOCWEOHIF  
 PRSERAWDRAHEPRP  
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 EIKCOABUTEOTA  
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 NSGNIHTVSMOCEIA  
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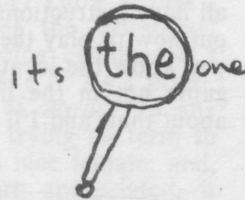
*gridcomment*

There were six correct solutions to this week's gridword, futuristically speaking. There were also six solutions to last week's gridword (the things I do not to have to correct this). The winner, chosen by the well worn six-sided die was submitted as a joint effort by Roger Peterson, Deb Wilson and Sam Veffler. They can come down to Mathsoc anytime and all get into the T-shirt they won. Other correct entries were from AM Cyr, Doug McInroy, Rick Takashima and Keith Pybus, R.L. Morrison, Mariette Proulx.

The most interesting mistake was indepedence, miles ahead of javas, the most commonly found substitute for Jawas.

Who? \_\_\_\_\_  
 What? \_\_\_\_\_

Wordsearchhhhh



*more extended assembler*

DEAR MOM

NO ARTSIE WORKTERM HERE, WRITING ASSEMBLER PROGRAM FOR MICROPROCESSORS. HARDWARE PROBLEMS THE PITS AND TORONTO IS WHITE COLLAR GHETTO, OTHERWISE THINGS ARE GREAT. PRESENT WHICH ARRIVED TODAY IS NOT MY BRAND OF SCOTCH BUT THANK YOU ANYHOW.

COULD GET HOME TO DO SOME ICE FISHING, WILL PHONE HOME SOON.

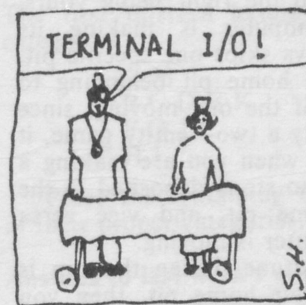
LOVE,  
 YOUR SON KEVIN

John Kevin Paris

- HCF halt and catch fire
- BCB branch on coffee
- break
- JOP jump on operator
- (not recommended for installations having false floors, or low ceilings.)
- BALR branch and lose
- register....for bottomless subroutines
- DOF divide and overflow
- DAC divide and conquer
- SPSW scramble PSW

the possibilities are endless.....

aeforber



J.B. Monk:

Your quote is from Doonesbury by Gary Trudeau. It is also reprinted in "the Doonesbury Chronicles"

Excuse the mess, I was attacked by a roving 'band' of (n-1)jineers.

ghssmit



Due to unpopular demand, I bring myself to you once again, and now it's (without further ado)

## THE MASKED MARUDER <sic>

In which the naive frosh guest stars.

In this column, I (and jr) shall try to enlighten all you poor helpless little hacklings (and other interested people) who wish to learn the great and glorious game of Kalah. This is another of the many diversions offered (without rules) here in the hacker's kingdom, namely U of W TSS.

To begin the game, which is a load module (algot), type GAMES/KALAH,E, and when asked for the password, type in the usual "now" and begin play.

For starters, the game asks you two (2) questions.

1) Specify look-ahead depth; correct response is 1 (don't ask us why, it works!).

2) How many pebbles in each pit? Pick a number (any number will do, but lower numbers are easier to keep track of).

The board configuration is then printed out, and you're asked if you want the first move. (*jr's note: Type "yes".*)

You are now through with the preliminaries, on to the tough part. (jr has just left, so it's up to me to interpret his scribbled notes and bring you the exciting rules to this time—honoured game)

Pick any pit number you wish to start with (your own, I mean of the bottom six, that is), and all the stones are then removed from that pit and deposited one at a time in each pit running counter clock—wise, until all the stones are used up. You both have a home base, and these bases are the two extreme pits, the left being the computer's, and the right being yours. When the computer is making its rounds, it always skips one specific pit. This pit is the home pit belonging to the opponent of the one moving, since the game is only a two—entity game, it is obvious that when you are making a move there is no stone deposited in the computer's home pit, and vice versa when the computer is moving.

If the last stone during the run is deposited in your home pit, then you have earned an extra turn. (*Note: it takes 13 stones to go around once.*) If the last stone, during a run, is deposited in an empty pit then you steal all the stones in the pit directly across from it plus the one which causes the steal, provided the empty pit is on your side (ie: the bottom six).

The game ends when one side can move no more stones from his/its side. The winner is the one with the most points at the end of the game and points are counted for each stone in your own home pit plus those in your other six pits.

1218

This game is not too popular, around the 'bun, which is too bad. Kalah is an interesting game and takes quite a bit of skill, and intelligence, which rules out certain people (all of whom shall remain anonymous). I would like to hear some comments about this games and any others, that have been played on TSS.

There are a lot of interesting games that are not in the games library floating around the 'bun—but it is hard to find out about them since there have been a lot of hassles from higher up, I don't know about them all, but I would like to hear about them. So drop me a line telling me which games you would like to learn to play, since they don't all have instructions, and I'll try to find out how to play them for you. In fact if you know the location of an interesting game not in the library, let me know about that, and I'll tell the world.

elmasko:eamacneil

ps: jrbakker says that his music contest ends this friday/today.

pps: acpatel wants me to mention that he believes that the world is based on ascii characters which are generated randomly, and soon an ascii 12 will be generated and the world will clear itself, ready to start again. He thinks I agree with him, and I figure that it might as well be so it's far more plausible than the world being based on hamburgers (eh rob?). (*actually, ascii 12 is newline, not clear (ascii 14)*) --ed.

## jr TRIUMPHS

in which the naive frosh does a record review.

BBBBBBB

The record is called "Rock'n'Roll Machine"; the group is Triumph. The title and the first song combine to give the impression that this is just another semi-mindless album filled with so-called "hard rock".

This impression is shaken by the second song (Bringing It On Home), which sounds like something April Wine might consider as a "hard" number. On this album, it is fairly "soft". The third song is called "Little Texas Shaker" and it consists of a grinding guitar lead combined with screaming vocals. A song which tends to reinforce the original impression of the album. Unfortunately, (or fortunately if you don't like mindless noise) this song leads into the two part "New York City Streets" which destroys any thought of mindlessness. Part 1 is quite a nice little tune (with a girls chorus yet) that seems like it could be a little bit "jazz-influenced" (that's an understatement if I ever heard one). Part 2, on the other hand, is basic

## Chevron to elect production manager

This afternoon the staff of the chevron will elect a production manager for the 1978-79 year. There are no estimates on how long this will take.

The incumbent, John W Bast, is seeking re-election. It is not known which candidates will oppose him.

"rock" at its best (the length of time Rik Emmett holds the last note of the vocals is incredible). An extremely good finish to side one. *Picture a small pause while I turn over the record.*

Side two starts off with a miniature "suite" (of the sort you might expect from RUSH; but softer) called "The City" which is mostly instrumental. The first two parts (War March, and El Duende Agonizante) are instrumental and consist mostly of different guitar solos; including a bit of what sounds suspiciously like a Spanish Guitar. Part 3 (The Minstrel's Lament) is the only part with vocals; but, again, the major emphasis is on Rik Emmett's guitar work. (It figures, he wrote it and he sings it too.) Still, it is a very good song. This song is followed by a version of Joe Walsh's "Rocky Mountain Way" which I believe is being released as a single. (I think I heard it on CFTR a few times a while ago.) I must admit to not having heard the original, but, I do like this version.

The last song is the "title track" and it returns you to the first impression of the album. It's basically a good Pub tune with a fairly interesting guitar solo; though at 6:53 I find it a little bit too long. However, since this is only their second album, I think I can forgive that fault.

About the members of the group. Triumph is Gil Moore on drum, percussion, and most vocals; Rik Emmett on all the guitars and some of the vocals; and Mike Levine on bass and keyboards. They work quite well together, and in some spots are really impressive. This band bears watching. They're taking the same route through the Southern States (notably Texas) that RUSH took to stardom, and are getting the same kind of reactions. They could become quite popular quite soon. (If they aren't already.)

I noticed on the Mathsoc blackboard that there was a possibility of getting them for a pub in the near future. My advice would be to get them if it is at all possible. (Mainly because I want to hear them "live".)

One final comment about the group as a whole—gimme MORE

Loud Music Survey Results are now in and are being tabulated for printing next week. (God [and Wil] willing) Thanx to all who voted and remember, "I told you it would be biased." See ya all next week.



## Dear Marcia Mathie

DMarcia:

My friends and I have been wondering? Would it be worth while to go out with an engineer?

Desperate

Dear Desi:

No matter how much the (n-1)jinurds talk about their rigid tools, I have never heard of one that really had one of his own. Why do you think they worship the damned thing?

Dear Marcia:

I am a handsome young man of 19. I am 6' and weigh 185 lbs. Most of the girls consider me a 'hunk'. The only problem is that I'm too shy to ask them out. What should I do?

About-to-die

Dear Abe:

I really think you need some counselling. Be at my place at 6:00.

Dear Marcia:

Is there any way a young female C.S. student can get a honeywell account without sending in a letter full of reasons?

Without

Dear Without:

Get Withit. If you're cute there's no reason why you should have to send in reasons. How do you think I got my part-time job with MFCF? I'm not to sure what a computer is but I do know how to work a program(mer).

Dear Marcia:

Why do they call pragde pogo?

Wondering

Dear Wonder:

It certainly isn't because of his stick. Actually he calls himself that because his name is Prabhakar and it is too hard to pronounce. No-one can be bothered to attempt to say it right because no-one really wants to talk to him that much. So he made up a short-form.

Dear Marcia Mathie:

My friends have my best interests at heart, and I thank them for it; but, what they don't know is that I am planning to enter the Priesthood and am practising being celibate so I will know if I can make it. As a priest, that is (poor choice of words). In any case, they have been trying all term to set me up with some nice female; and, while their efforts are appreciated, it isn't exactly the thing to keep my mind on my vows. How do I tell them to stop without letting them know of my future plans? (I don't wish for them to feel stupid.)

J R St. Croix

Dear Crotch,

Obviously, you need some way to politely discourage your 'friends' without looking like a nurd. The safest bet is to tell them you have an incurable case of the clap. Presumably they like this female, and would not appreciate having her ruined.

It's funny that it should come up, but I haven't been to confession for a while. Care to make it 6:30??

## COLUMN OF THE WEEK

Before we plunge into more questions, we would like to take this opportunity to clear up a popular misconception. All your life, you have been told you could only count up to ten on your fingers. This, however, is not so. Using your fingers as bits in a computer, it is possible to represent the numbers from 0 to  $2^{10} - 1$  (or, 1K different digits!). If you become proficient at this you can then learn to represent negative numbers using 2's complement. This, however, decreases the range of positive numbers which can be represented, and gives a range from  $-2^9$  to  $2^9 - 1$ .

As an alternate method, sign and magnitude representation can be used, with your tongue representing the sign bit. It should be noted that doing this in public will fail to impress people, and others may be offended if they see you working with the number 132. It is also possible to use double precision in your calculations, by including your toes. This is a little tricky, but can be mastered with practice.

Now, back to our regular (?) features. (and now for something completely different? --ed.)

### NURSERY RHYME OF THE WEEK

Ride a fast plane  
And don't spare the cash,  
To see the math wizard do sums in a flash.  
Roots on his fingers  
And powers on his toes, --  
He carries log tables wherever he goes.

### PROBLEMS OF THE WEEK

1. How many times in 24 hours are the minute and the hour hands of a clock perpendicular?

2. The letters of the alphabet can be grouped into four distinct groups. The first thirteen letters establish the categories.

A M  
B C D E K  
F G J L  
H I

Place the remaining thirteen letters in their proper categories.

### Answers to last week's questions:

We only received three replies to last week's questions, and none of them were complete. Therefore, semi-honourable mention goes to jrbakker, cdwebster (if it was so absurd why did you bother to answer), and mapeate.

Again, send us the solutions to the problem (or some of your own problems) and we will give you an honourable mention. Send mail to mpproulx or rlmorrison on the Honeywell or mail to mathNEWS via the usual channels. (however, mathNEWS has yet to see either mpproulx or rlmorrison --ed.)

-RuMar

## CS STUDENTS CO—ORDINATION

This is to correct a general misconception that there is overabundance of computer science jobs. Unlike last term, we do not have a great many more jobs than students up for placement.

Many of the "late postings" are not attracting a sufficient number of students. If we do not fill these jobs now we may get another chance in the future.

All students are requested, therefore, to check the notice boards in Needles Hall each day and to sign for more interviews. Remember — Ottawa is a delightful place to spend the summer!

## COLLINS MIX

I have become very tired of writing a column that is considered filler because nobody tells me what topics they would like me to cover. Therefore this column will only appear when I get an entry to the following offer: GET TOTALLY FREE! ONE (1) COLUMN!!! WRITTEN ON THE TOPIC OF YOUR CHOICE!!! JUST SEND IN YOUR REQUEST TO: ME, ROB COLLINS!!!

If you want to know what is happening where and why just drop me a line. I'm rfcollins on the 'bun or put something in the mathNEWS box across from the third floor lounge or in my mailbox in mathsoc. I'll follow up on it and it will appear (I hope) in this paper. Of course there'll be prizes but I won't tell you what they are just to peak your interest.

In conclusion, let me say; 'BEWARE OF ENGINEERS, REFUNDABLE FEES, AND THE PROPHETS (PROFITS) OF BRUCE SPRINGSTEEN!!!'

Rob Collins



# Mathematics for a Friday Afternoon

It's Tuesday evening right now, and I don't really feel like I should be expounding on Friday afternoon veg-out style mathematics. But one of the things that really bothered me about Fridays was isomorphism. Somehow isomorphisms seemed to come up on Fridays when no one cared about them. I have an isomorphism that might be useful for veg-outs, since it involves games.

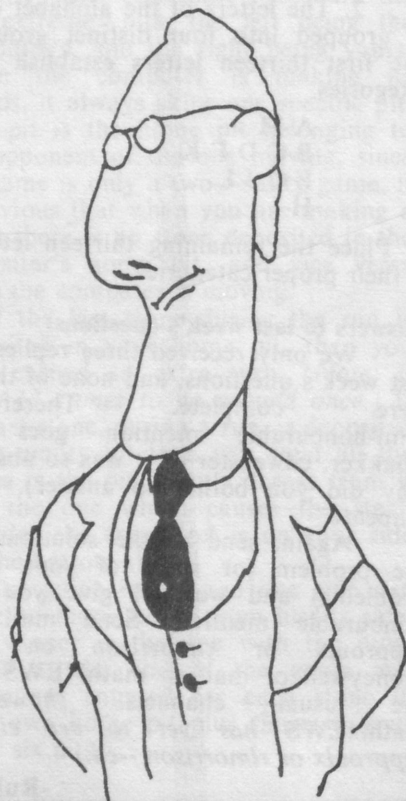
Consider the following three games. All of them are extremely simple, and require no really special equipment.

1) CARD. Take the nine non-court cards out of any suit in a standard deck (ace through nine). Lay them down on a table. You and a friend then take turns picking up cards one at a time. The first person who obtains three cards that add to 15 is the winner. (Before you ask, ace counts as one).

2) HOT. Take those cards you just played with (providing it's not a Mathsoc deck) and write the following words on them in any order: hot, hear, tied, form, wasp, brim, tank, ship, woes. Again take turns picking up cards one at a time. The winner is the person who first obtains three words that all share one (or more) common letter(s). Don't ask me why it's called HOT, I think it's a dumb name too.

3) JAM. Diagram #1 is drawn on a sheet of paper and you and a friend take different colour pencils. You take turns colouring in a highway. Notice that some highways just connect towns, and some highways go through towns. Whichever player first controls a town by making all the highways into and through it of one colour is the winner.

Got it? Now go away and play them for a while.



Now for the surprise; all of these three games are isomorphic to that good old stand-by favorite, tick-tac-toe! Look at diagram #2. Play ticktactoe on this diagram and when you make your mark on the number, take it as one of your numbers in CARD. When you get three in a row, you have numbers somewhere adding to 15. (Astute observers will notice that #2 is the famous Lo-shu magic square). The same thing is true of diagram #3 and HOT. JAM can be played using diagram #2 as well, with rows and columns representing towns, and numbers representing highways as they are numbered.

This is called an isomorphism; four isolated games are really the same game. Now that you've read this column, try playing one of the first three with a friend who hasn't. You'll find you have a distinct advantage, since you know the strategy for ticktactoe (at least, I hope you do), and thus know the strategy for any of these three, while your friend doesn't. That's the great thing about isomorphisms; they can relate something easy to something hard. So in linear algebra, we can relate the nullspace of a matrix we can make (which we know how to do) to a basis of the intersection space of two vector spaces (which we couldn't do to save our souls). Have a good Friday afternoon, and don't leave JAM diagrams scribbled all over the desks, please.

-plragde

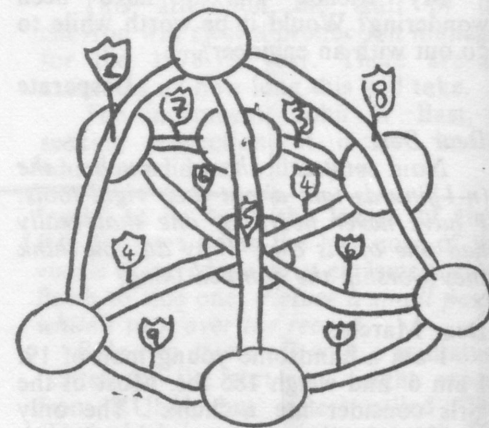


diagram #1

2	9	4
7	5	3
6	1	8

diagram #2

HOT	FORM	WOES
TANK	HEAR	WASP
TIED	BRIM	SHIP

diagram #3

It's 7:30, and I just put the last page number on. I finally found the word search about 5:00 this morning, so here it is for you, ripe for the picking.

JJLong just left, after laying out since about 3:00, here during the course of the evening were Ruth Harris, Mike Webster, Rob Collins, Prabhakar Ragde, ghs(s())mit, eamacneil collaborated with jrbakker. Anybody else?? i don'tknow we got our ISSN number in the mail... mathNEWS is financed by but independent of C&D mathSOC (and soon to have our own constitution. We need people, especially typists&layout people. off at 7:40 on wed mar 8 ----- wil