

next week...

## PRE-REGISTRATION RIP-OFF

It's pre-registration time again, kiddies!

Now, we want you to run upstairs to see your Undergraduate Officer, who is really a very nice man, but remember we don't want any pushing or shoving or we'll withhold your marks (which we don't like doing after you have put so much work into them!). Just check on the schedule below to see how generous these nice men have been with their time, because we all know how busy they are, don't we? I mean it's not as if we're being unreasonable. You kiddies have so much time on your hands, you can come running upstairs whenever we want, can't you?

As these good people have given up so much of their valuable time please don't bother them with such questions as what courses to take. (Really, now, you all know how anathetic you are so you don't REALLY care which courses you take anyway.) Even though you've seen in the past how flawless their advice has been (and how happy they were when you dropped in to ask a few simple questions!) they won't have time with all you good little kiddies scampering around trying to hand in your course sheets.

### DESCENDS FROM TOWER

Just think, these nice gentlemen are going to be handling the pieces of paper that you have mauled with your grubby little hands. You should all be thankful to people like Dr. Burns who has actually devoted four long hours to this unrewarding pastime of dealing with you inconsiderates.

This year, as always, we went out of our way to make it easy for you. Rather than confuse your poor little heads with all the new courses coming up in the fall, we've decided not to publish the Calendar until after you've pre-registered. (And you know that we've got your best interests at heart.)

### schedule ...

Below is the schedule, carefully laid out for you. (we went to so much trouble to make this easy!) We want you to learn it and follow it. It's for your own good.

All Regular and Co-operative Mathies who plan to continue their studies in the Fall/73 term should pre-register during the week of March 12-16/73 as indicated below.

(1) All students pre-registering for year 2 Regular, 2A Co-op and year 3 of a pass program:

- F. Miller, E. Anderson,  
P. Brillinger.
- MC 4022 (West Half)
- 1:00-4:00pm each afternoon,  
Monday thru Friday
- 10:00am-12:00noon Thursday, Mar 12

(continued over leaf)

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# math NEWS

as the stomach turns...  
GREEN BEER

On Saturday, March 17, the Irish are coming, as the Mathsoc will sponsor an Irish Pub Dance on that evening. Reliable sources have it that the band booked for the night is an excellent one. The group is the Northwest Shovel Company, the house band from the "Nag's Head" pub on York Street in Toronto. This pub is very well known for its Irish atmosphere. In keeping with the spirit of the occasion, Mathsoc is putting forth its best greenery in the form of banners, decorations, hats and song sheets--not to mention green beer for those that want it.

Advance tickets for this event will be available in the Mathsoc office, MC 3038, starting today, Friday, March 9.

a news weekly  
published at the  
university of Waterloo  
Friday, March 9, 1973

### sports...

## NUMBER ONE -- AGAIN!

We're Number one - Again!

The Regular Math hockey dynasty carved a niche in the annuals of intramural ranks at the University of Waterloo this week with an unprecedented fourth consecutive championship. (continued on athletics page)

(cont'd from page 1)

(2) All students pre-registering for years 3 and 4 (Regular and Co-op) of an Honours or General programme should register with the appropriate Undergraduate Officer:

#### APPLIED ANALYSIS & COMPUTER SCIENCE

-V.A. Dyck, MC 4022 (East Half)  
1:00-4:00pm Tues, March 13  
1:00-4:00pm Thurs, March 15

#### APPLIED MATHEMATICS

-M.E. Snyder, MC 5007  
-anytime EXCEPT 10:30-11:30 Mon, Wed,  
Fri.  
and 11:30-1:00 every day.

#### COMBINATORICS & OPTIMIZATION

-R. Burns, MC 6135  
-9:00-12:00noon & 4:30-5:30pm,  
Monday, March 12.

#### CO-OP TEACHING OPTION

-R. G. Dunkley, MC 5103  
-1:00-4:30 Wednesday, March 14.

#### STATISTICS

-C. Springer, MC 5039  
-9:30-12:00noon Tues, March 13  
and Thur, March 15.  
-2:00-4:00pm Friday, March 16.

#### ACTUARIAL SCIENCE

-M.A. Bennett, MC 5036  
-9:00-12:00noon & 1:00-3:00pm,  
Monday March 12.  
-9:00-10:15am Tues, March 13.  
9:00-11:00am & 1:15-2:30pm  
Wednesday, March 14.

#### PURE MATHEMATICS

-E. Moskal, MC 5068  
-10:30-12:00noon & 3:30-4:30pm,  
Monday, March 12.  
-9:30-10:30am & 1:30-3:30pm,  
Tuesday, March 13.  
-10:30-12:00noon & 3:30-4:30pm,  
Wednesday, March 14.  
-All day, Thursday, March 15.  
-10:30-12:00noon & 3:30-4:30pm,  
Friday, March 16.  
At other times than those listed for  
Dr. Moskal, students should see Dr.  
Kerr-Lawson in MC 5067.

## MATH FED REP RAPS

Over a week ago 16% of regular math students elected 3 representatives to the Federation of Students Council. Co-op students didn't get to vote because their rep was acclaimed. Three weeks earlier, 33% turned out to vote in the presidential election (the highest turnout of any faculty). Why such low turnouts? I believe it is because what the Federation does is irrelevant to most math students.

In view of this the Federation has two alternatives; dissolve itself or construct a relevant Federation. Being a Federalist the first choice is unacceptable; thus leaving only the second.

## the phantom reports ...

# TERMINALS GIVE UP THE GHOST

It's been a good week for terminal diseases, Honeywell Operators and other annoying gremlins that grow in the cracks and crevices of a terminal system. M&C 2009 has the best track record, two of its six terminals were removed and replaced. These promptly broke down, and a third was removed. The other three however can ordinarily be signed on (though little else). Not to be outdone M&C 3022 has replied with quality rather than quantity, managing to inflict two entirely new diseases on the put-upon APL users. In one, all tabs are permanently set in all positions, slowing I/O down to a crawl, in the other, the terminal forgets to print the next one or two characters after each space. The staid old Honeywell's terminals are however sticking to such classic diseases as jammed keys and non-return-type carriage returns.

In the meantime most of the Honeywell's operators must be very happy now! Rumour has it that many copies of AHA! and related systems have been caught in the past while (for the uninitiated, AHA! lists the attributes of a file, i.e. when and who created it, when it was changed, what the password is, etc.). Need I point out that when caught a copy does not have a long life expectancy. But what can you say about a machine that actually saves copies of mathNEWS (or should that be NOOSE, to give the Honeywell-type terminology).

ALAS IT IS TOO LATE IN THE MORNING TO BE  
PUT UPON TO WRITE THIS TRITE SO NOW ADIEU,

BUT FIRST:

TO 555 MAIL: BEWARE THE TEST OF "TIME"  
TO 11495 MAIL: HELLO (WHAT ELSE CAN I SAY)  
TO "YOU KNOW WHO": I CERTAINLY DO!  
TO FRISBEE: NO SOONER SAID .....  
AND LAST (AND MOST DEFINITELY LEAST) TO MY  
GHOST WRITER WHOSE MIND HAS BEEN MORE THAN  
USUALLY BOGGLED UP TODAY (AND THAT'S PRETTY  
BAD:  
GET THIS DONE QUICKLY THE TERMINALS ARE  
ABOUT READY TO GIVE UP ON YOU!

#### FIRST STEP

The first step in making the federation relevant is being made by your reps Tuesday, March 13 at 1.30pm in MC room 3008. They want to know what you think the Federation should be doing. Do you want more concerts? pubs? or do you want a Federation concerned with the quality of life on campus? a Federation attempting to produce constructive change?

Come out Tuesday and tell your federation reps what you want

Burt Putledge, Co-op Math Rep

# GOV'T TIGHTENS SCREW ON FOREIGN STUDENTS

In December of last year, Robert Andras, Minister of Manpower and Immigration announced new non-immigrant entry records and employment visa regulations, effective as of January 1 of this year. The new rules present a very serious threat to students who lack Canadian citizenship or landed immigrant status.

Violation of the regulations can result in fines of up to \$500 and/or imprisonment up to 6 months or deportation from Canada.

In recognition of the gravity of these measures to students from other nations and the fact that there is a sizable number of foreign students within the math faculty, mathNEWS invited Cheun Lok Lam, a grad math student and president of the Chinese Students' Association, to submit views of the C.S.A./I.S.A. on the matter.

Following is his report:

## THREATENED

On 1 March, 1973, the International Students' Association, co-sponsored with the Chinese Students' Association of the University of Waterloo, invited Mr. D. Davies, Immigration Officer; Mrs. J. Culley, Canada Manpower Officer; Drs. H. Schnetz, Countryman Counsellor and Mr. G. White, Placement Officer to give a panel discussion concerning the revised non-immigrant entry records and employment visa regulations, effective and of 1 November 1972 and 1 January 1973 respectively.

By 7:30 p.m., Room MC 2066 was filled with an audience of close to 200 (70% of which were Mathies), mostly student-visa holders who worry very much over the uncertainty of getting work permits for their summer jobs. The highlights of the revised employment visa regulations are:

1. The student whose job constitutes an integral part of his study will not be affected. These job applications will be handled by the Student Summer Job Centre;
2. All other student-visa holders have to present to the Manpower Officer a statement verified by the employer concerning the nature, place, duration and wage of employment and also the name and telephone of the employer and employee. If there are no Canadian Citizens or Landed Immigrants qualified and available for the job, consent will be made. The student must go to the Immigration Office next where final decision will be made on the issue of the work permit.

### CLAIM UNFOUNDED

The main objective for the implementation of these regulations is that the government believes that the current unemployment situation will be thus eased. However, with a total of only 36,000 foreign University students in Canada, and the fact that not all of them will be available for work in the summer, the effect of foreign students on the current job market can be said to be almost negligible. In fact, recent year statistics indicate that the rate of

immigration is going down while that for unemployment is continually rising. Visitors in Canada are thus not the principal contributing factor to Canada's high unemployment rate. The economic crisis will not be solved by such restrictions.

Summer is Canada's tourist season. Many stores and restaurants demand extra assistants to handle their booming business. Students are good sources of temporary labor and most Canadian citizens or landed immigrants looking for permanent positions will not be willing to do those. Also, summer is vacation time for most people. Substitute workers are in great demand. Students therefore, not only do not take away employment of permanent residents, but promote better summer business and replace people on holidays. Many student-visa holders depend on the income obtained from a summer job to supplement assistance from parents and family or personal savings brought from home. Tuition fees for foreign students is very likely to be doubled soon. The financial assistance obtained will thus be far from adequate. This topped by the current fast inflation (purchasing power of the consumer dollar being \$1.00 in 1961, but only \$0.70 by the end of 1972), necessitates the need of a summer job to make ends meet. (A recent survey conducted at McMaster University indicated that 45% of student-visa holders will have to quit school and go home if they cannot work in the summer, 30% will leave Canada and study elsewhere, 20% will switch from an Honours to a General programme while 5% will go into debt, ..... etc.)

Also, just consider the effects of these students doing nothing at home for 1/3 of the year. They want summer jobs not just for money but because of the effects of idling also.

In addition, all of them have already devoted tremendous effort, time and money in hope of a Canadian education.

### GOODWILL?

The Canadian people have already indirectly contributed to their education. It appears inconsistent with this previous attitude of goodwill to jeopardise now the further education of these students and in so doing to write off the mutual investment in resources and goodwill already made. In another word, when these students return home, they are armed with a Canadian education and an understanding of Canada. These people will responsible positions in their respective mother countries and it is highly probable that they will promote further relationships with Canada, trade and commerce and/or academic wise. On the other hand, some will assume permanent residence in Canada and the investment made on them will be many times Canada's gain.

In view of the difficulties that student-visa holders have to face in the foreseeable future, many International Students' Associations and Foreign Student groups of Universities are working together, hoping to obtain the legal right to seek and obtain summer jobs in a manner similar to past years and a number of Universities are already supporting this pledge.

# Math LETICS

(cont'd from front page)

## Hockey... no. one

With a superb display of scoring, balance, defense and goalkeeping, Math thumped Co-op Residence 7-2 in the quarter-finals, eked out a 1-0 thriller over Environmental Studies and then swamped Kin & Rec 6-1 in the final.

The wins extended Math's undefeated skein, dating back to January 1972, to a total of 25 games. Over the past two years, Reg. Math has amassed a total of 33 wins in 36 contests including 2 ties. The only set-back occurred in the winter term of 1972 a 3-1 loss to Upper Engineering.

### OUTCLASS OPPOSITION

This terms team, however, probably ranks as the best of the four and perhaps the best ever in intramural ranks. Reg. Math outscored their opposition 53-7 in nine games and were only tested severely in their 1-0 win in the semi-finals.

The quarter-final win over Co-op was not as convincing a triumph as the score indicates. Co-op were in the game for most of the contest until Reg. Math pulled away in the final five minutes on consecutive short-handed goals by Rob Madeley, Pat Fallon and Jin Barton. Coming off a ten day lay-off, Math appeared sluggish in the early going and only splendid saves by Pay Berry kept Math in the game. Ted Smandych opened the scoring and after a reply by Co-op, Brian Greatrix and Jim Barton gave Math a 3-1 lead after the first period. The second period started on a bleak note as Co-op's George Thompson blasted a 90 footer by Berry to cut the margin to 3-2. A series of penalties put Math in the hole before Pat Fallon upped the lead to 4-2. Rob Madeley then made a superlative play with help from Dean Mucci and Fallon to score while Math were 2 men short and virtually wrap up the game. Fallon and Barton added their second of the game to add to the margin.

In other quarter final action, Environmental Studies beat Village II N 5-1 while Kin & Rec edged Team Waterloo 3-2 and St. Paul's surprised an overconfident Upper Eng team 4-3.

### STUN STUDS

That set the stage for a fourth meeting this year between archrivals Environmental Studies and Reg. Math. The "Studs" had held Reg. Math to a 2-2 stand-off in the fall term before bowing 6-2 and 5-2 in more recent contests. The game turned out to be packed with thrills and excitement as John Wetmore's screened blue-line drive early in the first stanza proved to be the winning goal. The Math defense of Wetmore, Warren Hoshizaki, Bert Hesselink and Randy

Musselman was solid in front of goalie Ray Berry to shut-out the high-powered E.S. attack. Berry made several key saves particularly in the second period when the Studs stormed relentlessly on the offensive. Strong backchecking by the forwards was another key in the tussle. At the other end of the rink, Reg. Math was thwarted continually by a great display by the Environmental Studies netminder. Dean Mucci and Rob Madeley in particular were robbed blind on several occasions.

### ANTI-CLIMAX

After this great contest, the championship game was somewhat anti-climactic. Kin & Rec had shut-out St. Paul's 3-0 to advance to the finals but were no match for a better conditioned and balanced Math crew.

The opening minute featured the initial Math score as Bert Hesselink caromed a shot off a Kin & Rec defender into the cage on an assist from Rob Madeley. Five minutes later Rod Tanaka stole the puck and fed Dean Mucci who picked the corner for a 2-0 lead, and Mucci added his second of the night shortly before the end of the first period on a picture passing play with Pat Fallon.

John Wetmore continued the onslaught into the second stanza on a blistering drive that wedged under the crossbar for a 4-0 lead and Reg. Math's fifth goal was fashioned by Ian McElroy on a feed from tireless Rod Tanaka.

The Kin & Rec crew were completely outclassed at this point and the third period featured some chippiness and two fights. Brian Greatrix fought Bob Simons of Kin & Rec to a stand-still in their tussle and Warren Hoshizaki outpointed his opponent in another wrestling match.

The only goals of the final session were a perfectly executed give and go play involving Dean Mucci and Rob Madeley with the latter potting the goal and the lone puck tally on a screened drive late in the game.

After the contest, intramural director Peter Hopkins introduced Ellis Brown of St. Jerome's College, who presented the Father Bulbrook Cup emblematic of intramural hockey supremacy to Reg. Math.

### FUTURE

The presentation was a culmination of two years of hard work dedication, and superb-hockey for Regular Math and was the swan song for several Math players who will graduate this year.

Lost to the Math team will be goalie Bob Denney; defense men John Wetmore, Warren Hoshizaki, Al Edwards, Rocco Racioppo and Bert Hesselink; and forwards Ian McElroy and Ted Smandych. However a strong nucleus will return next year and scouting reports indicate a fine crop of freshmen who will

(con't)

(cont'd from previous page)

strive to wear the famed Red & White garb next season.

#### REGULAR MATH LINE-UP

Goal - Ray Berry, Bob Denny  
Defence - John Wetmore, Bert Hesselink,  
Warren Hoshizaki, Randy Musselman  
Al Edwards, Rocco Racionpo  
Forwards- Dean Mucci, Rob Madeley, Rod  
Tanaka, Jim Barton, Brian Greatrix  
Ted Smandych, Ken Chupa, Pat  
Fallon, Ian McElroy

## UPCOMING

#### HOCKEY

The unofficial Ontario Universities Intramural hockey championship will be decided on the week-end of Thurs. March 22, Fri. March 23, and Sat. March 24 at Moses Springer and Waterloo arenas with the first University of Waterloo Invitational intramural tournament. Sponsored by the Math & Environmental Studies societies, the tournament hopes to attract teams from six other universities and will feature two games Thurs, four games Fri, and a championship game on Sat March 24 at Waterloo Arena. Regular Math and Environmental Studies will represent the University of Waterloo. Complete details next week.

#### BASKETBALL PLAYOFFS

Both Math basketball squads went down to heart-breaking defeats in competitive basketball play-downs on Sunday night.

Co-op Math lost a 38-36 squeaker to Village II North A while a short-handed Regular Math team bowed 42-40 to Village I South.

#### ONE-ON-ONE

The first One-on-One Basketball tournament will beheld this Monday from 4-7pm in the P.A.C.. The set-up will be like the N.B.A. one-on-one tournament but with two height classes. Entries should be submitted to the intramural office or anyone interested should sign up on the Math bulletin board.

#### RENISON TOURNAMENT

This weekend, on Friday and Saturday March 9 and 10th, Renison College is sponsoring its 5th Annual Basketball Tournament. Teams from Erindale College, Western, St. Michael's College, Trent, Guelph, McMaster, St. Jerome's College will provide the competition. Weekend passes are selling for \$1.00, two game passes for 25c, and finals only passes for 50c.

#### CLASSIFIED

- FOR RENT: Apt. May 1 to Aug 31 Walking distance to both universities, All utilities paid, parking, cable. Partial furnishing negotiable. Call 884-6765 or come to 16 Austin Drive, Apt. 4
- FOR RENT: Townhouse this summer, swimming, pool, 2 bedroom & Basement. Close to university, Plaza with LCRC. & Ale. 170 or Haque 885-0837
- FOR SALE: Magnetic Cartridge Shure 91ED, in perfect condition; never used or installed. \$35.00 Call Gord 884-3765

## LISTENING IN ON C.S.A.

## 中國同學通訊

Recently mathNEWS learned of the existence of a Chinese Library on the third floor of M&C. The library houses Chinese magazines, novels, articles and other literary items, all donated by Chinese students.

Located in room 3031, it is open every Tuesday and Thursday from 3.00pm - 4.00pm. Anyone interested in a glimpse of Chinese culture is welcome to drop in.

#### UPCOMING

A session of Chinese folk song singing will be held this Saturday at 2.30pm in A.L. room 6. Everyone is welcome.

## sound-off:

## WALLPAPER CAMPAIGN

Imagine that you have been hired to remodel the interior of the Math Bldg. You are to use the cheapest method possible. You would:

- a) phone several painters, and get competing bids.
- b) you buy yourself some explosives and plant them in appropriate places.
- c) You convince Mathsoc to hold an election.

If you picked (c) you win one election poster (your choice of colour).

It seems that holding a Math Soc election is the only excuse needed to get dozens of people to dash madly around the Math building slopping up pieces of paper on any clear (and not so clear) space.

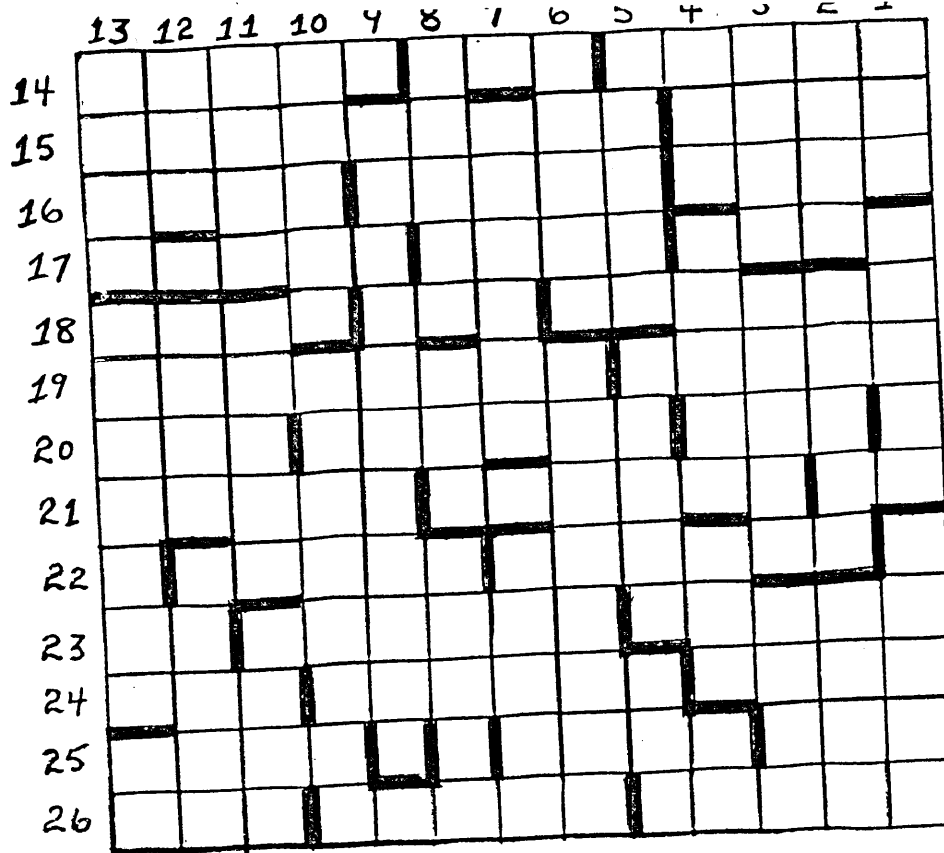
What is the logic in a candidate placing not one but twenty posters in one spot?

Do they believe quantity is better than quality?

In M&C 2066 on Tuesday I counted 159 posters supporting 06 candidates. This is advertizing overkill.

It is an insult to an intelligent person and should not be repeated in the future. Better results can be had by having candidates visit classes rather than by having thousand's of signs which do nothing but take up space.

- To the SONOFABITCH that lifted my ring out of one of the gym lockers last tuesday. I'LL BE LOOKING FOR YOU
- FOR SALE: Parts for 1955-1959 BSA 500 cc. twin motorcycle eg. Frame, Tires, Brakes. Also 1956 Fully Reconditioned and preserved Triumph side valve 500 cc. engine. Phone Tom 578-7925



- 0122 They hold up pants
  - 2513 Deaf \_\_\_\_\_
  - 2508 Me \_\_\_\_\_
  - 2507 Injure
  - 2503 Marge
  - 2613 Beverage
  - 2610 A male Artsie
  - 2605 Large fishes, related to goldfish
  - 1314 Float made out of logs
  - 1318 German pepper
  - 1325 Mother
  - 1214 Sick
  - 1218 (English truck) (y)
  - 1222 Cry of Cat
  - 1114 Past. part of to see
  - 1118 area in memory
  - 1123 small piece of above
  - 1014 Oil company
  - 1019 Copies
  - 0915 Say this and you get what you want
  - 0814 INlay
  - 0819 Amateur Radio League
  - 0822 People who wear glasses
  - 0715 Strain
  - 0218 Exult
  - 0223 Applaud
  - 0114 \_\_\_\_\_ offensive
  - 0117 Gradual end of disease
- This weeks gridword is due to the work of Jan Verser and Eric Granz.

- 1413 One who gets up
- 1408 International Tractor Association
- 1405 Piece of Land
- 1513 Nicholas and \_\_\_\_\_
- 1504 French Female \_\_\_\_\_
- 1613 Bend
- 1609 Unclear B
- 1604 Homer or Ovid, for example
- 1713 Highest male voice
- 1708 United \_\_\_\_\_ Republic
- 1704 Part of a coral island; mixed up a lot
- 1813 Blue print
- 1809 Nautical form of agreement
- 1806 Linear function
- 1913 Predict
- 1905 Coal and Oil
- 2013 To \_\_\_\_\_ is human
- 2010 Italian swamp?
- 2004 \_\_\_\_\_ Grande
- 2113 Fake
- 2108 Type of wreath
- 2102 Like
- 2212 Vietnamese slaughter ground
- 2207 Willy \_\_\_\_\_
- 2313 Two words in Old Macdonald's Song
- 2311 What we all once were
- 2305 Typical Engineer
- 2413 Mart. an \_\_\_\_\_ gun
- 2410 Sets of three
- 2404 What Alan Seus used to love
- 0722 Triple \_\_\_\_\_ balence (pl)
- 0614 Hamlit stabbed Pollonious through these
- 0619 Yesterday
- 0514 Type of cat
- 0519 Unit of capacitance
- 0524 Thus
- 0414 What you elected on Mar. 7
- 0417 Blue
- 0422 One thing on your chin when you don't shave
- 0425 A degree
- 0314 Much
- 0318 Give up
- 0323 Never
- 0214 What J.Caesar called his sweetheart

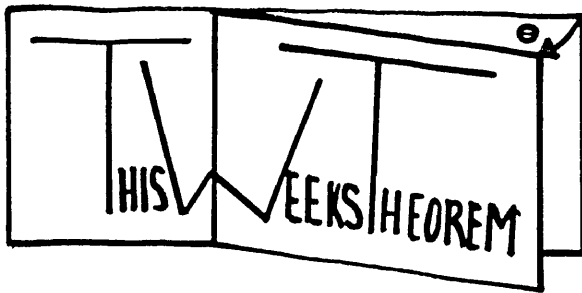
GRIDWORD COMMENT

The prize of a T-shirt for last weeks gridword goes to John Goodwin. Jean Smith and Norbert Bunte were runners up (run a little faster).

SOLUTION TO LAST WEEK'S GRIDWORD

H	A	S	N	T	B	A	M	S	P	A	R
O	C	H	E	R	O	M	A	R	H	E	R
W	H	I	T	E	H	O	U	S	E	E	P
L	E	N	T	A	K	R	O	N	S	P	E
S	T	E	N	D	S	N	E	W	E	S	S
S	T	U	D	E	N	T	S	G	E	A	R
P	U	N	D	O	O	M	S	T	I	M	I
G	N	I	D	T	R	I	C	K	R	I	D
D	E	V	I	L	E	T	H	E	R	N	O
E	V	E	S	H	O	N	E	S	T	L	Y
E	R	R	O	H	S	O	N	C	E	S	T
R	A	S	P	A	M	P	L	E	T	I	N
E	D	I	T	D	E	A	D	L	E	T	T
L	I	T	E	L	S	A	L	E	A	S	E
T	O	Y	S	L	A	M	E	L	T	S	

GRIDWORD



# the Water Melon Caully Flower Dough

This is part 6 (of 9)  
of an inspirational  
novel by Gerhardt van  
Schplümpftk

## CHAPTER 6

Prove:  $1=2$

Proof:

We have, successively, for all values of  $x$ ,

$$\begin{aligned} \cos^2 x &= 1 - \sin^2 x \\ (\cos^2 x)^{3/2} &= (1 - \sin^2 x)^{3/2} \\ \cos^3 x &= (1 - \sin^2 x)^{3/2} \\ \cos^3 x + 3 &= (1 - \sin^2 x)^{3/2} + 3 \\ (*) \quad (\cos^3 x + 3)^2 &= ((1 - \sin^2 x)^{3/2} + 3)^2 \end{aligned}$$

Let  $x$  have the value  $\pi/2$ . Then  $\cos x=0$ ;  $\sin x=1$ , and (\*) reduces to,

$$9=9$$

a true result.

But now let  $x$  have the value  $\pi$ . Then  $\cos x=-1$ ,  $\sin x=0$ , and (\*) reduces to

$$2^2 = 4^2$$

That is to say,  $2=4$ , or  $1=2$ .

Call me Ishmael.

Black foolishly wastes time protecting his bishop which will be useless for the remainder of the game, while I make several strong developing moves.

5. P-QN4 B-N3

6. P-R4!! ...

The commonplace woodpusher would think to win a bishop by 6. P-R5 ... Trivial! Doing this would delay my deciding attack which takes place in 10 moves, and only prolong Black's agony.

6. ... P-QP3

7. KR-R3 B-R2

The bishop is safe but is hopelessly trapped.

8. B-R3 P-R3

Black is at ends for good moves, so (taking his cue from me) he brilliantly improvises.

9. P-OR5 ...

The Maginot line attack; the result of 10 years of intense study of the Fish opening and first introduced to the chess world by me in this game.

9. ... P-QN3

Black struggles to free his trapped bishop.

Hemming in his king. Black succumbs to the inevitable.

11. P-N5 PxNP

12. Q-KN4!! N-KB3!?

His only reply, guarding against 13. QxNP ... winning the rook.

13. QxNP P-N1

14. QxPP N-N5

15. O-P7 Resigns!!!

An excellent move by Black which should have been done 14 moves ago. Black resigns foreseeing tremendous loss of material at best. A sample variation is 15. ... N-KR3 (protecting against the mate) 16. PxP (threatening 17. QxP NxP 18. P-B3 mate) P-QP4 17. KR-B3 (threatening 18. QxPch NxR 19. P-B3ch K-K2 20. PxQ with a bit of material gain) OxP 18. P/7-B6 K-Q1 (getting his king out of the line of fire) 19. PxH etc. with a win for White, of course. This game aptly demonstrates the superiority of the Fish Opening over all other known openings and proves that chess can no longer be played since White has a guaranteed win with 1. P-OP4.

An HS&S production.

## FISH'S MARKET

FISH(360/44) VS SPAS(HONEYWELL)  
The Fish Opening

Notes by Fish

Fish Spas  
1. P-QR4! ...

Chess experts state that the proper way to open a game is to initiate a fight for the center. This misconception has gone unchallenged since the dawn of man. However, when the light of my super-genius broke through the darkness of chess analysis, the world was soon to see there is a better way: my way.

1. ... P-Q4?

A weak move; the pawn is now open to attack and Black must waste time defending it.

2. P-R5 P-K3

Another stroke of genius; bringing the rook into the fray immediately; Black's reply is conventional.

3. P-KB3 B-N5

4. P-B3 B-R4

## FEEDBACK: WADGE SITS DOWN

EDITORS: The student occupation of the University of Toronto math department entered its second week on Tuesday. The sitters-in are protesting the firing of three profs, Spring, Salaff and Mathers, all (of course?) are outstanding and popular teachers. They are also demanding more student say in courses and teachers.

None of the three profs were given written reasons for their dismissal, though they had asked for them. They were told verbally they were "underpublished" (only 3 ounces per year). More likely its because they've had a habit of taking the students side in some disputes with the administration, eg. marking schemes and student voice in the curriculum. Department chairman Duff has several times admitted that they are popular profs: all the more reason to get rid of them, for as he once said, "Students rate highest those profs from whom they learn the least".

Last Tuesday the students held a rally in the lobby of Sydney Smith hall, where the math department is located. After speeches by the three profs and others, Duff got up and tried to defend his position to the 500 students present. Sound came from Duff's mouth, but 30 minutes later he still hadn't said anything. At this point a student got up and said "yes or no, will Spring, Salaff and Mathers be rehired?", said Duff: "no comment". The crowd responded by moving up to the department headquarters on the fourth floor, which has been occupied day and night since then.

MathNEWS readers may get a chance to hear more about the sit-in first hand: there is whispering in the corridors that some of the central figures may pay a visit to Waterloo early next week.

Bill Wadge

## where do 20,000 posters come from?

EDITORS:

As the elections draw to a close I would like to thank a certain gentleman Paul Corman at Graphic Services for the great job he did at printing the posters for the candidates of the Mathsoc election. When one looks at the 3rd floor lounge area and the posters which line all available wall, door, and sometimes even ceiling space it is not hard to imagine where the 20,000 posters Paul had made up have gone. The service was unbelievable. Requisitions went in and within a day on the average beautifully reproduced posters in all the colours of the rainbow were ready to be put up. The quick turn-around and excellent service was wholly due to Paul's putting in a lot of overtime. It's this kind of fast, efficient and enthusiastic help from certain members of the Graphic Services staff that makes it a lot easier to run a campaign and sometimes even fun.

Wayne Dargas

## LEFT HOLDING TICKET

EDITORS:

I bought advance tickets to last Saturday's Yukon pub and had to line up for more than half an hour after the doors were opened to get in.

i.e. the fact that I bought advance tickets didn't do me any good.

I suggest that if you sell tickets, you have someone at one of the other doors (there are 3 glass doors) collecting tickets only and stamping people. This is feasible since still only one cash box is necessary and allows people with tickets to get in immediately (or at least not wait so long).

Maureen Pratchett

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## MEET YOUR FEDERATION MATH REPS

Tuesday, March 13 Room 3008, 1:30

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mathNEWS - financed by but independent of Mathsoc  
putting on the final touches we see that our number has dwindled to 2  
... 12 hours--a new record time! ... cutting, hacking, writing, pasting,  
recutting, rehacking, rewriting, repasting, at one time or another, we  
were: Mark Saaltink, Randall McDougall, Jan Verster, Dennis Mullin,  
Hans Pennel, Mark Shields, Steve Treadwell, Lynn Solvason and John Peebles.