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LookAhead

| Cinema Gratis |  |
| :--- | :--- |
| Feb 4 | Death Trap \& Vormittagsspuk |
| Feb 11 | Reds \& The Big Snit |
| Feb 18 | 2001 - A Space Odyssey \& 2010 |
| Feb 25 | Brainstorm \& Mr. Frog Went-a-courting |
| Fed Flicks |  |
| Feb 6-8 | Karate Kid II |
| Feb 13-15 | Running Scared |
| Feb 20-22 | Armed \& Dangerous |
| Feb 27-Mar 1 | Cobra |
| UW Arts Centre |  |
| The 25th anniversary | of the infamous FASS |
| Jan 29-31 | A Touch of FASS (A Silver Sequel) |
| Feb 4-7 | A Touch of FASS (A Silver Sequel) |
| Feb 16-18 | Life After Hockey |
| Feb 23 | Mini Ballet : From Russia with Love |
| Feb 27 | Anonymus |
| DCS Courses |  |
| Feb 2-4 | Unix Part II |
| Feb 2,4 | Intro. to REXX |
| Feb 3,5 | Intro. to SPSSX |
| Feb 9,11,12 | SPIRES Protocols |
| Feb 99,11 | Intro. to DOS |
| Feb 16,18 | Intro. to SYSTAT |
| Feb 23,25 | Advanced DOS |
| Feb 23,24,26 | Intro. to GKS |
| MathSoc |  |
| Feb 6 | Cultural Caravan (Bombshelter) |
| Math Faculty |  |
| Feb 2 | End W87 DROP period - standard load |
| Feb 2 | Deadline for withdrawal, no penalty |
| Feb 2 | Advanced - Honours transfer deadline |
| Feb 5,6 | Preregistration - Spring '87 |
| Feb 16- | Co-op Employment Interviews |
| Mar 6 | (Get those suits cleaned!) |
| Mar 2-6 | Preregistration - Fall '87 |
| mathNEWS |  |
| Feb 2 | GroundHog Day brainstorming |
| Feb 9 | Issue \#3 submission deadline |
| Feb 9 | Production night Issue \#3 |
| Feb 13 | mathNEWS \#3 hits the halls |
|  |  |

## UltraClassifieds

Chester has solved Fermat's Last Theorem! "Trivial" was his comment.

Barley has a Tomato

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## From The MathSoc Office...

Just a quick note from this term's office management. 'Ve have lots of past midterms and finals in the MathSoc office which can be copied any time and not just during midterms and finals. Get the hint yet? Don't wait for the line-ups, come on in now and try copying some

Garth

## Math Grads '87

The MGB will be held Saturday, March 21 and tickets will be approximately $\$ 50$ per couple. For the first year, tickets will also be sold on an individual basis. They will be available March 2 through March 4. There are PLENTY OF TICKETS. Everyone who wants to go will be able to!

Tuxedos may be rented from Collin's House of Formals for $\$ 60$, and tails for $\$ 65$. Please reserve yours as soon as possible. Not every guy wears a Tux! (Personally, I love a man in a tux.) We would rather see you there in a suit, than not see you at all. Corsages and boutonnieres are available at Schnarr's Florist at a $15 \%$ discount for math grads.

Additional yearbooks may be available at a slightly increased price. Also, the photographer will be returning in mid-March for final retakes.

Last term we raised $\$ 1800$. Thanks for all the hard work, guys ... it really helps. I've heard quite a few people saying that they won't be going to the MGB because they can't afford it, but our Math Grad Ball is the least expensive, and the best on campus!

Hope to see you there!

Lisa Seabrooke Co-Chairman

Math Grad Committee '87

## Tell Us To Can It

Any legitimate student eats a lot of canned foods. To celebrate this lifestyle and honour the legitimate student mathNEWS will be publishing a special "Canned Goods Issue." We need your suggestions! Tell us what you think should be available in cans, then watch for your suggestions in the special issue.
dan schnabel (editor)

## CSC FLASH!!!

Everyone who was at the the Siggraph ' 86 Road Show has heard this already, but for those who missed this uplifting event, here are the latest developments:

This term, all five positions in the CSC executive were acclaimed. Here's the rundown:

Chairman-for-life:
President:
President of Vice:
Treasurer:
Secretary:
Rumour has it that there was a second candidate for secretary, but Calum intervened to allow more accurate predictions.

The CSC's next meeting will be held next Tuesday, February 3rd. Andy Wright will be discussing his language, ForceOne. Watch for mosters with full details.

Tea and Doughnaughts will be served.
Colin for Calum

## Elections

As you probably guessed from the sight of pink smoke coming out of the central services smokestack, the new MathSoc executive have been elected. Sort of. Well, actually, there were no elections for the MathSoc executive or class reps. The nominations closed with the following seats filled by acclamation:

| Executive |  |
| :--- | :--- |
| President <br> Vice-Pres <br> Treasurer | Dave Kirkness <br> Jacqueline Yang <br> Joel Crocker |
| 3A Class Reps | Darryl Ricker <br> Mary-Jane Verboom |
| 2A Class Reps | Ian Burnham <br> Mark Kerbel <br> Pat Szwyrlo |
| 5B Class Rep | Bill the Cat |

A by-election has been called for a 1B class rep., to fill the position vacated by Jacqueline. The candidates are :

$$
\begin{array}{|l|}
\hline \text { Gary Spence } \\
\text { Tom Vandeloo }
\end{array}
$$

The election will be held February 2nd and 3rd, with the polling booth on the 3rd floor, outside of the C\&D. The booth will be open from 9 am until 4 pm . All 1B co-op students are encouraged to vote! (Everyone else is discouraged from voting. You're not allowed. Vote in the Fed elections if you have some desire to ballot. - Typ.)

Garth Mann
CRO

## Yearbook

Those of you potential graduates returning to campus from workterms should have bought your yearbook in the summer to be guaranteed to get one (the final count had to be in by November, when the company printed up the covers).

However, the grad committee had decided that there is enough interest to warrant selling them again, at the increased cost of $\$ 18$ to cover the cost of setting up the presses again. Time and place of sales to be announced.

Please hand in your grad write-ups by February 7th to MathSoc. They will go with a black and white version of the grad portrait you just got taken. We could also use a few more submissions of your own photos from Oktoberfesting.


This is your ' $Q$ ' to help out on mathNEWS. mathNEWS is for you - are you for mathNEWS? You could be famous. Want to know how? Come out to the next production (see LookAhead for dates).

## Letters To The Editor

## Dear dan :

Such invective! As a 3B co-op student I am scandalized by your unprovoked diatribe. If anything, it is regular students who are a problem. Some observations: 1) Regular students have the intensity of a piece of limp celery. Due to the stultifying effects of being able to stay in one place for more than four months, they are callous and incapable of emotions, as your reply well indicates. Whoever saw a regular who seemed to care about anything? I'll bet you don't even have an ulcer. 2) Regular students have no conversational ability. How does one communicate with people who look blank when you discuss WatPubs, afraid when you offer to "do lunch", and never start a sentence with "When I was at BNR I ..." ? 3) Regular students have no sense of humour. They don't understand why government work-term is an oxymoron, or why IBM joke is a redundant phrase. 4) Regular students are so possessive. They often own big chunks of furniture. They live in a place, look after it and everything. Co-op students live 'on' a room, and can clear out of any place in under two hours. (Regular students don't even keep their belongings where God intended in cardboard boxes.)

Ah, you're probably all in regular 'cause you couldn't get into co-op anyway. But don't worry, I'm sure that when you graduate you'll get a job you're fully qualified for: "We need someone to document this COBOL accounting package. The co-op who wrote it never got around to it ..."

Stuart L Hodgins

## Dear Stuart

You turd! In case you were too awed by the prospect of an academic term to understand my viewpoint, i view co-op students as a burden on the university system. In other parts of the world, when you want a job programming COBOL accounting packages you apprentice to such a position. That's right - you sit down on the first day of the job and figure out what the hell to do before you get fired. If you still want the job after that, that's a different problem, but we won't discuss the shotcommings of CS types here. Going to university for five years so you can expect a $37 \%$ increase in your average annual income is a societal cop-out.

As for the intensity and style of regular students, more than a few of us will be off in Europe writing poetry about unrequited love with the money from our NSERC scholarships before graduate school. From what $i$ can understand, quite a few co-op grads will be rationalizing 'Maybe IBM wasn't that bad after all...'.

And one last point - about the cardboard boxes. When was the last time you looked at the housing situation. It just so happens that $i$ live in a cardboard box, and it's very nice!
dan the editor

## Hey mathNEWS!

What happened last Friday? Every last copy of mathNEWS disappeared by 6PM Friday night! A devoted mathie like myself couldn't even get my own copy - I had to photocopy a friend's copy!!

Devoted

## Dear Devoted

A really devoted mathie picks up mathNEWS before noon. By $6 P M$ the janitors have taken any that might be out after noon. If you are real$l y$ desperate the mathNEWS office (MC 3036) always keeps a few extras.

## The Silver Anniversary of FASS

## The Honeymoon Continues

For the Twenty-Fifth year, a group of faculty, alumni, staff and students have gotten together to perform FASS. This year, the performances opened last night with an amazing show. And this with less than three weeks to rehearse (parts weren't assigned until January 9).

Not surprisingly, there were occasions when actors (and techies) did miss their cues, but these came surprisingly seldom. A noticeable weakness was the band. Actually, the band itself played almost flawlessly, but some of the solo singers lacked in projection (and in one case, there was even an inaudible duet). Nonetheless, the performance was excellent, with outstanding performances by several of the cast members. Particularly impressive were some of the major production numbers-the ease with which these were performed belies the minimal rehearsal time that the cast had.

The theme of this year's show is "Putting on a Show", and the subject is FASS itself, with the difficulties involved in putting it together. The second act centres around a FASS performance in which everything goes wrong. The play-within-a-play did make some of the events a bit difficult to follow, but succeeded in giving the play an added level of depth.

Happily, things did not go wrong in the real performance, although many of the events written into the play have come true in real life. We can only hope that this does not happen again before the end of this year's run.

If the troupe improves with practise and experience, then this year's FASS will be a show to remember.

Don't miss it!
Alfred
[FASS will be performed tonight, and Wednesday through Saturday of next week, with performances starting at $8: 00$. Tickets are available at the Humanities and Modern Languages Box Offices, c. :irrough any BASS outlet.]

## T minus 44 and counting

Just a few notes about the delightful turn of events that may allow us all to graduate alive. The thing that most of us enjoy about the new requirements is that workload is reduced. Turns out that the profs feel the same way. Apparently a good ratio of professors to students at other universities is around 7:1. Here it's about 22:1. With the lighter load, this ratio may improve. This shouldn't affect course offerings, though - the Dean says that there should be no drop: as long as there's someone available to teach, all courses will continue to be offered.

There are two major reasons why the changes happened in 3 rd and 4th year. For one thing, 3rd and 4th year are departmentalized, and so the effects of changes on each program are relatively easy to predict. The individual departments could decide which courses were essential, and which could become optional. The other reason is the recent changes to the secondary school system. The University sees the approaching shockwave (it'll hit in Fall '88) and wants to be ready, so changes in lower years are best made for Fall ' 88.

Of course, there are still those who want to graduate under the 48 half-credit rules - a sort of machismo thing. "I took Math when it was hard - 48 half credits. Back then CS 375 was the true test of a Mathie's metal ... ". Well, if you want to beat your head, do so. For the rest of us, ever if we still make the 48 requirements, graduating under 44 may boost he ol graduating average!

## Doctor Heartburn's Book Of Pizza

(Dedicated to those who have a love for pizza that is hopefully not allconsuming...)

## PIZZA IS NEVER HAVING TO SAY YOU'RE STARVED

The pizza has so many overtones. It hides pepperoni, bacon, anchovies and pineapple, all under a cheese mask of self-mortifying reserve. (Aren't Canadians the most reserved people of the world? For how typically Canadian it is to say, "Anchovies?" and then retract his topping when someone objects to it!)

On the other side of the coin is crust. We would all like to have a crust we can trust absolutely, from whom we need not, cannot hide our teeth, and from whom we need not fear brittleness, yeastiness or gooeyness; then we could stop worrying and get on with the main business of ordering. If, however, you have to say you aren't hungry, you do not, cannot eat the crust you love. Then is it really pizza after all?

## I CAN'T BELIEVE I ATE THE WHOLE THING...

In more pessimistic moods I liken discussion of pizza to reading a menu for a restaurant you can't afford to visit, just as I liken discussing hamburgers to reading the franchisee's manual for a Burger King when you don't have an MBA. Yet there is an undeniable exoticism, an element of adventure to the whole subject. The toppings on another person's pizza are stranger than we imagine and sometimes stranger than we can imagine. We have no idea what dangers and delights are waiting down any given crust.

It's rather like clothing. Plain pizza is uninteresting because the element of the unknown has been discarded. (This is why no-name pizzas, stripped bare of natural pepperoni, are less exciting than they seem. "You're plain-so now what?") Before we can make a discovery we need an unknown. Before we can order pizza, we need to have some toppings.

## THERE WERE PIZZA JOINTS ALL AROUND

## BUT I NEVER SMELLED THEM COOKING

## NO, I NEVER SAW THEM AT ALL, TILL 967-1111

Everyone remembers the first time, when it wasn't just fascination or a bad Village supper or just plain honest starvation. It was the pizza that you thought would last forever, no matter how unforgivably small it really was. You had observed pizza delivery people, maybe even gone out with or lived with them, but you were still skeptical about the whole idea. "Is it just having something to eat or having something for a party or what?" Then it happens to you-it's so hard to believe that you keep pinching yourself-and then you know that it can and does taste good, and neither you nor anyone else on this earth ever has to be hungry again.

## Proof of the Week

$$
\begin{aligned}
t & =1+2+4+8+16+\ldots \\
& =1+2(1+2+4+\ldots) \\
& =1+2 t
\end{aligned}
$$

Therefore $t=-1$
henirg

## Joggers Anonymous

I was walking through the campus on the evening of the big snow storm. It was cold, and very hard to get around, except by walking on ring road. Overall, most sensible people would agree that on such a night, they would rather be at home sipping a cup of cocoa than be caught outside. I saw three "joggers".

## Running is a Disease

What are these people doing out in the cold, late in the evening in the rain, or early, early in the morning, when many people are just getting to bed? Clearly "runners" are more than just slightly strange. Running is a disease.

## Why Running is a Disease

Runners exhibit many of the more disturbing characteristics of the common alcoholic. Most runners run even though they do not particularly like it. There is a buzz associated with running, just as one can get a buzz while drinking. Excessive running causes runners to develop a number of running related ailments. Drinkers are beset with similar problems. Often, drinkers are proud of their accomplishments ("We're going to get pissed this weekend!"). So are runners ("I'm going to run the 20 k this weekend!"). Drinkers are known for being obnoxious 'under the influence'. So are runners ("Damn $\mathrm{F}^{*}$ king Drivers! I just hate 'em! And if you can't keep pace, then why don't you just quit?!?").

## What can we do?

Do you want to help these poor, disturbed individuals? Of course you do. But how? Well, we have noted the similarity between the alcoholic and the runner. We'll try to help the runner the same way we help the alcoholic. First the runner must realise that he/she has an illness. Once the runner has been made to realize his/her plight, therapy can begin. The runner must be prevented from running. Trip them, break their legs, hide their shoes; you must remove from them the temptation to run. The runner must be made to stop jogging completely. Even a brisk walk may put him/her in danger.

Unfortunately, running can only be prevented, not cured. But take heart; many former runners survive to lead normal, inactive lives. next week: The Fitness Instructor; Can a Cure be found in Time?

MLE
(emily)


IMPERIUMS TO ORDER

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## So You Want To Be A Scientist?

## (Part II in an Infinite Series)

It has recently come to our attention that UW offers a Bachelor's degree in Science.

When one considers that we are in our third year at UW, you would begin to wonder, Why? Could it be that the science faculty is totally devoid of spirit? We never hear a damn thing about them, or from them for that matter.

After many inquiries as to their existence, the general consensus seems to be that the typical science student is an "airhead", as one math student so boldly phrased it.

Could it be that university officials wish to hide these geeks so that no one will get the wrong impression of the university? Why not? Hide the idiots, and we'll all look better for it.

Many science students are reported to be illiterate. They are only required to score twenty-five on the ELPE. Even with this low requirement, many students write the exam five or six times.

To give you an idea of the kind of person that graduates from the science faculty, here is a list of some UW BSci degree holders:
(1) Ferdinand Marcos
(2) Pee Wee Herman
(3) George "The Animal" Steele
(4) Sylvester Stallone
(5) The Three Amigos

And these are some of the smarter ones!
Clearly, the problem in the science faculty is not a lack of quality instructors, it is rather a lack of intelligent students.
$\mathrm{CJ} /$ Superdave

## Cure Found for Dry Mathies !

In a series of bizarre, never before dared experiments, Dr A.G. Forse has discovered a number of new beverages designed for maximum benefit of the math oriented.

Pink Tie

- 1 part Cherry Whiskey to 1 part milk


## Q.E.D.

- 1 oz Dark Kum

Case 1) fill glass with Coke. Then add lime;
Case 2) fill glass with Pepsi. Then add lime;
Case 3) fill glass with Jolt Cola. Then add lime;
Q.E.D.

## Prime Factor

- Get $1 B-52$. Drink one layer at a time
with a long pink straw
Trinle Integral
- I wz $T$ iple sec, measured $1 / 4$ teaspoon at a time
- 1.zan proof Vodka. fluwed by a iong drag on
a Malboro
Fibonacci
- 1 oz Tequilha, drink. Then 1 oz Tequilha; drink.

Then $20<$ Tequila; drink. Then 3 oz Tequilha; drink.
Continue the way only Mathies know how!
The S.S. Mangoes

## Prof Quotes

"Then the unit squeals on the user for violating another programmer.
F. Burkowski, CS 350
"This is on the transparency, so it should be perfectly clear."
Derik Wood, CS 360
"Go over this later, preferably with a good stiff drink because your mind will be relaxed and you can see anything then."

Keith Rowe, Math 234A
"Constants are random variables too. They just don't vary much."
Chris Small, Stat 333
"It doesn't make much sense to collect contributions from someone after they have died."
M. Bennet, ActSci 332 "You can come and twist my hyperboloid after class."

Stanley Lipshitz, Math 230A
"It's a place in memory where you can go to grab a byte."
N. Ostlund, CS 235
"It's so quiet I keep turning around to make sure you haven't gone away."

Andy Conn, CS 337
"I wouldn't have a hope in Hell of passing this exam, would I?"
Howard Slaney, ActSci 338
"Are you with me? Good. I am somewhat lost."
V.P. Godambe, Stat 450


Fermat Drug Ltd, Waterloo. Ontario N2L 3G1

## THE ADVENTURES OF

## WATMAN

When we last saw our lustrous superheroes, they were being digitized and entered into the scheduling computer as conflicts.
"Well, Watman, I guess this is the end."
"Yes, Duck. We are doomed. Before we die, I just want to tell you how much I'll miss your cute bottom in those tights...'

And then they were gone.
"What are we doing in the Watcave, Duck? I thought we were supposed to be dead."
"Well, sir. I thought I'd take the liberty of using the Watcomputer to fix the problems in the scheduling system, and it spotted the two of you in digitised form. So naturally, I just ran you through the Watdigital-to-analog converter, and here you were."
"Good work, Alfred. I was hoping you'd think of that."
"We'd better do our assignments now, Watman. They're due at 8:30."
"Wait! I've got two tickets to see FASS. And it starts in five minutes!"

Rushing into Modern Languages, our heroes quickly spotted a sign: "F.A.S.S. Convention Moved to MC 6502". Pushing through the milling crowds, Watman and Duck burst out of the building and rushed across campus to MC.

Quickly reaching the sixth floor, our heuristic heroes plunged into the bowels of the sixth floor maze, and became instantly lost.
"This way, Duck! ... No. This way... Maybe here... or ... just a sec ... Uh, Duck? ..
"Wholly non-planar graphs, Watman! I think we're lost."
"Not lost, Duck. We're merely disoriented."
"Lost, Watman."
"I told you, Duck, we're not ... Damn! We're lost, Duck."
"Not lost, Watman. We're merely disoriented. And I've got a Watorientation Film in my Watutility Belt."
"What does it say, Duck?"
"It says to go this way, ... and then left ... Follow me, Watman! ... Here we are. MC 6502."

But no sooner had the stochastic superduo entered the room than
"Get them, boys."
BOOF!
BOING!
ZORF?
And our heroes found themselves bound and gagged amidst a horde of costumed characters.
"Why would the actors in FASS want to capture us, Watman?"
"I can't imagine, Duck."
"Well, well. I see you two haven't figured your situation out yet. Well, you see, you've just walked into the middle of a F.A.S.S. convention. That's F.A.S.S., the Fearsome Archvillains Secret Society! And now, have we got a fantastic slow death planned for you! Yes. That's right, folks, you can be sliced, diced, and even julienned. But wait! There's more! Your purchase will also include a death to the fabulous sounds of this K -Tel record: The Greatest Hits of Ollie Ropeburn. Ready to buy it, yet? But that's not all! If you die now, we'll throw in this set of Ginsu knives, free. Make your will or money order payable to the now appearing on the bottom of your screen."
"Oh no, Duck. It's the Adman."
"Sometimes, Watman, I really don't know what I'd do without your astute observations."

Can the Adman be overcome? Will Watman and Duck succumb to this gimmick? And what has happened to the FASS show? Is this curtains for our heroes?

Tune in next issue, same Wat-time, same Wat-paper.
Na-na-na-na na-na-na-na na-na-na-na na-na-na-na ... WATMAN!

The Chuckler

# C \& O Undergraduate Seminar 

Combinatorics and Computer Science In
Coding Theory and Cryptography with

## Applications to Communications

Professor Scott Vanstone
Tuesday February 3, 1987
4 PM, in MC 1050

## Refreshments provided

This will be a 45 minute talk that should be understandable by any mathematics undergraduate. Come and find out what $\mathrm{C}+\mathrm{O}$ is about and meet some of your professors.

## Dr. Slug's guide to Social Acceptance

Hi! My name is Dr. Slug and believe me this is no coincidence. Having majored in the capricious field of Social Acceptance it is my responsibility (as a slug) to inform you of the omnipresent fears that encompass your everyday life. This is particularly true of the species Mathie ( Thincalot-sleapalot ) and never so acutely as in the case of the academic hyperborean gastropod ( askus-Heartbreak )

This week we will discuss what you do when the raspberry jam from a jelly doughnut spews down the front of your Mickey Mouse sweatshirt. Of course, there are ways to avoid this crucifying social embarrassment. For example, you could buy a lemon filled doughnut. However, eat enough of these and you'll look like Ronald Reagan getting an enema. Once in a while you have to have a raspberry filled doughnut. But let's say on this day of woe you're not wearing a Mickey Mouse sweatshirt but say a Skinny Puppy T-shirt. It suffices to say a red grebo dripping from a Puppy Skull could be an improvement, whereas a Mickey Mouse waving a lentiginous "hello everybody" with raspberry goop clinging to his nose is (and here's the big word) SOCIALLY UNACCEPTABLE.

Ah, poor misfit of society that you are! You're standing there like a P.I.B. at a funeral and you know, you just know, there is no way to cleanse Mickey of the crimson curse. Scared? You should be! Your friends mock you, relatives disown you, and even the neighbour's cat would rather choke on catnip than be seen using your leg for a scratching post. It won't be long before the whole of society deems that you are unfit to play in the reindeer games. Even the Kent Hotel would slam its doors in your abbreviated face.

As I see it, (and as a stomach footed Ph.D. I should know) you have one of two choices. You could run to the nearest euphemism flushing Mickey and his sociopathological slime to kingdom-come. Then pray that no one saw you in transit. More recommended is that you fall to one knee looking obliquely to a corner of the ceiling with you arms pointing at strange angles. With any luck you will be mistaken for a Tempo Cigarette commercial.

Of course the advice given above applies to Mathies. If you're an engineer give it up. You didn't stand a chance to begin with.
"Fozz" Sutherland

## Keener Bingo

To begin, we must clarify what a keener is. They can easily be spotted in the front row of any class and are noted for their remart able ability to ask an unusually large number of confusing question during a lecture. Some further characteristics to watch for are
Standard Keener Equipment

## - Briefcase <br> - Checkered trousers

- Wears an undershirt
- Muscle shirt (but no muscles)

Optional Keener Accessories
A very powerful calculator such as an HP 41 CV with card reader, printer, and optical wand. Plastic pocket protector for front shirt pocket. Contains six different coloured pens, several mechanical pencils, and a pencil sharpener.
Slide rule, complete geometry set and a well used flowcharting template.
Other Distinguishing Keener Features

[^0]
## S.N.O.T.

## None Of The Above

As you all are aware by now, Fed elections are approaching. It won't be hard to realise this, the way that the campus is littered with literature. We feel that this mess is a very offensive trend. Is this what we can expect from candidates once they are elected? We don't need this mess!

There are three candidates who have not, as yet, littered our campus. They are running under the name of "The Three Amigos". Despite the off the wall attitude that they present, we are certain that they would do a better job than any of the other candidates, should they be elected.

Waterloo's Yuppie reputation has evolved from our Fed executives - they have, in the past, all been Yuppies. The Three Amigos are the only candidates this term that aren't Yuppies. We would do well to shed the image of "Yuppie U".

King, Clyde, and Morden are running for Pres, VP-UA, and VP-OF respectively. We're not sure just what these initials stand for, and we aren't sure if these candidates know either. We do know that they will get our vote on election day.
S.N.O.T.
(The Society for the Nullification of Offensive Trends)

## Rebuttal:

Note that the above is a reflection of the opinions of only a portion of S.N.O.T. members. Another faction of S.N.O.T. is actively supporting the "Nostalgia Ticket":

Pres: Kurt Waldheim<br>VP-UA: Jim Keegstra<br>VP-OF: Rudolph Hess

Should these gentlemen be elected, we are sure that the general silliness of Fed elections will soon cease.

The Rest Of S.N.O.T.

## The Rules

Pick out three keeners and write their names on a piece of paper. As the keeners are keen, cross of their names. The first person to cross off all the keeners on their list yells "BINGO" and is awarded one Bingo Point. Play the game over several classes or several weeks and the winner is the person with the most points at the end of that time. For a more challenging game, arrange the names of nine keeners in a 3 \& 3 grid. The winner is the person who first crosses off the names of three keeners in a horizontal, vertical or diagonal row. Some additional rules apply:

- You may not use your own tame, nor may you repeat names on the same card.
An extra point is awarded if you preselected the keeners in the order that they were keen.
Double score if you can guess their first word, such as "Sir...Sir...", "Professor...", "But...",
"Excuuuuse me...", or the always popular "You forgot..."
- Triple points if the professor spots the keener and refuses to acknowledge his presence.
Quadruple points if the prof threatens the keener. You are not allowed to physically abuse a keener in order to affect the placement of his or her hand. - Bribes are illegal

Before you begin, you miy want to have a look at a keener at lose range. Pay a visit to the EngSoc office in Carl Pollock Hail. Tappy hunting!

## Math Column

The solution to the previous week's problem is to suppose the 6 colours are yellow, blue, green, white, black and pink. Turn the cube so the green face is at the bottom. Now, the top face can be any of the remaining 5 colours, with no two colourings in which the top face is painted a different colour (with the bottom being green) obtainable from one another by rotating the cube. Thus, the total number of colourings is 5 times the number with the top face painted some specific colour, say blue.

Select one of the 4 remaining colours, say pink, and turn the cube about the vertical axis so that the pink face is the back face. The 3 remaining colours can be used on any of the 3 remaining faces, in 3 ! $=6$ ways, with each colouring being different since there is no rotation which leaves the top, bottom, and back faces fixed.

Consequently, the total number of colourings is $5^{*} 6=30$.
Now, for the next problem. In certain rural areas of Russia, fortunes were once told in the following way. A girl would hold 6 long blades of grass in her hand with the ends protruding above and below; another girl would tie together the six upper ends in pairs and then the six lower ends in pairs. If it turned out that the girl had thus tied the six blades of grass into a ring, this was supposed to indicate that she would get married within a year. What is the probability that a ring will be formed when the blades of grass are tied at random in this fashion? What is the probability if 2 n blades of grass are used?

Solutions may be submitted on or before February 9, 1987, in the "Black Box" on the third floor outside the C+D Lounge, with the names of submittees and the solution printed in the next issue. Also, if you have any particular topic that you are interested in, let me know via the "Black Box".

## The solution and problem comes from:

Yaglom and Yaglom; Challenging Mathematical Problems with Elementary solutions; Volume 1; Holden-Day Inc.; San Francisco; 1964; pg. $47,48,25$

For those of you who want an unusual way to keep time, here is a description of how to make a Moorish sundial. The first crude sundials consisted mainly of upright poles or obelisks with time measured by the angle of the sun's shadow with respect to fixed graduations (usually $15^{\circ}$ apart). However, the length of the hour varied with the season of the year. The Moors saw that this condition could be eliminated merely be setting the shadow pole in a north-south direction with the top edge tilted above the horizontal at an angle equal to the latitude of the location. Now, the angles for each of the hourly divisions on the scale can be determined using the following formula:

Tangent(shadow angle) $=\sin \left(\right.$ latitude) ${ }^{*}$ tangent(hour angle)
For example, at latitude $42^{\circ}$, for 1 p.m., the hour angle is $360 / 24=15^{\circ}$ and thus
$\tan ($ shadow angle $)=\sin 42^{\circ} * \tan 15^{\circ}=0.1758$
giving the shadow angle to be about $10.2^{\circ}$. The rest of the divisions can be marked out accordingly!

The above information comes from:
Vergara, W.C.; Mathematics in Everyday Things; Harper \& Row; New York; 1959; pg. 23-25

The Final Alias

Good morning math-cadets. Were you able to straighten out your time-tables yet? Glad to hear it! It can be a real pain trying to get core requirements to fit around those necessary electives (e.g. Phil 140, or Anth 101 -- "Human and Cultural Evolution" (great for anyone living in Village), or that perennial math-cadet favourite Sci 205 --"Hi-Fi-Sci"). Just stay well clear of 8.30 h sections, and watch out for those one hundred percent stochastic-process (i.e. multiple guess) final examinations. Now that everything is under control, relax and take a sip from your cup of life-giving elixir (one coffee, six sugar) and peruse .

## mathNEWSquiz \#14

1. Who portrayed "The Prisoner" in the television series of the same name?
2. Sir William Lyons founded which classic automobile manufacturing firm?
3. Natty Bumpo, also known as "Deerslayer", "Hawkeye", or "Leatherstocking", and his Indian companion Chingachgook were the creation of which American novelist?
4. What was jazz great Ferdinand Morton's nick-name?
5. Which is the largest lake entirely within Canada's frontier?
6. Which great composer quipped that "Wagner has beautiful moments but awful quarter hours."
7. Copper and zinc may be combined to form which alloy?
8. Who won the women's giant slalom gold medal at the Grenoble Winter Olympics, on February 15, 1968 ?
9. Which poem contains the following lines: "Flash'd all their sabres bare,/ Flash'd as they turn'd in air,/ Sabring the gunners there,/ Charging an army, while/ All the world wonder'd . . ."
10. What do Karl Böhm, Wilhelm Furtwängler, Otto Klemperer, Arturo Toscanini, and Bruno Walter share in common?

Quiz solutions may be submitted on or before February 9, 1987, in the "Black Box" on the third floor outside the C+D Lounge. Consideration will be give to all solutions, and yet another skilled mathNEWSquizexpert will be announced along with the solutions to mathNEWSquiz \#14, plus a brand-new mathNEWSquiz, in the next issue of (your friend) mathNEWS.

And now, for the blatant filler that we've all been waiting for, the solutions for mathNEWSquiz \#13: H.G. Wells penned "The Invisible Man"; "The Peter Principle" (or co-op dictum number 58); the Cabot Strait; C,S\&N boarded "The Marrakesh Express" in Casablanca; the Spanish Armada; Groucho ("I wouldn't belong to any club that would have me as a member") Marx; "The Third Man"; Henri Richard is The Pocket Rocket"; "My Financial Career", by Stephen Leacock; and "The Lodger", "The Lady Vanishes", "Notorious", "Rebecca" and "Rear Window" are all films directed by Alfred Hitchcock.
"Fine effort" to mathNEWSquizexpert . . . Graydon Hazenburg for his work on mathNEWSquiz \#13 (eight out of a possible ten correct). You may collect your exciting prize and especial mathNEWSquizexpertcertificate at the MathSoc office (MC 3038) during their hours. The list of aspiring mathNEWSquizexperts includes Robert Cormier (6), Ken Choi (5.2), dwarf (you furry thing you!) (5), and in no particular order Rubina Jiwani \& Kevin Awrey, bulletproof and Lamarr Hoyt (didn't you play for the White Sox?). W.Jim Jordan (5A Advanced Insanity) suggests that a "best-worst" answer prize be awarded each mathNEWSquiz, and the mathNEWSquizmaster would be interested in the opinion of other math-cadets on this topic. Good luck on this mathNEWSquiz and be sure to tune in two weeks for more mathNEWSquiz.

## Cryptic

## Across

1. In order that a promotion is an amphibian (4)
2. Steals back the foot-rest (5)
3. The thing took Kate's partner a hundred special letters (6)
4. Prohibit precipitationless terrain and pleasantry (6)
5. Other pests include social disease (6)

10 . The second person will sound Christmasy (4)
11. The princess' flower is a catastrophe (8)
13. Mountain trail above the Jewish holiday (8)
17. Note the accountant is a rock (4)
19. An angel arranged the phrase (6)
20. A mathematician, softly like, left the French lake (6)
21. The star's companion undresses this way (6)
22. Relative to kind, central energy (5)
23. The right flyer with the competition (4)

## Down

1. Specific male and general male but really female (3-3)
2. Many exist before a lock in danger (8)
3. A small bag, coloured, is very holy indeed (6)
4. A diagram to make me cash (6)
5. From the printer, not in and again with the front one up (6)
6. The French and German soldier or rent recipient (6)
7. Seem to rest about a term (8)
8. Slowly drink up the weight of a cylinder content (6)
9. The midway attraction under the street is a step (6)
10. The cops love a second way to be against (6)
11. About th of them. fix it up (6)
12. Assert tir cwery example cinenates the front (6)

## Conventional

Across

1. ABNORMAL GROWTH
2. FIGHT (slang)
3. SUFFICIENT
4. COMPOSER
5. STRAINER
6. PATHS OF POINTS
7. VERY HOT
8. AUSTRALIAN NATIVE
9. ARTICLE OF CLOTHING
10. ATTRIBUTE TO
11. LIGHT
12. G.AMBLING PLACE
13. PINCH
14. GFM

Down

1. CROSS OUT
2. ENTICING
3. POEM
4. PUNY THING
5. RURAL
6. SCOUT
7. CREATOR
8. ANCIENT FIGHTER
9. TEAT
10. VIOLENTLY ACT
11. BEGINNING
12. SCORE



## The Wonderful World of GridCon ments

Howdy! It's GridWord time again. I hope you enjoy yourselves (especially those Friday-morning-lecture-avoider types amongst you). We had a good response of 30 solutions submitted - 18 cryptic ( 15 correct) and 12 conventional ( 10 correct). You are already above the mean and median number of solutions per issue from the Fall term (which were 25.9 and 24.75 respectively).

To submit a solution for this GridWord, fill-in your name in the space provided and deposit your grid via the BLACK BOX across from the third floor lounges. Solutions must be in before 19:00 on Monday February 9, 1987.

Now for the winners of the week. They are wike and 3 for
 by gently, quietly and politely making a request in the MathSoc office, MC3038. Of course you might get quicker action by vociferously demanding it.

Other correct submitters: Menage à trois (typ. would you care to make that quatre?), Irene Bosnich, Graydon Hazenberg, Vladimir Nabokov, Rubina Jiwani \& Kevin Awry, Lamarr Hoyt, Karen Joyce \& Mike Hess, Rip Torn, GRENDEL, Kevin O'Reilly, Herschel Slansky, Mark \& Rick, John McIntosh, Karen \& Cindy \& Chris, Steve Barkley \& Ann Topping, Zamil Janmohamed, Ken Choi, Jim Sankey, Rob Pellegrino, Steve Loffree \& Steve Johnson, Cindy \& Kevin, and Lance Sibley. I'll mention the following names (but I won't say that their solutions were incorrect because that might embarass them): W.Jim Jordan, bulletproof, Helen Cameron \& (not) Glen Ditchfield, Deb Blake, and Phideaux.

Comments on "first time": 6 said 'Yes', 3 said 'No'; others ranged from ' A long time ago' to $87-01-16$; then there are the slightly more colourful ones (Yes, Spock, now is such a time): 'On couch, her hubby drunk in bed', 'for what?', 'Next Wednesday (What a bitch!)', 'r'll never tell', 'With a gorgeous brunette', 'Back of my girlfriend's station wagon', 'in the back seat at a drive-in', and 'First day in E-block (don't drop the soap)'.

Other comments of the week: 'A bit easier than usual', 'It's good to be back', 'beats waxing my porpoise', 'Friday's classes just wouldn't be the same', 'We want to win this time' (Sorry), and 'Refreshing'.

Well, that just about does it for this issue. Have a good one (whatever that one may be).
fletniowski


[^0]:    - Extra long right arm for better visibility.
    - Greasy hair.
    - Tape on glasses.
    - Knows $\pi$ to 200 digits and wears a t-shirt an button to show it.
    - Briefcase is always overflowing with books.

