

## Where is MathSoc?

Many of you are probably wondering where MathSoc went. There was a great orientation week and then poof! There is a good reason for this and you deserve a good explanation. Well, here it is:

If I did not meet you during orientation week, my name is Andrew Welch and I am the current President of your Math Society. When I returned to campus at the start of the Spring 1981 term after a co-op work term, I found the society in a total shambles with approx. \$3000 in unpaid bills from the last term, and word that of the two council meetings that the President, MAB Garstin, attempted to set up, one had an attendance of three and the second was attended by him alone. Let it not be said that MAB was responsible for this; it is a problem which I decided to correct starting right there and then (and a very old one at that). I will not throw the 'student apathy' excuse at you again - it is not the root of the problem. Let me illustrate the real cause, using our present term as an example.

You see, I am presently on work term in Toronto. That's right, the current MathSoc constitution states that the President is elected for a full year (three consecutive terms). This means, as has been the case for many years past, that the Society will go into a new term with no executive, no one to say what happened last term, no one to call meetings or open elections - total chaos. This being the case, naturally tension arose when, having spent a whole Spring term pulling, tearing, and shaking MathSoc into some kind of organizational shape I left to go on work term. Consequently my Social Director, who by the way did an A-1 job of orientation week (if you enjoyed it, she probably had a hand in it), quit to go help out SciSoc as their Social Director. Many other helpers were not formally on the Council and as such did not leave formally....they just left.

So who is running the show now? Well, fortunately all is not lost. I have refused to watch my work go down the drain. I beg a lift from my work down to the University about twice a week to try and follow what is happening. When I am not on campus, I have two very dedicated interim executives: Rob Byrd, interim vice-president and Al Bechamp, interim treasurer. Oh, did I not mention? The previous vice-president and

treasurer both quit, (both are now off-term). But no matter how hard-working the interim executive are, the society CAN NOT be run by two people. This appears to be a common assumption among many students. It is an accelerated problem because those who do try hard spend more time at MathSoc work than their share. Then they begin to fail classes. Then more people pull out. This leaves less students to do more work, etc., etc.

So what is the solution? For a start, organization is required. The prerequisite for this is a constitution that puts someone on-campus at (get this folks) the SAME TIME as when they hold office. Such a constitution has been written which handles not only this problem, but many other very stupid clauses in our present poor excuse for a constitution which have been stumbling blocks to any improvement for half a decade. And where do you fit in?

On October 14th, 15th, and 16th there will be an election/referendum held for Vice-President, Treasurer, and the new Constitution. The nominations are as follows:

-- Vice President --  
Byrd, Robert  
Lam, Wei Ying

-- Treasurer --  
Bechamp, Allan  
Schiedel, Len D.

Copies of the old and new constitution will be posted around the second and third floors. The results may not be known for some time, due to another gem in our present constitution. Since all the executive are elected for one year, off-campus students must be given the right to vote. In other words, MathSoc takes your money and sends notice of an election out to all work term students (around 2000 in the summer) and then sends out the ballot forms and then pays business reply mail charges to collect the votes. This is what I am trying to change. If you agree, please drop around to the MathSoc office (MC 3038) or the polling booth in the hall on the third floor (if I can get any volunteers to man it) and cast a vote for the new constitution. Thank you in anticipation of participation,

Andrew P. Welch  
President, MathSoc  
Chief Returning Officer

## CSC FLASH!

### Gala Opening of the 81-82 Season

The opening CSC meeting, on September 24th, combined the executive acclamations with a showing of a film detailing the process whereby our efforts, as computer scientists, will cause massive unemployment within the next decade or so.

First, the acclamations. For the second time, the CSC had free-and-democratic elections, with written nominations, a Chief Returning Officer to accept them (Bill Ince, of the MFCF staff) and, if need be, position statements to be distributed at the meeting. But the need wasn't, as Guy Middleton assumed the post of president, Peter Rowley the post of vice-president, William Hughes the post of treasurer, and Ashok Patel the post of secretary, all without contest.

Then the feature of the evening, the film "And What of The Future?", began and people settled down into the chairs of MC2066, waiting to hear all about the future. People familiar with Manfred Mann's recent song "All Through The 80's" will know the topic of the film: increasing automation, especially through the use of powerful computers providing "intelligence", will displace workers-- that is, put them out of work or force them to be retrained. While the movie made its point, its impact was lessened, at least for a technical audience, by its hyperbole. This is sad, because some people dismissed the film entirely; we should indeed consider the social problems caused by the displacement of workers-- not necessarily because we are computer scientists (some of you aren't, of course) but because we are citizens, and probably more likely to be in a position to do something about it than most.

Last Wednesday, J. Schaeffer and H. Johnson discussed PRODIGY, the Waterloo chess program that has been invited to the North American Computer Chess Championships to be held this November in Los Angeles. If PRODIGY can survive the fall smog, we'll have a report on how well it does.

Yesterday, a team of people (and recruiters) from Mitel in Ottawa came to the Waterloo Motor Inn to tell graduates in Math and other disciplines about working for Mitel. Undoubtedly, some people took advantage of Mitel's

## Of Cabbages And Kings

*Note: The opinions expressed herein are exclusively those of 'E.Siastes' (whoever he might be — no one here knows) and are definitely not the opinions of anyone else on the mathNEWS staff, living or dead. It is the opinion of the editor that this article is intended as satire and is not intended to be libelous. (Now that I've covered my ass, I shall shut up.)*

In lieu of my usual column this week (which has not been my usual column since the very first week, due to various perverse aggravations and distractions inflicted upon my person) I shall take this opportunity to reply to a letter by 'Steve Reid' which was published in last week's issue. For some obscure reason, this character chose to defame me personally instead of tending to the many assignments and midterms which should be his happy lot in fourth year. Since none of you readers are likely to have a copy of his attack on hand, I shall quote the more unsavoury parts in italics and add my own rebuttal immediately beneath.

*I really wonder how E. Siastes can consider himself one of the 'few good people'. His article presents him as something quite different.*

Well, of course I consider myself one of the 'few good people'. I have no doubt that 'Steve Reid' considers himself one, too, or he would not have written this. If one doesn't there is very little point in living in this hellhole, indeed in living at all.

*First of all, bigoted remarks like his do not deserve publication. His remarks about his professor's supposed 'colony of relatives in some godforsaken place like Botswana' is disgustingly racist. And many people consider children with Down's Syndrome as something more than horrors.*

Here we have a good example of the emotional style used by people like 'Steve Reid' who resort to slander when the facts do not allow for careful refutation. Botswana was a name I picked out of the air, but it IS a godforsaken place, as you would know if you read virtually any publication besides mathNEWS. Since the majority of residents living there are black, my derogatory remark is automatically racist, is that it, 'Steve Reid'? As a matter of fact, the professor involved happens to be white, and quite a sickly shade of it too. And I am certain that some white people live in Botswana. I am not a racist; in fact, I am a member of a minority myself, my father being Castilian.

If you had bothered to read my article closely, something you obviously did not do the first time, you would have realized that I did not call mongoloid children 'horrors' but merely expressed horror at the thought of such children being born when it could so easily be avoided, by simple methods of birth control that are freshman-proof. The vast difference between these two viewpoints no doubt appears miniscule to people such as 'Steve Reid'. Anything to label me a cripple-hater.

*Does the Arts Library really squat?*

I am beginning to lose my patience with you, 'Steve Reid'. This is a metaphor. Spelled M-E-T-A-P-H-O-R. You must have been desperately deprived of reading material as a child. No doubt it has warped your worldview.

*Does Siastes' roommate know that he has been branded as a moron? I wish them a pleasant term together. (By the way, what exactly is non-mutual copulation?)*

Evidently someone knows he is a moron (would that 'Steve Reid' could come to the same understanding) for when I arrived home on the Sunday night following the publication of my first article I found it nailed to my door. A strange sight greeted me inside; a plastic liner had been run around the walls of my room and five feet of water pumped in, in the middle of which six volumes of Proust floated. The seventh, volume III, is thinner than the rest and had become waterlogged and sank to the bottom. I am thankful that I purchased the paperback version instead of the more expen-

sive and heavier leatherbound set. At any rate, this only proves that one of the inhabitants of my floor can read words of less than one syllable and the others are capable of understanding them when spoken slowly. I recognized the prank as having been reported in the pages of Reader's Digest, which I read as a child before discovering it was Communist-controlled.

My roommate is aware that he has been branded a moron; no doubt in his dim simian-like brain he is aware that he IS a moron. I do not consider him skilled enough to have set up the prank, although he did move his belongings above the high-water line of the flood that ruined my best trousers when I finally kicked my way through the liner. He cannot help it. He shall remain a moron, he will seek a moron job, find a moron wife and produce hordes of moron kids. Perhaps he will even own a moron dog, though statistically chances are that he will purchase an animal much smarter than he. He has no higher ambitions.

'Steve Reid', on the other hand, has higher hopes but is no doubt destined for a similar future. And if you do not know what non-mutual copulation is, you are either a virgin or a deluded man. Excuse me, I am upset or I would not have committed that redundancy. The former is a subset of the latter.

*Another contradiction: if Siastes feels that his brain is becoming atrophied, the campus is appalling, and the social atmosphere repellant, why is he still here? Could it be that even though playing the 'intellectual' snob, he isn't adverse to letting his mind rot? Get lost, Siastes!*

Oh, 'Steve Reid', 'Steve Reid', I despair for you. If you ever find out who your father was, you must have him give you a man-to-whatever talk. I am here because there is no alternative. I could get most of my tuition and residence fees back, but it is too late to make other arrangements. I have no intention of letting my mind rot. I am undertaking a massive study of what motivates the common man to his abhorrent lifestyle. Hopefully it will be serialized in one of the better psychology journals. You will be Chapter One, as I intend to work my way up through the natural order.

*P.S. I dispute the opinion held by some people that Siastes' article was well-written. He overuses his vocabulary, just to give this article a snobbish 'intellectual' flavour - something that should be avoided.*

And here we come to the real motivation behind 'Steve Reid's' base attitude: he is jealous of my intellect! Shall I underuse my vocabulary just to make you feel better? What is the point of words if they are not to be used? Did I use incorrect grammar or syntax? Why don't you listen to the opinions of other people — or are you the only one that matters? Why should intellectualism be avoided?

If you have to vent your spleen on something, why attack me, someone three years below you in the academic level? Why not attack 'David Till', who spent half a page saying nothing about a record, and who put my name in the masthead below that of someone who typed a five-line pizza ad? Or 'William Hughes', who spent two-thirds of a page giving his own perverse view of the constitution? Or 'WJ Jordan', who has obviously fallen in with a bad lot? Or 'Hugh McCague', who spent inordinate amounts of time raving about Jung and his breed of fanatic?

You see, people like 'Steve Reid' feel that the world should be portrayed as a happy, innocent place where every-one can live equally in socialist squalid ignorance. It is not like this. We live in the worst of all possible worlds, but 'Steve Reid' and his cohorts shall not bring back the Dark Ages no matter what sort of insipid mud-slinging they resort to. Theology and geometry shall triumph. The Renaissance Man shall overcome.

All this arguing has quite upset my balance; I shall have to retire early. Until next week, I remain



••• The Flowers Of Romance  
Public Image Limited •••

## platter spatter

I have never been able to figure out whether or not this band is supposed to be taken seriously — whether they are musicians looking for new modes of expression or just a bunch of layabouts showing their contempt for the supposedly 'aware' British existentialist art-rock fans by flinging together the most atonal bashings they can produce and then killing themselves laughing when people try to figure out what the 'message' behind their music is. Perhaps they are the musical equivalent of the guy who succeeded in convincing wealthy New York art snobs that they were financing a new wave in painting, when all he was doing was giving a gorilla some buckets of paint and a canvas and selling the results. This gorilla-splashing theory has some merit to it: consider 'Hymie's Him', which features some of the worst drumming ever to hit vinyl (if I had not been wearing headphones, I would have risked eviction from my apartment). 'Phenagen' starts with exactly the same guitar feedback as the Beatles' 'I Feel Fine' and then wanders off into obscurity. Also, the lyric sheet contains every word that vocalist John Lydon says, including "Alright stop Nick", "Hallo", and "Alright I finished".

Yet, not all is self-indulgence, apathy and contempt. The title track is a well-crafted little piece in which Lydon's vocals and the monotonous drumming complement each other nicely. Also, Keith Levene does an impressive job on 'Go Back' — the guitar work is eccentric, yet listenable.

Conclusion? This album will probably start gathering dust after awhile (yes, Virginia, I must buy, or borrow, the records that I review), since it's just not musical enough to be worth listening to. One can get sick of atonal synthesizers and the monotonous pounding of tomtoms and bass drums after awhile. And though John Lydon has a strong pair of lungs and a marvelous imagination, he really can't sing worth a damn. However, PIL do have some good ideas, even though they don't discipline themselves sufficiently to develop them properly, and I would rather listen to their music than to a lot of the polished commercial crud that is pumped out of the big labels' marketing departments like so much raw sewage; in fact, I think it would be a good idea to have some sort of equal-time legislation that would force a radio station to play something like PIL immediately after playing one of those soppy love songs that seem to monopolize the airwaves; a law of this sort could revolutionize Top-Forty radio.

### Nick Mason's Fictitious Sports

Over the years, Nick Mason has not been the most creative member of Pink Floyd. In fourteen years with the band, he has been given credit for exactly two (2) songs: 'The Grand Vizier's Garden Party', from *Ummagumma*, which consists of discordant keyboard chords and drum soloing; and 'Speak To Me', from *Dark Side Of The Moon*, which is

nothing but tape loops. Thus, it is not surprising that the album which bears his name does not contain anything written by him; all the words and music are written by Carla Bley.

Ms. Bley does not take herself too seriously, it seems; for the songs contained herein are, er... odd. For instance, we have 'Siam', which is described as a "place near Hong Kong" where "all the fancy pussycats come from". In addition, 'Hot River' manages to rhyme 'Sterno' with 'Inferno' and gets away with it; and last but not least we have the deservedly unfamous 'I'm A Mineralist', which is a 'shocking revelation' about a man's 'heinous deviation' — amongst his disgusting perversions is the filthy habit of creeping up to old wrecked cars and licking off the rust.

The music matches this rather odd sort of lyricizing. It is suitably melodramatic, and can be described as one part jazz and one part art-rock, with a dash of MGM musical thrown in for seasoning; predominant are the trumpet and clarinet solos and Chris Spedding's guitar. (Mr. Spedding seems to show up everywhere; besides this lot, he has recently played with or for Brian Eno, John Cale, Robert Gordon, Harry Nilsson and the Vibrators, among others.) Although this ain't no 'Shine On You Crazy Diamond' or 'Set The Controls For The Heart Of The Sun', it's still not bad.

David Till

## feedback

Dear Mr. Siastes:

I know not who you are, but I do take offence to your comment that I "have obviously fallen in with a bad lot." Mr. Siastes, I helped mathSOC with their Orientation Week because the executive did not know what was going on. It was the social director (who is *appointed* to the position) who kept Orientation Week from being more disorganized than it was.

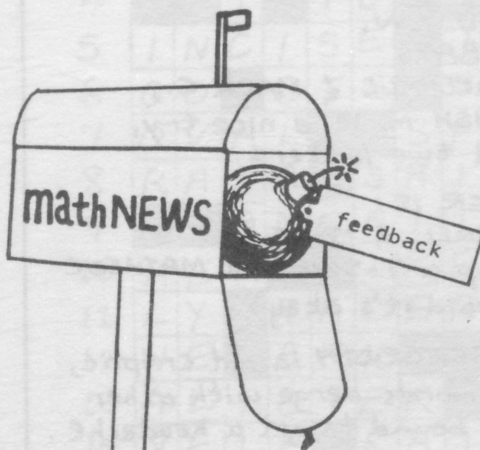
Tracey Allen was running the show for mathSOC that week because there were no members of the executive around whenever one was required. She was going crazy in the office, and, being a concerned individual, I offered her my assistance for the remainder of Orientation Week.

Miss Allen has since resigned from the position of social director and teamed up with a vastly more organized group, SciSoc. My affiliation with mathSOC has also been terminated. I now work for mathNEWS, which is only funded by mathSOC.

Mr. Siastes, I appreciate the articles that you write. You are a reasonably good, though verbose, writer, but I do not appreciate being called down for what I write about. One unsolicited letter should not be enough to send you spewing out a column that shoots down everyone who writes for mathNEWS.

Mr. Siastes, I may not agree with what you write, but I will defend your right to write it. I would do the same for anyone else. I wish you success in your studies and luck in any lawsuits that may come your way as a result of your venomous pen.

Sincerely,  
WJ Jordan



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## Observations

The Insanity of  
The Typical American  
Game Show

This week I had the privilege of watching television during the late morning and late afternoon. After cranking the tuner around twice and finding nothing more interesting than a game show on a Buffalo station, I decided to stay and watch the show. This particular game had the two contestants filling in blanks to ridiculous sentences like "The astronomer said, 'I've just discovered two new moons!' His wife answered, 'No you haven't! You're pointing the telescope at my <blanks>!' " and trying to match the answers of all six celebrities on the set.

All of these celebrities are people who regularly appear in movies or TV shows such as this one. None of them are civilized. They all try to outdo one another at perversity, insanity and stupidity. One particular panelist was constantly being reached over, leaned on and touched by the two female panelists on either side of him. He did not mind too much (neither would I, in his position), and the people who were trying to win the money were completely left out in the cold.

The pseudo-intelligent game shows such as Bullseye or Tic-Tac-Dough require prospective contestants to write a sort of 'entrance exam'. After a few practice games, results are compared and the ones whose scores fall below a certain point get on the show. (This is done to avoid people like one Thom McKee, who won over \$350,000 dollars on Tic-Tac-Dough.)

Wait a minute...\$350,000????! Hey, these game shows may not be so bad after all! I can see it now--200,000 Canadian university students converging on Los Angeles in a mad dash for the money, the fame and the game shows. \$350,000 in cash, prizes and cars to be won if the answer is correct. If it isn't, then you leave with \$200 or more worth in 'parting gifts'. Who needs Reach For The Top or Headline Hunters when I can win millions answering questions like "What is the capital of Ontario?" (It is NOT Quebec, like one contestant replied.) or "Who is buried in Washington's tomb?", or,...well, you get the idea.

I am now convinced that most of the American game shows are incredibly simple, obscene, or both. I can live without them, and I am sure they can live without me. There are millions of people who don't care about making fools of themselves on national television for the chance to win a lot of money or some useless thing like a Veg-O-Matic. At least in Reach you get a chance to do something for more than yourself. That's part of what life is about, isn't it?

*—M. Jordan*

IF YOU  
HAVE  
ANY  
COMMENTS  
OR  
ARTICLES  
FOR  
math  
NEWS  
PLEASE  
PUT  
THEM IN  
THE  
BLACK BOX  
ACROSS  
FROM C+D  
ON  
3<sup>rd</sup> IN THE  
MC  
BUILDING—  
WE HOPE  
TO HEAR  
FROM YOU



## New BNF Structures

## Tautological:

<A> ::= <A>

## Multiple Buckpass:

<A> ::= <B>  
<B> ::= <C>  
<C> ::= <D> ...

## Bureaucratic:

<A> ::= <B><A> | <A><B><A> | <A><B>  
<B> ::= <A><B><B><A> | <B><A><A> | <B><A><B>

## Wallflower:

::= <A>

## Existential:

<A> ::=

## Hierarchical:

<A> ::= <B><C>  
<B> ::= <D><E>  
<C> ::= <F><G>  
<D> ::= <H><I><J><K>  
<E> ::= <L><M><N><O> ...

## Marxist:

<B> ::= <A>  
<C> ::= <A>  
<D> ::= <A>  
<E> ::= <A> ...

## Geometric:

<A> ::= <A><A>

## Shakespearian:

<A> ::= <2B> <~2B>

## Indecisive:

<A> ::= <B>  
<A> ::= <C>  
<A> ::= <B>  
<A> ::= <C> ...

SOLUTIONS FOR GRIDWORD BIZ CAME  
FROM: KEN SOLUTION,  
FRANK BAX,  
LYNN MARSHALL & MARK C.,  
and GORD IRISH made a nice try,  
but missed two letters.

AND THE WINNER IS:  
LYNN MARSHALL & MARK C.  
who can pick up a T-SHIRT at MATHSOC  
(tell 'em we said it's okay)

This week's TABBERGRIDDY is not cryptic,  
but the ends of words merge with other  
words so you're bound to get a headache.



### Galumphing Gourmets

**The Knotty Pine** King St. N., Waterloo. (opposite Conestoga College).

An as yet incomplete clone of the one in Preston, this newly opened operation appears to be a faithful copy of the original. The gift shop, bake shop, sweet shop, the lounge and the restaurant are open and operating at full throttle. The downstairs dining room and the lower terrace are still under construction.

Exploring the menu here can be expensive. The Gazpacho is one of the best interpretations we have found in this area. The steaks are pricy but good. Other entrees tried at random are also acceptable. Most meals come with a choice of french fries or duchess potato. Duchess potato is a baked potato that has been removed from the skin, whipped with butter and then piped through a pastry bag as decoration or what-have-you. Here, they pipe it back into the skin, producing a delicious vegetable with the meal. Other vegetables were unremarkable.

Most meals here include a choice of lettuce or "cabbage" salad. Since the writer is partial to cole slaw, that is what he has had. It is tasty, and not drowned in the dressing. Others have had the lettuce salad, and found it to be somewhat overdressed.

Desserts here are the house specialty. As you might expect with a bake shop attached, there are some slightly fabulous cakes and pies. The butter almond cake is moist and filled with butter cream. The chocolate cake comes with a very strong chocolate icing and about 5 cm. of meringue coating a nice dark cake. The covered apple pie will make you think of the ones grandma made.

The service in the restaurant is very good, if a little absent minded at times. Dinner for two will run between \$10 and \$30. The restaurant is licenced. Major credit cards are accepted.

7 Bunnies September 24, 1981.

### Previously Rated

**The Laurel Room** South Campus Hall.

An inexpensive buffet on campus run by Food Services. An example of institutional operation at its best. Fixed price of \$4.20 per person for the buffet. \$11.00 a couple with drinks. Lunch Monday to Friday, dinner Wednesday to Friday. Dinner reservations advised.

5 bunnies May 29, 1981.

**Marbles Restaurant** 8 William Street East, Waterloo.

Behind the Donut Castle (next to Ali Baba's), it is well worth a visit. Recommended are the various

hamburgers (can be had rare); featured salads, especially the whole earth and caesar; avocado with crab louis and the quiches. Beer and wine licence. Wide choice of other beverages. Meal for two without drinks \$15.00. Visa, Amex.

7 Bunnies June 12, 1981.

**Mathsoc C+D** Mathematics Student Lounge, Math and Computer Centre.

Operating Monday through Friday during day class hours, a supplier of coffee, donuts, subs, bunwiches, salads, and soft drinks at a reasonable price.

4 Bunnies June 23, 1981.

**Shantz Country Pork Family Restaurant** 210 King St. N., Waterloo.

One of the better bargains in the immediate area. Pork specialties at family prices. The boneless pork chop is good with the saurkraut. Good fries, but the mashed are overprocessed. Ham steak, sausages, pork burger are also good. Dessert portions tend to be small. Pastries are not recommended. Open for breakfast. \$4.00 - \$5.00 per person. Unlicenced, cash and carry.

5 Bunnies July 28, 1981.

### Visited Once

**The Texas Steakhouse** Waterloo Square. jcwinterton et al

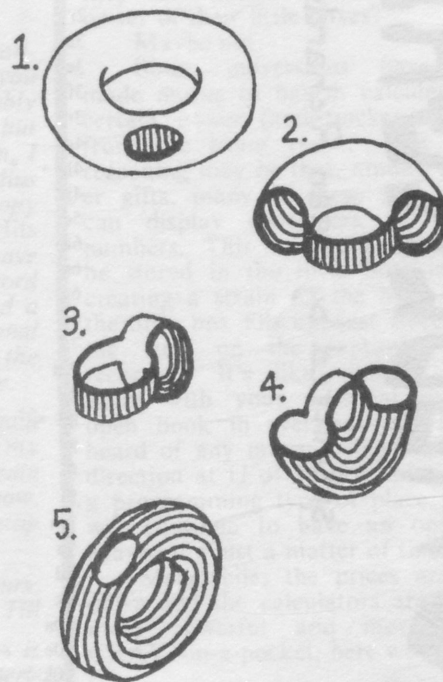
## Gridword Biz

ABCDEF GHIJKL MNO

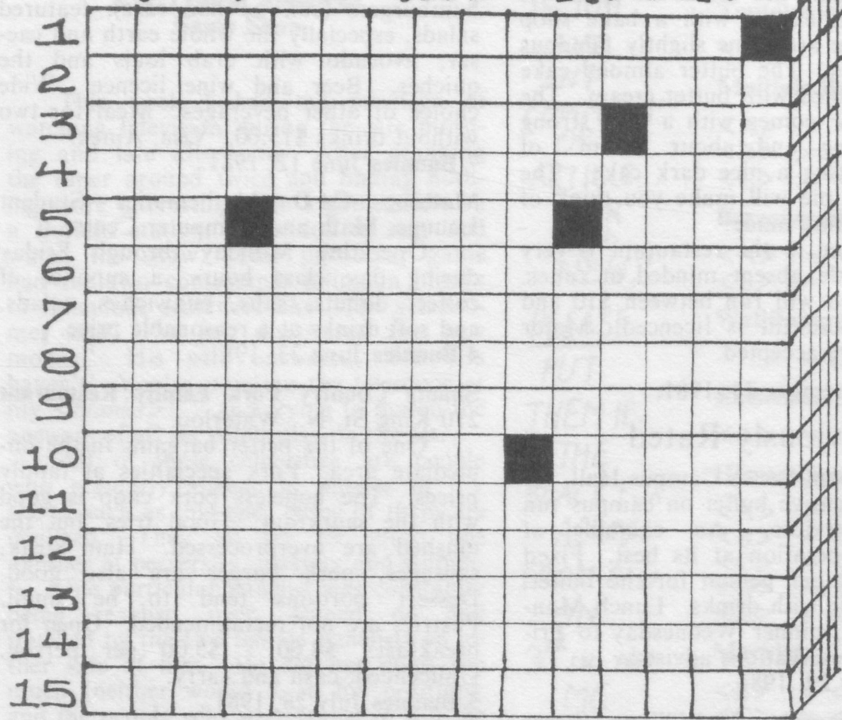
1	PEA	ENCORE	TOUR
2	ION	GARNET	OHNO
3	ENTROPY	DEMONIC	
4	IL	RIT	SK
5	INCISE	JONAH	OE
6	GO	STS	UPI
7	OV	AL	SPITTTLE
8	RAJA	SHINY	ORCS
9	AMENITY	VOLT	
10	AER	IRE	STE
11	LY	RACER	PORTER
12	WE	ARK	RYO
13	ALISTER	PAINTED	
14	YELP	RAISIN	ELI
15	STAY	SPRING	SME

WINNERS: LYNNE MARSHALL & MARK C.!

Solution to Last Weeks Problem: Turn the Torus Inside Out.



ABCDEFGHIJKLMNO



GRIDWORD BIZ WINNERS - PT  
 GRIDWORD BIZ SOLUTION - PS  
 HOW TO WRITE A GRID - ALL

# JABBERGRIDDY

submitted by Sean Richardson

## ACROSS

- 1a Computer orthodontical problem? (9)
- 1h Formerly, of old (4)
- 1k Look after (4)
- 2a Circumconstant (2)
- 2c Deja -- (2)
- 2f Age (3)
- 2i Quench (6)
- 3a Not always highest mountain (7)
- 3c Before (3)
- 3f Full meal (6)
- 3m Type of evergreen bush (3)
- 4c Video zigzag (6)
- 4h perpendicular column (3)
- 4j Heraldic winged dragon (6)
- 5e Give away (4)
- 6a Manually publish on bond paper (4)
- 6c Earth-shaped fruit (4)
- 6g Fold up (4)
- 6j Los Angelos (2)
- 7a Engie Rag (4,7)
- 7m Not of now and known (3)
- 8a Choral poem (3)
- 8d Russian river near Volga (3)
- 8f Drug agent (4)
- 8i USSR (4)
- 8l Police Department (2)
- 8m Canis (3)
- 9a Retrograde Lunus (4)
- 9d Homo Sapiens Sapiens (3)
- 9k North Pole: Ultima ---- (5)
- 10a Container for serum (1,4)
- 10e Medieval guitar (4)
- 10k ex interest (2)
- 10m Canadian Labour Congress (3)

- 11a Language of Science (5)
- 11f Of the work of Galver-quacks (7)
- 11l Bigtown Peru (4)
- 12a of two (4)
- 12d Jacquard's digital machine (4)
- 12g In the center of (3)
- 12j Presently (4)
- 12m Meteorological raincloud abbrev (3)
- 13a Not some and bar none (3)
- 13c To sack (4)
- 13g Flat (6)
- 13m One gravity and mother earth (3)
- 14b Japanese cyclone (7)
- 14g Diminutive member of Iroquoian tribe (5)
- 14j Scandanavian keeper of immortality (5)
- 15a Congener (8)
- 15g Greek letter "P" (3)
- 15j Set of lower vertebrae (6)
- 15k Eclipse shadow (5)

## DOWN

- a1 State of anaesthetized patient (11)
- a10 M\*A\*S\*H Hawkeye (4)
- a12 Salvador, the painter (4)
- b1 Long Life! (4)
- b5 County of Scotland (3)
- b8 Ugly WATFIV loop (3)
- b10 Sportese for jumps (6)
- c1 All (5)
- c6 Macarbe Edgar (3)
- c10 Locus of Roma (5)
- d1 Robotic Play (3)
- d3 Egyptian sun god (2)
- d6 Finis (3)
- d9 Flexible armour (4)
- d14 Afternoon (2)
- e1 Aerodynamically impossible insects (4)
- e5 Crow noise (3)
- f1 AD 1980 (11)
- f7 Roman year (5)
- f11 ELeCtric engine (5)
- f14 Operating Room (2)
- g1 Carry (4)
- g3 Turn and spread (3)
- g7 Angrily Rave (4)
- g10 Heat per mass unit (4)
- h1 Huge (abbr) (4)
- h3 Metal rock (3)
- h5 Royal insignia (3)
- h8 Fish eggs (3)
- i3 Severe (4)
- i5 Body waste acid (4)
- i9 pH extreme (4)
- i10 Parliament's third world charity (4)
- j4 Warrent Officer (2)
- j6 Lake (4)
- j12 Shrub Indigo (4)
- k6 Curve (3)
- k10 Kubla Khan's pad (6)
- l5 Pictures (6)
- l8 Lover in Science (5)
- l13 Barbados booze (3)
- m2 Before (3)
- m3 Viral programme (11)
- n1 of the day (7)
- n7 to be lazy (4)
- n13 Unit of maize (3)
- o2 Sell (4)
- o5 Evade (5)
- o10 Photon recorder (6)
- o13 Age (3)

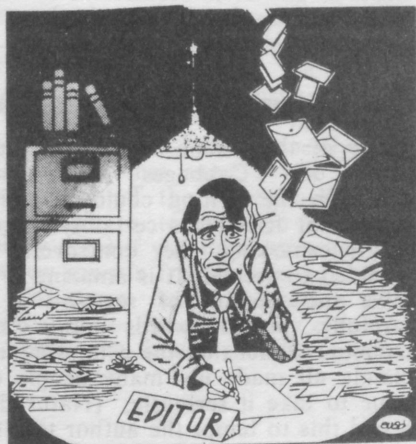


To David Till  
c/o mathNEWS

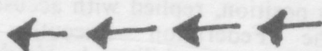
Dear David:

I just read your review of Throbbing Gristle's latest effort, *Throbbing Gristle's Greatest Hits*, and as an avid fan of TG, I must protest. You are most definitely out of your range. Perhaps this is due to your lack of knowledge concerning TG. In this area I may be able to help.

Throbbing Gristle was formed in the mid-70's by Peter Christiferson (I probably spelled his name wrong), Chris Carter, Genesis P. Orridge and Cozey Fanny Tutti. (As a matter of fact, I probably spelled all their names wrong.) [And I probably corrected them incorrectly, too -ed] Their first album, *2nd Annual Report*, appeared in the shops in 1977. This was the first evidence of their form of "Industrial Music For Concrete People". *2nd Annual Report* was not well received, but established TG as a cult band not to be missed. Around this time, TG released a single, 'United', which would later appear on their next album, *DOA*, in a much speeded up form (mixed down from 4:00+ to 0:16). *DOA* has become one of TG's best albums, including such greats as 'Death Threats' (actual death threats as recorded off the group's telephone answering machine) and 'Wall Of Sound', which was recorded over a period of four months in various locations in London, among others. Both these albums featured studio as well as live tracks. Unfortunately, the live recordings were generally poor in quality, and to fight this TG went into the studios of Industrial Records, their record company, and on February 18, 1980, between the hours of 8:10 pip emma and 9:00 pip emma, recorded the live sound of Throbbing Gristle, releasing it as the album *Heathen Earth (Can The World Really Be As Sad As It Seems)*. It is this work which I consider TG's finest 50 minutes. Now it is 1981, and TG is releasing a 'greatest hits' album, but not so. Without hearing the album, I feel confident that this album is all new material. But enough about past history; what is Throbbing Gristle shouting about?



## feedback continued



The members of TG feel that rock and roll is used by the 'rulers' of our society to control youth by channelling their energy into harmless and mindless music. Throbbing Gristle uses this principle in their music: to program the listener and expose him to new ideas and new concepts in music. To enjoy TG, one must understand that an attempt is being made to 'program' him. I'm not surprised that you were a bit taken aback by TG, but then again most people are; however, an informed listener is TG's best listener, and I hope this little spiel isn't too condescending.

But I have two questions to ask:

1. What the hell are you, an inexperienced listener, doing with an album by Throbbing Gristle?
2. Can I have it when you're done??

In conclusion, remember: Throbbing Gristle is dangerous stuff. Do not listen to them when not on any illicit or sober. If you are unsure, don't touch the album - phone the Morality Police and they will come and, using special equipment, they will remove the dangerous vinyl. (But some of us will always live dangerously.)

Yours in good faith  
Jim R. Sullivan

Dear Mr. Sullivan:

*I wish to express my heartfelt gratitude for your thoughtful warning - you have saved me from a fate so unspeakably horrible that it cannot be described but can only be imagined. As a precaution, I have cordoned off a twenty-foot radius around the milk carton in which my copy of Throbbing Gristle's Greatest Hits serenely reposes; furthermore, I have decreed that no one is to touch this record without first donning safety glasses and a protective lead shield. As an additional safeguard, I try not to look directly at the record whilst placing it on the turntable.*

*Allow me to thank you once again for your concern. I am confident that my cerebral cortex can handle the strain which TG so subtly imposes upon it; now, if only those huge hairy, bats would stop trying to get in my window'...*

Sincerely yours,  
David Till

P.S. Throbbing Gristle's Greatest Hits is a collection of previously released material.

## Bits 'n Bytes

The sliderule is extinct. Thank goodness.

In its place we find the calculator, and one of those places is the examination room. Has the calculator had any effects on the type of exam we see?

Well, for one, the problems are no longer made up so that the answers come out to nice, round numbers. This makes the exam easier for the Prof to set (I think), but more difficult for the student to write. You used to be able to tell if you had the right answer because everything fell into place so nicely. If you found yourself smothering in a sea of decimal points and fractions, you probably were on the wrong track. Some of the problems put on exams today would have given the Prof and his sliderule a hard time a few years ago. Now, anything and everything is fair game. In general then, the calculator has given the student more computing power, and the Profs have seen to it that this power is put to use.

What, then, will the pocket computer and the advanced programmable calculators do? More than just number-crunching power is now available -- a student can store complete algorithms in his pocket! Many of the new machines will retain a program even with the switch set to 'OFF', with very little drain on the batteries. Will we see another growth in the complexity of problems the student is expected to be able to solve? What will happen to the students who are not of a programming bent of mind? Will their marks in non-programming courses suffer because they can't make sufficient use of the power of their little boxes?

Maybe not.

Some universities have already made moves to banish calculators of a certain power (and pocket computers) from the exam room. Part of their reasoning may be that, among their other gifts, many of these new machines can display characters as easily as numbers. This means that formulae can be stored in the little box, instead of creating a strain on the brain. And if the little box fills up, just store some of the stuff on the (optional) cassette recorder. It's like walking into the exam with your personal tutor. An open book in every exam. I haven't heard of any moves being made in this direction at U of W yet. Maybe, being a programming type of place, everyone will continue to have an open mind. Maybe, its just a matter of time.

Meanwhile, the prices are coming down and the calculators are becoming more powerful and more plentiful. CRAY1-in-a-pocket, here we come.

Gerry Wheeler



Will  
Hughes

## Feds vs. OFS

To stay or leave?

I have rarely attended a council meeting of any organization which was as active as the Federation council meeting last Sunday. The vicious diatribes were reminiscent of MathSoc at its worst. The procedural debates brought forth unpleasant memories of Chevron types at General Meetings. At times the monotony was worse than a Stats 230 class. And yet the discussion and the meeting were the most productive of those I have attended.

The meeting, after a few housekeeping items, settled into a heated debate about the effectiveness and integrity of the Ontario Federation of Students, the advisability of a review of Waterloo's position in the OFS, and the events surrounding the recent OFS meeting (plenary). A major split in the Federation Executive, with Vice-President Bob Elliott set against President Wim Simonis and the remainder of the Executive, soon became evident. Simonis was highly critical of the OFS, while Elliott, although he did not wholeheartedly endorse the OFS actions and policies, was much less critical of the OFS and at the same time highly critical of the Federation's actions vis-à-vis the OFS.

Simonis, and his faction, accused the OFS of financial irregularities, of playing politics, and of contributing little or nothing to the students at Waterloo. Simonis stated that Waterloo might have more effective representation at the provincial level acting alone (as per Laurier). Specifically, Simonis stated that the Waterloo delegation to the OFS had repeatedly asked to be allowed to examine the financial records of the organization, and despite repeated assurances to the contrary, these books were never produced. This occasioned vitriolic debate among several members of council as to the exact timing and circumstances of the requests for these books. Simonis stated that former Waterloo Federation President Neil Freeman, who was treasurer of the OFS for some months previous to the meeting (though he no longer holds that position), had expressed misgivings as to the financial operations of the OFS.

Bob Elliott, and those who leaned toward his position, replied with accusations that the Federation Executive had abdicated its responsibilities by not having a member attend the closing meeting of the OFS conference. The circumstances surrounding this decision were once again cause for heated debate. Much was made of the question, that if Bob Elliott had been able to attend the final meeting would he have been given Waterloo's vote (apparently not). (Note: Bob Elliott was attending the conference as a member of one of the OFS committees, not as a delegate from Waterloo.) Simonis replied that in his opinion (and others on the executive echoed this) the conference had already been shown to be a complete waste of time. Simonis was accused of not making a concerted enough effort to change the OFS from within, an allegation he denied.

Before during and after this there was much debate about the OFS in general. However, discussion of the points brought up during this time can wait. For near the end of the meeting a motion was proposed to hold a referendum on whether or not Waterloo should remain in the OFS. The proposed date after amendments was November 10. Discussion at this (very late) point was held to a minimum by time restrictions the council imposed on itself. Two viewpoints were proposed. Some councillors were in favour of the immediate referendum while others were in favour of less drastic review procedures with a referendum, if any, delayed until at least January. (Efforts to table the motion to allow more discussion (proposed by myself) were defeated.) The motion passed 8-6 with some abstentions. (My vote was in favour of a referendum.)

And so this fall will see a debate and a referendum on whether or not to remain in the OFS. Next issue I hope to discuss some of the pros and cons and explain why I am in favour of withdrawing.

William Hughes

## Fed Speak

This is a new column of mathNEWS. It is designed to let the students of the mathematics constituency know what is happening with the University of Waterloo

Federation of Students. My colleagues and myself are interested in your views concerning the operation of your student council. We represent YOU! If YOU have any comments on the issues in this column or are interested in your councillors' views on issues please (pretty please) let us know through mathNEWS. We will attempt to address your concerns on any student issue.

### The Ontario Federation Of Students

The Ontario Federation of Students is your representative at the provincial level. Education is important to all of us!! Education is a provincial responsibility. Thus, we the students of Ontario need a unified voice when we attempt to fight post-secondary cut-backs. The Ontario Federation of Students is our voice at Queen's Park. It lobbies for the students of Ontario to the Ontario government.

At the last meeting of the University of Waterloo Federation of Students Council, the Council by the narrowest of margins voted to hold a referendum on our membership within the Ontario Federation of Students. The vote was 8 for, 7 against, with one abstention. This is considered by many to be one of the most important issues to which this Council has focused its attention in some years.

I and my federation colleagues will attempt to bring you both the advantages (the point of view of myself and D'Arcy) and the disadvantages (William's point of view) of membership in the Ontario Federation of Students. We will attempt to educate you and make you aware of what the Ontario Federation of Students does in the process.

At this time we urge YOU to find out about the Ontario Federation of Students and on November 10th express your view by the democratic process of the vote.

dlwilkie

## Monologue

-with Brad Templeton

"There is only one thing worse than people who have no intelligence, namely those who flaunt the fact."

Something is wrong here. For the past few weeks, I have not felt any urge at all to put together another edition of what used to be a weekly column. There is still lots of crap in the world for me to yell about, yet this week I don't really feel moved to yell about it. (Ok, you can cut the cheers, guys.) Last week, at least five people came up to me, stating in surprise that I didn't offend anybody with my last column. Perhaps I've got **Monologue**?

Before I close, I must give my compliments to 'E. Siastes', the *nom de*

*plume* of the person writing a column called 'Of Cabbages and Kings.' Although the writing could be a little better, our friend has certainly succeeded in sparking the controversy he intended to create. It is amazing to observe the amount of reaction a few carefully placed words can create. Despite the fact that the column is fairly plainly all made up, many people continue to take it seriously. (Naturally, I reveal this to tempt the author to attack me!) What fun.



## I am not a number, I am a free man!!

It was an unusually sunny day. You know, all the birdies singing and all that. I woke up in a world that was often lacking in sanity, especially when there was a party going on your floor at 6:30 a.m.. I got up and told myself that these other fools are people, just like me. Well, almost.

The Physics prof in this morning's class advised us that homework assignments were due this Friday. "Your section number, student i.d. and class number are to be put on your assignments."

"And our names, too?" I asked.

"Well, if you want."

I proceeded to one of the computer rooms where a WIDJET terminal was waiting. There, I typed in my number and password into the cataclysm of glass and electronics. Oh & \$%#! The computer thinks I made some errors. Rats! The source file won't flip. Well, I gave up and went to lunch, but only after entering the line "C- WIDJET= CRAP" into my program.

I proceeded to the neighbourhood cafeteria for my afternoon dose of edible substances. Inside, a voice boomed out towards my person.

"Gimme your number!"

"1537"

"I said your cafeteria number, not your History lesson!"

Sheesh! This is dehumanizing! Every day I have to give my blasted cafeteria number to the cook! Don't they know me by NOW?? This is humanity for you.

After lunch, I went to the CC to play that new pac-man game. There, I realized that my wallet had lost mass to the extent that I needed to withdraw some dough from the bank. Therefore, I saw fit to write up a cheque in order to withdraw some money.

At the bank, I gave the teller my cheque.

"Hey wise guy," said the teller, "you didn't give me your bank account number. Besides that, you have to sign this check and give me your student i.d. number."

Not again!?! Whatever happened to proper, non-numeric names? I thought about this as I made my way to the mathSOC C&D Stand. Who was it that could tell me who I am? Why, IBM, the government, and the Registrar's Office, that's who!

I arrived at the C&D Stand. After buying a coffee and a doughnut, I began to ponder this numeric crisis.

"Dave?"

Like, people are people, except when they're thrown inside a DEC10 like Wintario numbers, and...

"Hey, David?"

Now that female voice interrupted my thoughts again! Like I was thinking, we're all numbers. A proper name is nonessential anymore. And it's people who are numbering us in the first place...

"Dave??" said that girl again, this time grabbing my arm as if she wanted my attention or something.

"Who? Me??" I responded.

81047866

## At The Movies

Sorry that I missed last week's issue, things happened that I won't bore you with and I missed getting a column in. Sorry...

### Comin' At Ya

This movie is, as you no doubt know, in 3-D, a movie gimmick that was popular some thirty years ago. The gimmick died out because the novelty wore off and the effects of 3-D were not worth the discomfort of having to wear cardboard glasses that never quite fit right, and also the headache that you usually got from watching the movie. Well, 3-D is back, and I must say that I was quite surprised at the interesting effects that I saw. I can honestly say that I thought that some of the things jumped right off the screen and were close enough to touch. The effect is especially good if you have someone sitting a few rows in front of you as everything that comes out of the screen will go right over his head and very close to yours. But, even though the effects were

good, I still got a headache and the picture was a little off-focus and blurry at the best of times. But, enough about the 3-D effects and on with the movie.

The general plot of the movie is a simple and well-worn one; man loses wife to the bad guys (who plan to sell her and an amazingly large amount of other women to bordellos), and spends the rest of the movie trying to get her back. This movie is supposed to be a western, so there are plenty of bad guys (mostly Mexican types) to kill, and lots of rough desert terrain to ride his horse around in. The plot is simple, the acting not very good at the best of times, and the outcome predictable. This movie carries a restricted rating, but I for one will never know why. There was not very much swearing, a minimum of actual violence, and if you will excuse my vulgarity, I only saw one pair of bare breasts throughout the whole movie and that was only for a very short time.

Rating: 1 1/2 \* (out of a possible five stars)

R.W.Byrd

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*continued from page 1*

NH <-> WMI shuttle service to attend the Deserter's concert.

In the future: A talk on graphics by Dave Tillbrook from U. of T. on the 20th, a panel on careers in computer science on or around November 9th, and a concert of computer music with Bill Buxton, also from U. of T., during the week of October 12th, and more talks are in the works. But to put all this stuff on, we need your help; please join! Drop by MC3037 and see what we have to offer.

plowley

## Polyhedra: an Introduction

In case you don't know, a polyhedron is the surface of a solid object with flat faces and straight edges. This is an introduction to some fundamental polyhedra.

A polyhedron is *regular* if it is symmetric with respect to cyclic permutations of the vertices surrounding each face, and the faces surrounding each vertex. What this means is that we can select any face of the polyhedron and rotate it in such a way that every vertex of the face moves to the position of its neighbouring vertex in (say) the clockwise direction and, after performing this rotation, the appearance of the polyhedron in space will not be changed. Similarly, we can select any vertex of the polyhedron and perform a rotation which moves each face surrounding the vertex to the position of its neighbouring face in a direction without changing the appearance of the polyhedron. Clearly, the cube satisfies the definition of regular. It can be rotated about any face by an angle of 90 degrees or rotated about any vertex by an angle of 120 degrees and still appear the same.

Many restrictive properties that a regular polyhedron must satisfy follow easily from the definition: each face must be a regular polygon (the *same* regular polygon), all edges must be equal in length and the number of faces meeting at every vertex must be the same. In fact, only five different polyhedra satisfy the definition of regular (proof is left as an exercise). They are called the Platonic Solids and have been known for quite a while. They consist of the tetrahedron, octahedron, cube, icosahedron and dodecahedron (see figure 1).

Table 1 contains the number of vertices, edges and faces of each Platonic solid. After staring at this data for a little while, some patterns will become apparent. First, for each polyhedron  $V - E + F = 2$ , where  $V$ ,  $E$  and  $F$  are the

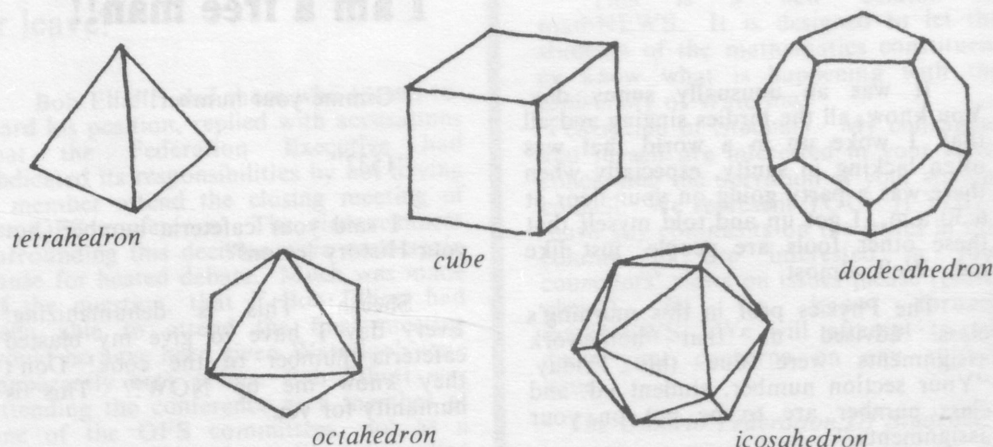


figure 1 the five regular polyhedra

polyhedron	vertices	edges	faces
tetrahedron	4	6	4
octahedron	6	12	8
cube	8	12	6
icosahedron	12	30	20
dodecahedron	20	30	12

table 1

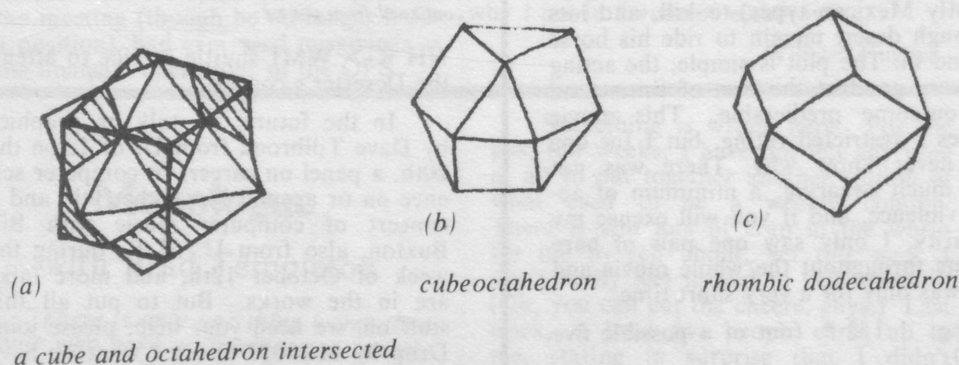
number of vertices, edges and faces respectively. Actually, this relation holds for a much more general class of polyhedra. Can you find a polyhedron for which  $V - E + F$  is not equal to 2? (It does exist.)

Continuing our examination of table 1, we can check that the cube and octahedron both have the same number of edges. Also, the number of faces in

the cube equals the number of vertices of the octahedron and vice-versa. This suggests a kind of reciprocal relationship between the cube and the octahedron. Note that the icosahedron and the dodecahedron are also reciprocals. What is the reciprocal of the tetrahedron?

A nice way to visualize this reciprocity is to construct the two polyhedra intersected, with each vertex of one centered over a face of the other and each edge of one bisecting an edge of the other perpendicularly (see figure 2 (a)). From this, two new polyhedra can be constructed. The solid of intersection of the cube and the octahedron is the first one, which is called (what could be more natural?) the cubeoctahedron (figure 2(b)). Now, if we take each vertex of one polyhedron and join it with the nearest vertices of the other then these new edges describe a polyhedron with twelve identical rhombic faces. This is called the *rhombic* dodecahedron (figure 2(c)).

Obviously, the rhombic dodecahedron and the cubeoctahedron are not regular but, in a way, they can each be thought of as 'half-regular': the rhombic dodecahedron is symmetric only with respect to cyclic permutations of the faces surrounding each vertex and the cubeoctahedron is symmetric only with respect to cyclic permutations of the vertices surrounding each face. The rhombic dodecahedron and the cubeoctahedron are also each other's



a cube and octahedron intersected

figure 2





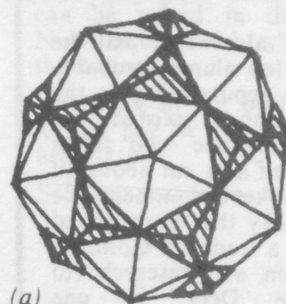
reciprocals in the exact same sense that the cube and octahedron were shown to be (and can be intersected in the same way too).

Now let's examine another reciprocal pair: the dodecahedron and the icosahedron. Well, it turns out that we can take the above discussion of the cube and octahedron and apply it in exactly the same way to the dodecahedron and icosahedron instead. In this case, the new reciprocal pair of polyhedra generated are called the icosadodecahedron and rhombic triacontahedron (see figure 3).

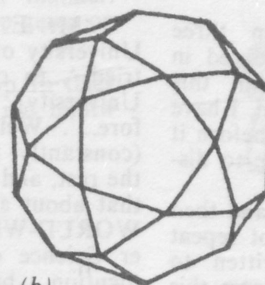
What about the tetrahedron? Well, the tetrahedron is its own reciprocal, so by intersecting it with itself in the vertex-to-face manner we get what is shown in figure 4. Notice that the new reciprocal pair generated are the cube and octahedron!

If, by any chance, you are interested enough to construct models of some polyhedra (they do look kind of elegant) then I recommend bristol board and invisible tape be used for quick, neat and inexpensive results.

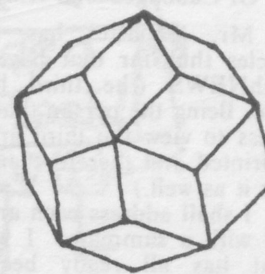
Richard Cleve



(a)  
an icosahedron and  
dodecahedron intersected

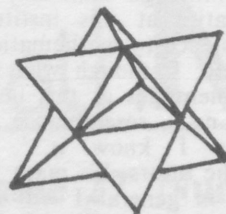


(b)  
icosadodecahedron



(c)  
rhombic triacontahedron

figure 3



two tetrahedra intersected

figure 4

## Descartes Evening

The annual Descartes Evening will be held on Thursday, October 22, 1981 in MC 5158. The guest speaker will be Professor A. J. Schwenk of the U.S. Naval Academy in Annapolis, Maryland. His topic will be "Rubik's Cube Exposed". Refreshments will follow in the Faculty Lounge. All Descartes scholars are invited to attend.

## How to Write a Gridword

or  
#464 of "1001 Ways to Waste Time"

So you'd like to write your very own gridword, huh? Or at the least know how to solve one? Well, it's all very easy once you know how and if you succeed in creating one, send it to mathNEWS (thus saving me the trouble of writing one myself). Just follow these steps and you'll have a genuine gridword done in the grand tradition.

### Ingredients:

- 1 Dictionary
- 1 Graph paper pad (1/4" by 1/4")
- Pencils and eraser
- Lots of spare thyme

Mark out on the graph paper a 15 by 15 grid and shade in an interesting pattern of black squares. This pattern ought to be symmetric about its center, and use at least twice as many white squares as black squares. Try to optimize by having words of 3 to 7 letters long; 8 or more is troublesome and 2 letter words aren't quite challenging enough. It's also nice to make most of the white squares be part of two words, but it's not always possible. Once you believe you have a sufficiently nice pattern, you can...

Proceed to fill in the white squares with words. Start with the long words, and try to avoid awkward letter positions such as 'I' at the end of a three-letter word. Avoid words that begin with an 'R'. The most common

letters you should use are ETAONRISH. Don't use phrases with multiple words unless you are really stuck. Avoid nonwords and abbreviations as long as you can. Other rules will come with practice. Oh, yes. Make sure you can spell.

Now for the fun part, and oddly enough the one I find most time consuming: making the clues. Get a couple separate sheets of paper, and write down the left side all the ACROSS words, then all the DOWN words, as they appear in your grid. You might as well label all these words at this point with their grid positions, such as 'a1' or '10j'. Now proceed to write the clues beside the answer, except they must be cryptic. (Actually they don't have to be cryptic, but then you wouldn't have a genuine gridword in the grand tradition, now would you?)

Cryptic clues can be of many forms and half the battle is won when solving one by discovering what type of clue it is. Simplest first:

### ACRONYM/ABBREVIATION

clues give the elongated form of the answer, eg: "Estimated Time of Arrival" for ETA.

STRAIGHT clues are the standard no-trick crossword type clue.

ANAGRAM clues scramble the answer into other words, which are used in the clue beside a straight clue. In Gridword Biz, I used "TIE MANY to be agreeable" for AMENITY. Words like mix, turn, about, and the like signal an anagram clue.

OR clues are my own invention. If the answer forms half of two phrases or words, I use the two remaining halves separated by 'or' for my clue.

FILL IN THE BLANK clues are used when there aren't two phrases for an OR clue.

SOUNDALIKE clues are clues that often pun on the sound of the answer. For example, "Rock sounds more audacious" is a clue for BOULDER.

EXAMPLE clues simply are clues like "Eg: Honeywell" for TSS.

DOUBLE DEFINITION is like an OR clue, except it's based on two different meanings or contexts of the answer. Gridword Biz used 'Laughing chocolate' for SNICKERS.

And then there is the REBUS clue, which is quite common and quite tricky. In a rebus clue, the word is spelled out for you, using words for letters. I used this clue: "Eastern go is tabletop theorist of self-interest" for EGOIST. Eastern is E. The top of table is T. Thus the clue spells E-GO-IS-T, which is a theorist of self-interest. Another one was 'Northern eggs are a blast'. Northern = N. Eggs = OVA. So the blast is a N-OVA.

There are other clue types, but this should give you some help in writing or solving a gridword. When writing a grid, try to remember that other people have to have a chance of understanding you, so don't use clues that express your opinion of the answer, or clues that otherwise might refer to anything. If these examples aren't enough, write to me on the bun (dswelbourn), and I'll try to help. Until then, happy gridding!

David Welbourn

## Feedback

Re: Of Cabbages And Kings

Mr. E.Siastes has written three articles thus far that have appeared in mathNEWS (the third being in this issue. Being the person that I am, I have access to view the third article before it is printed and therefore am able to discuss it as well.)

I shall address each article and then end with a summary. I will not repeat what has all ready been written to demonstrate my points, (as I deem this redundant) but will make references only to certain lines and you can pick it up from there.

Starting with article number one: 'Mr. E.Siastes' states that the social atmosphere of the university and the Village in particular are not quite up to par, and that he feels that he is the only good person in the Village and that the rest of the residents are a bunch of morons. It is my opinion that there are a good number of fine people who live in the Village. These people have helped out on numerous occasions with various functions and have contributed a lot of time, effort, and talent to running these various functions. And you don't even have to ask them to help, they just ask if they can. I do not see 'Mr. E.Siastes' getting involved with any of the various things that are going on that would be of concern to a math student. As for his roommate declining an invitation to watch the sun come up, I feel that what his roommate does is his own business and he should not have to put up with someone exercising his vocal cords at the time of the morning that the sun comes and generally bothering the rest of the residents of the Village.

I do not know where 'Mr. E.Siastes' gets the idea that the term 'Frosh' is a degenerative one. The fact that maybe he does not personally like the term, is no reason, I feel, to brand it degenerative.

As for a janitor trying to buff-wax his feet to the floor of the Campus Centre, I personally consider this a gross exaggeration of what may or may not have happened. And if this is what he thinks to be a little (sic) humour, I see nothing humorous about degrading janitors.

'Mr. E. Siastes' now comes to the tip of the iceberg. He described the turnkeys of the CC as '...gentle meek souls [who] are usually in so deep a drug-induced stupor...' (etc.). This is just the sort of ignorant and offensive remark that total cynics like 'Mr. E. Siastes' lower themselves to making, (and if you take that as a personal jab. 'Mr. E. Siastes', then you took it right). I do not know of anyone who works harder directly for the student's benefit than our turnkeys. Satire is one thing, 'Mr. E. Siastes', but to be a satirist, one must know the difference between humour and cheap slander directed against those who least deserve it.

'Mr. E. Siastes' also wrote that the University of Waterloo alumni probably tried '...to create a reputation [for the University] where none existed before...'. Well, for someone who refers (constantly) to himself as a cut above all the rest, and then makes a comment like that about a university that is respected WORLD-WIDE as a leader in Computer Science education and research (to mention but one Dept. in one faculty)....need I say more?

Let us proceed to Article Two in the term's second issue of mathNEWS. To begin with, may I be so bold as to suggest that his first sentence should be changed from: '...though what they pass off as mathematics at this institution bears no resemblance to mathematics as we know it...', to: '...though what they pass off as mathematics at this institution bears no resemblance to mathematics as I know it...'. His description of the tutors, his math prof. and his course in general I will leave entirely alone, as I am not directly familiar with any of them, and, unlike 'Mr. E. Siastes', I only form an opinion on subjects which I can intelligently discuss, (I am sure the general student population would be in a better position to judge the descriptions for themselves, based on their own experience).

The remainder of the second article I found to be 'Mr. E. Siastes' usual collection of conceited slanderous trash that is not worthy of this newspaper and certainly not worthy of any critique that I could offer.

And finally to this week's article. It is predominantly a rebuttal to Steve Reid's letter of last week and upon reading it, I think you will agree that no one needs me to point out how incredibly self-centered and (again) slanderous the article is. He does, however, go even further than this to attack this paper and its editorial staff.

On a final note, I would like to add something that 'Mr. E. Siastes' has never heard of...constructive criticism (spelled C-O-N-S-T-R-U-C-T-I-V-E). Try, 'Mr. E. Siastes' to see the centre of the universe as something separate and distant from your own belly-button. I hate to be the one to tell you this, but some day someone is going to show you that you do not know all there is to know, you are lower than most of the people you so loosely insult, and life is not quite as you picture it. I only hope that you will learn sooner than later.

R.W.Byrd

layout, gridword instruction kit); Charlene 'Shy Froshi' Sam (layout, lettering); D'Arcy Emery (photon); Andrew Welch, the man in a suit and tie (mathSOC stuff); Jim Sullivan (feedback #3 - no, you can't have my album!); Peter Rowley (CSC Flash); Gerry Wheeler (last part of BNF - bits'n'bytes); Pizza Pie (pizza pie); Joanne West (haggard editor cartoon); William Hughes (OFS); Dave Walkie (more feds); Jap (photon phix); Brad Templeton (mono) & me (DavidTill).

## Frustratin' Fallacies

Starting this week, this column will be presenting one or two mathematical fallacies for your amusement. Fallacies, or paradoxes, are proofs that conclude with a statement you *know* can't be true, but somehow is proven. Your job is to discover what the fundamental error is in the 'proof'. Remember, from Phil 140, that any statement can be proven from a false premise!

Here's a real easy one using ordinary high school algebra that 'proves' that  $1 = 2$ .

$$\begin{aligned} a &= b && \text{(line 1)} \\ ab &= b^2 && \text{(multiply by } b) \\ ab - a^2 &= b^2 - a^2 && \text{(subtract } a^2) \\ a(b-a) &= (b+a)(b-a) && \text{(factorize)} \\ a &= b+a && \text{(cancel common factor)} \\ a &= 2a && \text{(subst. from line 1)} \\ 1 &= 2 && \text{(divide by } a) \end{aligned}$$

Also, did you know that the top half of a bicycle wheel moves faster than the bottom half? The reason why will be revealed next issue. I'll also show that every triangle is isosceles. From now, till then...

David Welbourn

it's 3:25, and we're done! This week, there were rather a lot of us: David Leibold (alias 81047866) (number); Jim Jordan (layout, help on Monday night, photon, observations, feedback #1); the infamous and still unknown E.Siastes (cabbages and kings); Richard Cleve (polyhedra, answer to torus, layout, thanks for ordering the pizza!); Sean Richardson, the man from Guelph (gridword), jcwinterton (the galumphing gourmets); Robert Byrd (movie review, feedback #2); David Welbourn (gridword editor,  $2=1$  (or  $1=2$  - it's probably commutative), layout, gridword instruction kit); Charlene 'Shy Froshi' Sam (layout, lettering); D'Arcy Emery (photon); Andrew Welch, the man in a suit and tie (mathSOC stuff); Jim Sullivan (feedback #3 - no, you can't have my album!); Peter Rowley (CSC Flash); Gerry Wheeler (last part of BNF - bits'n'bytes); Pizza Pie (pizza pie); Joanne West (haggard editor cartoon); William Hughes (OFS); Dave Walkie (more feds); Jap (photon phix); Brad Templeton (mono) & me (DavidTill).