math NEWS

faculty notes

Spring/81 Pre-registration
Nov. 5-7/80

Spring/81 pre-registration will be held November 5 - 7 for Co-op students who will be on work term after Christmas. Details are posted throughout the Math building. Instructions and course offerings lists are available in the Math Undergrad Office (MC5115). Calendars and replacements for lost computer-produced timetables are available from the Registrar's Office.

News Flash

The Mathsocist Dead Ringers just succeeded in winning their second game of the season in two starts. The Dead Ringers won by a whopping 14-0 against the Whipper Snappers, each of the Ringers scoring one goal. The goaltenders were even pulled so that the opposition had a chance. Unfortunately, the opposition did not show up and defaulted to us.

John Plaice
Head Statistician
Dead Ringers

Interaction

This week's article will be very short in order to make room for the non-serious Halloween articles. Besides I am quite interested in the outcome of Tuesday's U.S. elections (will Ronald Raygun get in , or will Jimmy C. save the day with a last minute comeback? What effect will the minor candidates have?). By now the debate will have been held and perhaps tell the story.

However there is another election coming up after the U.S. election. On Monday November 10th, city voters will go to the polls in the biennial municipal election. If you are a student living in Waterloo or Kitchener, you still have an opportunity to vote if you have not been enumerated already. You can register to vote right up to election day, and unlike federal and provincial elections you can even register right at the polling station (This is done in order to increase the low turnouts at local elections). If you live in Waterloo you have more reason than usual for voting, as for the first time in a long while there is a candidate, Andy Telegdi, who has the interests of the students and university community at heart.

Not much has been happening around the Feds lately. Freeman hasn't been doing much. I guess that means things are alright. I would like to add that MathSoc President Mark Garstin now has pi buttons on sale for 25 cents each. My grand finale article will either be printed on November 7th or 14th.

J.J. Long

Report from the Office of the Internal Affairs Director

This week should be seeing the end of the nominations for the Mathematics Society elections. If you come under one of the following categories you can be nominated for election in that particular constituency.

Position	# of seats
1st year reg.	3
1st year co-op stream 4	3
1st year co-op stream 8	3
3rd year co-op stream 4	2
4th year co-op stream 8	2

There are also positions open through bielections : 2nd year co-op (both streams), and 2nd, 3rd and 4th year regular. To become nominated you must have a nomination sheet with the following :

1) Name of candidate and position.
2) Candidate's signature accepting the nomination.
3) Signatures of 5 eligible voters from candidate's contituency acknowledging support of the nomination.

The elections will be held on Nov. 10.

Andrew P. Welch

Social Director's Report

Tickets for the Math-Kin Pub with the band RENDEZVOUS are now on sale in the Math Society Office MC 3038. The pub is being held at the Waterloo Motor Inn on Thursday, November 6th from 8:00 p.m. to 1:00 a.m. We will probably not be selling tickets at the door so I strongly suggest you buy your ticket now. They are only $1.50 each for Mathies and Kin students ($3.00 for others) so even if it turns out at the last minute that you can't go, you won't be out much. The theme of the pub is "Dress Tacky" and there will be a prize for the most tackily dressed! We need volunteers to work at the door. If you are willing to help out please let me know or sign the schedule that I will be placing in the Math Society Office. I would still like to hear from you regarding what sort of event you would like to have on November 27th. How many are for another wine&cheese? How many would like a regular beer and liquor pub? Any other suggestions??? Oh the bar prices for the Kin-Math Pub on the 6th are: $1.40 for liquor and $1.10 for beer.

Marnie

Comparing C&D's

If you find yourself in Carl Pollock Hall sometime (the new name for Engineering 4), don't be frightened by the hordes of engineers you'll find. Instead, try out the EngSoc C&D stand, located on the ground floor of that building. Here's a list of what they offer, their prices, and MathSoc's C&D prices:

Item	MathSoc	EngSoc
bagel	.35	.25
tart	.20	.20
cookie	.20	.20
long sub	1.50	1.35
short sub	1.40	1.30
kaiser	1.00	.95
coffee	.20	.15
donuts & muffins	.20	.15
tea	.20	.10
pint of milk	--	.45
250ml of milk	--	.25
250ml orange drink	--	.20
yogurt	--	.50
hot chocolate	.20	--
soup	.20	--
pop	.30	--

Notes: I haven't seen all the items listed above; they are taken from the posted price lists. -- means "not available". Also, butter is free at the EngSoc C&D.

For everything I've bought, the quality at both stands was identical. In fact, the subs and kaisers *are* identical; both EngSoc and MathSoc get them from Mr. Sandwich. Though I don't buy donuts or muffins very often, they look quite similar at the two stands. One may note that while MathSoc C&D doesn't sell milk, it is available from Canteen of Canada machines nearby (0.35 for 250 ml.)

thomas a. eiselbaum

CUSO
Overseas Employment Opportunities

There will be an information meeting Wednesday, November 5 at 7:30 p.m. in MC3009. Slides will be shown by a volunteer returning from Botswana who worked on a windmill development project. He is currently in the Mechanical Engineering Department doing some tests on windmills with Gord Bragg.

As world resources dwindle, we'll be searching together for alternative lifestyles. Those in the Third World can teach us much about living with limited resources, just as we can help them with education, agricultural technology, health care and trades.

Editorial

Things are off to a late start this term. Plans for the MathSoc elections are finally underway. This leaves the new reps three weeks of the term to work with. I doubt that these people will be able to do more than familiarize themselves with the MathSoc council.

MathSoc elections are under the control of the Internal Affairs director, who is appointed by the president. Our new prez, Mark Garstin (though away most of the summer), did manage to collect a group of bewildered frosh and a few who have stayed away from MathSoc in the past, and while still unknowing of the impending perils, formed a working council out of them. However, to the surprise of many (mostly the old "clique-type" mathsocists) this year's frosh have the spirit, willpower, and energy to get the job done. When one considers that (1) many on the council are freshmen, and do not have experience in university politics; (2) they have put up with stubborn opposition who have, after last winter's antics, reverted to slime tehniques; (3) they have organized two liquor give-aways, a wine & cheese, a scavenger hunt, and rescued the C&D and Antical from fates unknown; someone has been doing something.

Andrew Welch, new (yes, and frosh) Internal Affairs director, has opened nominations this week. Hopefully most mathies know that there are open positions, and moreover, will want to participate.

It would seem reasonable to assume that elections for MathSoc reps (even though the term of office is one year) would have occured late in Setember. Then why didn't this happen?

First of all, the Math Society constitution states that elections should take place in October. This was passed in March 1976. The constitution was revised as of last April, but no one was around at that time to ratify it. A revision had been made to ensure that the Math Society president must remain a math student during his term in office. In September, the revised constitution was given to the Council Executive and hasn't been seen since. An interesting note is that Mr. Garstin is currently in Integrated Studies. (Another interesting note: The current constitution states that all students "...who have paid their full society fees...shall enjoy all the privileges of a member of the Math Society." This thereby allows an engineer (with engSOC fees paid, of course) to run for any position on the Math Society Council.)

But first you need a returning officer. Garstin wanted to ratify three new Council members in September, one being the present returning officer. A motion was brought forth to play musical chairs with the respective positions of the prospective Council members which generally threw a wrench into the works. This type of activity continued until it was discovered that two supposedly valid, voting Council members held offices that 'turned into pumpkins'. However, simple motions (eg. getting rid of old business) were delayed for weeks. The Math Society had little chance of getting anything done when it was wasting time on such petty things.

Perhaps those associated with the Math Society, and just the usual MathSOC populace should be less self-centered. They must start thinking about the reason for having an office for MathSOC and a MathSOC for mathies. If the Math Society office wasn't used as a social resort, maybe some people could get some work done for the Society. A proposition was brought up to divide the office with a physical partition. This would allow those who wish to work and those who wish to socialize, appropriate places to do so. The proposition died a quick death. Apparently no one wants a change.

The situation could be worse. Last winter's elections were abused to the extent that they were postponed until the end of term.

Joanne West
co-editor

Monologue

-with Brad Templeton

Due to the mathNEWS policy of providing equal time for opposing views, the following column is printed, as there will surely be people with opposing views.

Mr. Hughes' article last week concerning abortion cries out for a reply. (No, I'm talking about the destruction of babies, not that obscene statue in the main entrance of the Math building.) Right from the title, he terms abortion to be "simply murder". Although he and I have already argued the topic out in person, I have decided to write up the other side so that mathNEWS readers are not left with only his side of the story.

My opinion on abortion is rather drastic in the eyes of most people. I feel abortion should be legal, upon decision by the parents, at any time up to shortly after *birth*. You heard (read) me right, birth. There are a number of reasons why I feel this way, and even if I can not convince you of the validity of this stand, I have some other points to present on the issue in general.

Many anti-abortionists (or "pro-lifers" as some like to be called) take their stand on religious grounds. (These are unlike the coffee grounds that my stand is based on.) They feel, as a direct result of their ideals, that a fetus is a person right from the moment of conception. (If not from before if one considers bans on birth control.) The problem with this is that there is no tangible evidence to support this belief, so it must be taken on faith. It is my belief that what makes a person is not the pounds of chemicals and molecules of DNA that are his physical constituents, but rather what is done with those items.

What makes a man unique, both among other creatures and other men? In most cases, this is his mind. His self-awareness, relations with other creatures and usefulness to himself and others all stem from his mind. On Earth, the mind of man is the most highly developed device known. If anything is sacred, surely it is this. The body is just a tool controlled by this amazing mind. Without the mind, it has absolutely no value to itself or to others. The body has no desire to live, nor does it have many survival abilities without the mind.

So now we get to the question of

In addition to this, allowing abortion a few days after birth allows children with physical birth defects to be terminated before they can grow old enough to be aware of their misery. Similarly, the parents (as people already highly developed at great cost to themselves and society) can be saved the high costs and difficulties involved in raising such a child if this is their desire. (You should note that I am not advocating any type of state controlled eugenics here: the choice of abortion must always remain with the parents.)

Thus, in my view, you have several reasons to allow abortion, and no reason not to. Above and beyond all this, however, there exist other reasons why anti-abortionists should not get their way. First of all, as stated above, most anti-abortionists feel the way they do for religious reasons. This is all well and good, for in our society at least, everybody is entitled to their own opinion, no matter what it is. One right people do not have, however, is to stuff their moral and religious opinions down other peoples throats by means of law. If a Catholic woman, for example, does not wish to practise abortion, that is fine with me, although I may pity the person the baby will eventually become. This prerogative should have no bearing, however, on the will of another woman to do what she wants.

Some feel it is the responsibility of society to legally enforce moral issues as the majority wishes. I question whether this is in fact true. Most people would consider murder immoral, yet it is allowed in self defence. Murder is not only allowed, but encouraged upon relative innocents during war. In fact, society will even justify murder against members of an army that is coming only to take over a country, not kill its citizens. Thus murder becomes justified against somebody who simply wants to change your way of life or governmental structure.

Well, I have little doubt that this will be my most unpopular column so far, so before you decide to allow abortion on adults in my case, reread the disclaimer at the top. Perhaps the basic point of this article is that ideologies should not be made into laws. Only principles that directly result in the protection of members of a society should be given this distinction.

the newborn babe and the fetus. What are they worth, both to society and themselves? The baby does have some form of mind, but it is clearly a very limited one. It is just barely aware of its surroundings, and does little more than react to strong external and internal stimuli. In other words, it would be fairly difficult to claim that this mind is at anywhere near the level of the mind of an adult dolphin, whale or chimpanzee. There is no denying that the potential to become an Einstein or a Hitler (depending on the surname of the kid of course) is present in a child. This potential is not yet fulfilled however, and can not be distinguished in any particular child. every child.

Despite this, people content with a world where animals which are more intelligent than babies may be legally killed come out against abortion. They find something mystical about a human body with an undeveloped mind that gives it the same rights as a person. Despite the fact that the only thing that a person can observe in another that makes the other person special is the mind, anti-abortionists strive to speak up for the rights of creatures that have very undeveloped minds. Abortion actually harms no one except the fetus, which has minimal self-awareness. I know (since I have no memory of my first few days of life) that it would not have made any difference to me if I had been painlessly terminated at that time.

Naturally, abortion would be wrong if there were no reason to do it, in the same way that abject cruelty to animals is wrong. In the case of abortion, there are many reasons why we would wish to carry it out. Let's face it, in a world of overpopulation, little boxes containing pounds of chemicals and molecules of DNA are cheap. As a matter of fact, we have too many of them. The "potential" of these creatures is mostly a potential problem of how to feed, clothe, educate and find meaningful work for them. Additionally, many children come into the world unwanted, and thus suffer in their upbringing. Many a woman (and man, if he feels the responsibility) can have her life and plans ruined by the introduction of a child that she is not ready to support or capable of supporting. In some cases, the mother's life and health may be put at stake through a pregnancy.

Badger

In closing, I have been assured this year that Christmas Eve, Christmas, and New Years Day are all going to fall within a week of one another, so in this time of midterms and encroaching exams we at least have something to look forward to.

Ever had one of those days when it seems that everything that needs to be done is the stuff that you aren't doing? Well, thoughts have a way of turning to vacation time when the people accusing you of such are staying close at hand. Regrettably though there are no more holidays for some time to come. Fortunately, if you manage to survive, a month with a wealth of holidays is on its way.

And speaking of that upcoming holiday, one must view it with the proper reverence deserving of such religious occasions! Glorias to the good grace of God should fill the heavens at times such as Christmas, Easter, Labour Day, etc., along with the cast of saints and angels to anoint the festive spirit, like Kris Kringle, the Easter Bunny, and Queen Victoria. I usually don't view religion with a great deal of favour, but when it comes to days off, it is nice to realize that saner views don't always prevail.

Assessing the importance of a deity, for whom a holiday is allocated, can be managed by considering the fact that Christmas falls on the 25th of December regardless of the day of the week that it happens to fall on. Queen Victoria's birthday, on the other hand, is always on a Monday; I've noticed that for some reason she is one of the handful of people throughout history who were born on a weekday (as opposed to a date in a month like the rest of us!). And after asking a good cross-section of people around tonight, no one has any idea who the patron saint of Labour Day is! Americans, whose holiday deities are generally more important that ours, usually have a date allocated to them (Lincoln's birthday, Groundhog Day, Arbour Day, (the latter named after the coach of the New York Islanders after they captured the Stanley Cup last year).

Night Flight
by James Gardner

Great little country up here, isn't it though? Great little country, land of the midnight sun, yessiree. You from northern Canada here, mister? No, neither am I. I'm from good old Dallas, Texas. The U.S. of A. Great little country down there too, love it, where I was born and where I'm gonna die. But that's not gonna be for a little while, no way, there's life in me yet, that's for sure, there's a lot of life left in Joshua P. Culpepper, that's my name, what's yours? That's foreign, isn't it? Kind of familiar too. Should I know you from somewhere? I get the feeling I've seen your picture some place. No, guess it isn't likely, don't you pay no attention to old Joshua P. He's a talkative old codger, but he don't mean nothing by it. You just ignore me.

Still, two people sitting together like this on an airplane, it's only right they talk, sure it is. Specially on these here night flights when you can't see nothing outside. Course, it's not much anyway even when you can see it, just what they call tundra, okay for the first few minutes, but it just goes on and on the same for hundreds of miles. So does Texas, I guess. A little sand, a little grass, a few oil wells... not like some places I've seen. You do a lot of travelling, mister? So do I, so do I. Ever since I retired, travelling's what I do, yes sir. I love Texas, where I was born and where I'm gonna die, but it's nice to see the rest of the world too.

What's your favourite place? In all the whole world, what's your favourite place, mister? Transylvania? Where in hell's that? Romania! Iron Curtain country, that is. You wouldn't catch old Joshua P. over there in Russki land, no sir, don't matter how pretty the place is, you can't trust them Reds as far as you can kick 'em. You really keen on this Transylvania place? Well, to each his own, I guess, to each his own.

Hey, miss, how's about some refreshment? My doctor told me not to touch the hard stuff but a little vino would sure go right. You want some too, mister? Don't drink wine? That's too bad, a touch of the grape is good for what ails you. Drink anything at all? No, no, you don't have to answer, just ignore me. I'm a snoopy old codger, ain't I? Don't pay me no attention.

Say, want to see some of my souvenirs? Got a whole herd of nephews and nieces back home, they always want something from wherever I go. Must be the same with your family, right? No family, huh? That's too bad, I love the little tykes. See, this here's for little Sammie, a soapstone carving of a bear, polar bear, I guess, that's the only kind they got up here. And this here's a cute old stuffed bird, I forget what the hell they call it. I bought it special for Jenny, she likes birds, got a budgie that talks more than I do. Probably makes more sense too, that's a joke. Oh, here's something I picked up at a store right beside a church up in Inuvik. A genuine whale bone crucifix. I ain't Catholic or nothing, but I kind of like the thing, all carved up and down... hey, what's the matter? You sick or something, mister? Sure, I'll put it away, sorry to get you all het up like that. You got something against Catholics maybe? Well, it's none of my business, is it, I'm just being a nosey parker.

So, you up here on business or just touristing about? Oh, up for the midnight sun, yes sir, that really knocks me out too. Sun up all night long, never goes down, makes it hell to sleep, don't it? Well, you're lucky then, pal, if you can sleep right through it. You come up here because you sleep longer? If that don't beat all. Sleep better in the light than the dark, you're built backwards, friend. Shucks, why do you want to sleep anyhow, you're gonna sleep your life away, and none of us are getting any younger, are we? You aren't getting any older? You're kidding me, I can tell. Not getting any older... wish it were true, friend, wish it were true, but I tell you, sometimes when I wake up in the morning, old Joshua P. is really feeling his age, you know what I mean? Yeah, I guess you feel your age too. It's tough when you're getting on like we are. Hell, I can remember when I was a youngster, I used to say I'd rather kill myself than get so old I couldn't bounce out of bed ready to take on the world. You too, huh? Yep, now that we're getting up there, we aren't so keen on ending it all, are we? You said it, you keep on going even if it don't seem to have no point.

I mean, I ain't afraid of dying when it comes. I figure the Good Lord's got a place for old Joshua P. in heaven no matter what little things I done I shouldn't of. Must be the same for you. Hey now, don't talk like that, man, you can't be that bad, there's always hope, sure there is.

I mean, I think of all the things I've seen and done. I killed a man in the war, you know. Guess a lot of folks did. You ever seen action? Then I guess you know a bit about the way it is. When it's him or you, you do what you have to. You got sick of it? Well, nobody rightly likes it, unless they're a little wrong in the head. Bloodthirsty types. You kill who you have to kill, but you get to hate yourself after a while. Do you ever.

Still, the war's over, isn't it? No wars up here in the north, no sir. Hasn't ever been, except maybe between the Indians and the Eskimos, but they don't count, not

for real. Peaceful place. Peaceful is the very word, you said it. You want to go somewhere for peace, there ain't many better places to go than up in the Arctic. Specially for someone like you who can get a good night's sleep in the midnight sun. A good day's sleep too? Six months of sleep? You old card, you're pulling my leg, sure you are.
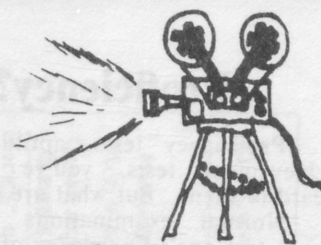
So where you heading now, friend? Tierra del Fuego? Where in hell's that? Tip of South America? You're just beating it from one pole to the other, ain't you, that's downright wild. Say, I know, you're going down there for their long days, aren't you? Yep, now it's those folks who've got the midnight sun, now that winter's coming on. I knew it. You sure are a bear for soaking up the sunlight. Too bad for you this is a night flight. Still, you can't have everything, can you, into every life a little darkness must fall, that's a joke. Yep, I guess if you really work at it, the only time would be while you're hightailing it between the poles.

Say, mister, are you really serious about this stuff? I mean, you really go back and forth like that? Every year! How long can you keep that up, must get kind of boring after a while. Funny way to live. Still, must pass the time... and at our age, what else do we have to do but pass the time? A little tired of living and a heap afraid of dying, ain't it the truth. And I'll lay money it just gets worse as it goes on. Only so many new things you can do, new places to see, then it's all just putting in time till something happens that lays you out for good and all. Yeah, mister, when I think of it, it might be nice to sleep for months just like you say. When you've seen it all, it's kind of nice to close your eyes for a while.

Well hey, lookit, we're landing already. You know Edmonton here at all? There's a real pretty little hotel not too far from the airport and... oh, you got a place all fixed up. You sure? It's a real nice place, cheap too if that's what's worrying you. Why don't you come along with Joshua P. and have a look at it? No, don't fuss about that, my luggage is checked through to good old Dallas. Yours too? Well then, we can just walk right out of here. Sure can. Right down this way.

Hell of a nice night, isn't it? Guess you don't see much of the night. But hey, you should live a little while you've got it, you bet. Night makes you a little crazy? Shucks, we're all a little crazy, ain't we? I mean, here we are walking all alone and who knows but what we could get bushwhacked by muggers or something any minute. You tell me what's crazier than walking like this. You tell me, mister. Mister? Hey, what's wrong? What do you mean, you regret this? Regret what? Hey, cut it out. Boy, you sure do go crazy at night, mister. What do you think you're up to? Let go, damn you. You think you're gonna do dirt to Joshua P. Culpepper, you got another thing coming, Mr. Drac...

THE END

Radio News

Are you interested in finding out more about your campus and your community? Become involved in creative radio. Join the CKMS News Department and help inform others as well. No experience required. Call 886-2567 and ask for Scott Sutherland or drop by and see us. We're in the Bauer Warehouse on the North Campus of the University of Waterloo.

Whatever your interests are, there's a place for you at CKMS-FM.

Quote of the Week

From the UW *Gazette* Notebook, October 22, 1980:

Fewer faculty: This year UW has 744 full-time faculty members . . . The figure at the same date a year ago: 744. So the complement has dropped by 0.4 per cent.

Movies!!

Movies playing, as reported by the K-W Record of Tuesday, October 28th

Ordinary People with Donald Sutherland, Mary Tyler Moore, Judd Hirsch, and Timothy Hutton *at the Lyric, 7 & 9:20 nightly. (Recommended)*

Motel Hell with Rory Calhoun and Wolfman Jack *at the Capitol #1, 7 & 9:05 nightly.*

Middle Age Crazy with Bruce Dern and Ann Margret *at the Capitol #2, 7:10 & 9:15 nightly.*

The Elephant Man with John Hurt, John Gielgud, and Anne Bancroft *at the Waterloo, 7 & 9:10 nightly. (Recommended)*

Loving Couples with Shirley MacLaine, James Coburn, Susan Sarandon, and Stephen Collins *at the Fairview, 7 & 9 nightly.*

Cries in the Night with no-one special *at the Cinema, 7 & 9 nightly.*

Private Benjamin with Goldie Hawn *at the Frederick Mall South and Cambridge Twin #1, 7 & 9 nightly.*

Somewhere in Time with Christopher Reeve, Jane Seymour, and Christopher Plummer *at the Frederick Mall North, 7 & 9:05 nightly.*

My Bodyguard with Chris Makepeace and Ruth Gordon *at Cambridge Twin Cinema Two, 7 & 9 nightly.*

CINEPLEX:

The Big Sleep with Humphrey Bogart and Lauren Bacall *at 6:45 & 9*

The Divine Nymph with Laura Antonelli and Marcello Mastroianni *at 6:50 & 8:55.*

Airplane with Robert Hays and Julie Hagerty *at 7 & 9:15.*

Urban Cowboy with John Travolta *at 7 & 9:40.*

Caddyshack with Chevy Chase, Rodney Dangerfield, and Bill Murray *at 7:15 & 9:35.*

Bad Timing/A Sensual Obsession with Art Garfunkel - A Nicolas Roeg Film *at 7:20 and 9:40. (The "Best Film" of the Toronto Festival of Festivals)*

Once Upon a Love with Bo Derek *at the Odeon, 7:15 & 9 nightly.*

Times Square (a movie about the New Wave) *at the Hyland, 7 & 9 nightly.*

If you've seen any of these movies and have comments on them, mail them to mathNEWS and we'll print them!

Proficiency?

Proficiency tests, aptitude tests, achievement tests, you've probably heard of them. But what are they?

Normal examinations generally try to test one's knowledge of a particular subject matter based on information supplied through a particular course or series of courses. However aptitude tests generally test one's knowledge of a broad subject area based on information acquired through various experiences (which may or may not be related to formal courses) over a long period of time. Often these tests can be successfully taken by the examinee by applying "common sense" as seen through by the eyes of those who develop the test.

The (in)famous English Language Proficiency Exam falls in the category of an aptitude test, though it has some elements of a normal examination. One element is the presence of a minimum "passing" mark, something that is officially absent (but often alluded to) in a real aptitude test. Many of you have heard of aptitude tests for admission to grad school, medical school, dentistry school, law school, and graduate business school. At one time there was an aptitude test for high school seniors in Ontario (such a test exists in many American states). These tests are often required or strongly recommended for those who want to be admitted to many post-graduate programs.

One of the biggest organizations involved in the aptitude test business is the Educational Testing Service (ETS) which is located in Princeton, New Jersey. This non-profit group has many representatives from American universities on its advisory committees. However no Canadian counterpart exists for this purpose, so Canadian students must take these American administered tests (at an extra cost) in order to meet many post-graduate entrance requirements.

Groups like ETS claim that since their tests deal with long term acquired proficiency, it is fairly useless to study for them or receive coaching for them. However those unfamiliar with taking aptitude tests are encouraged to practice for the tests and to purchase sample test from ETS. There exists however, a number of profit making firms (both Canadian and American) who charge upwards of $100 for study and coaching sessions held on various weekends at large hotels in major cities. These firms claim that their programs work and often give free second and third sessions to those who are not satisfied with the test results on their first attempts.

It is difficult to decide who to believe. Many may doubt the validity of these tests. However in many cases they must be taken. Often people will take them for the challenge and experience when they are not expressly required. However the cost of taking them, while not exhorbiant, usually exceeds $20 U.S. Other charges could push this to near $50 U.S. While one may not want to take a professional study session, a test candidate should be prepared psychologically and emotionally when taking these tests.

We return to the English Language Profiency Exam (often called ELPE by many rock music fans). A passing mark on this test (at one time in one's undergraduate career) is required for those who wish to graduate in the Faculties of Arts. Env. Studies, H.K.L.S. and Math (!). It is not strictly an entrance exam. It is generally agreed that students in all faculties should have a minimum proficiency in the English language, it does seem odd that a test that was designed primarily for Arts students should be required in a technical faculty like Mathematics.

First of all the approaches in the two faculties towards their courses are different. Secondly the that students enroll in the faculties are different. An ELP test for Math students may also be discriminatory. Those who prepare for a career in the Arts subjects generally are more prepared for extensive reading and essay writing in their courses. Those in the technical fields are generally less prepared. Also many students in the Math and other technical faculties do not have English as their first language. In addition to writing a test called TOEFL to be admitted to university they must also deal with the ELPE.

Perhaps it would be better that the Math Faculty followed the lead of the Science and Engineering faculties in this matter. A number of things can be done to substitute for the ELPE. One answer would be to require students to take courses that involve writing essays which relate to technical areas, to technical areas. Another is the upgrading of standards on work reports. There are some courses in the Math (and other technical faculties) that could involve mini-essays. Computing courses most easily come to mind. Another solution would be the development of a proficiency test for the technical faculties, call it an ELP-T. Some professors claim that this would involve extra work and that there may be those who do not have such language proficiency themselves. However it would be strange to require students to have such proficiency, if some of their professors did not. Besides, if professors in Math and other technical faculties feel that

should be willing to participate in making it come about.

It does not seem right that the matter of language proficiency for technical students should be passed off to the Arts faculty. It is true that the ELPE is a more valid and more fair test than it was when it was first administered (and other universities doubted its validity). The test does seem to be much more fair than before. The failure rate has dropped from about 50 per cent to 25 per cent in the last few years. It is doubtful that first year students have gotten that much smarter in such a short of time (three to four years). There is now a new ELP director and there are improved methods for the selection of ELP tutors. However the imposition of the same campus-wide test on language proficiency may not be valid or fair. Unless distinctions are made between the proficiency tests given to Arts students and technical students (perhaps an ELP-T should include a mathematical component), many students in the technical faculties may feel that they are being unfairly dealt with.

J.J.

Dead Ringer Report

Tradition was on the side of the Ringers last Monday as the team was decimated by "mid-termitus". Severely handicapped by a manpower shortage which limited the team to three subs, the Ringers showed the depth of talent necessary for a division championship by rebounding from a 2-0 disadvantage to a 3-3 tie. The opposition was the Skinners. Formerly, the Skinners had been called Co-op, a team that has never beaten the Ringers since the inception of the Math team six seasons ago. While the Ringers employed their typical body-checking style throughout their match, their passing and forechecking lacked the consistency of prior games. This was particularly evident on the power-plays the team enjoyed as a result of the bush-league penalties taken by the Skinners. On several occasions the Ringers had a two-man advantage and failed to capitalize on it. The shortage of subs was a possible reason for this but the team refused to use excuses. Scoring for the team and subsequently named the three stars of the game were Mike Turcot, Ray Byam and Gilles St. Pierre. The games remaining until the play-offs are expected to be against contenders for the Engineering Title (for which the Dead Ringers are obviously not eligible). The games will not be televised but some standing room is available at Seagram's gym. Dates and times are posted on the mathletics board across from the C&D.

C.C.

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
1 7 Minutes to Midnight — Conrad Grebel — Rites of Passage Theatre of Arts	**2** The Rocky Horror Picture Show → Fed Flicks: Theatre of Arts	**3** Pinball Tournament C.C.	**4** Math News Production Night	**5** Co-op Students: Pre-Registration for Spring /81 — Cuso meeting 1:30pm MC 3009 — Wizard of Oz Cinema Gratis C.C.	**6** Math-Kin "Dress Tacky" Pub	**7** Creative Clothing Pageant Theatre of the Arts — Beatle Mania - PAC - — Fed Flicks:
8 Tournament D+D — Maxin Mazumoor Theatre of the Arts	**9** Picture Show → — Humanities —	**10** MathSoc Elections Vote!	**11** Rememberance Day - Humanities - — Math News Production Night	**12** The Turning Point - Humanities - — The Man Who Would Be King Cinema Gratis C.C.	**13** Pinball Ends Pub	**14** Theatre of the Arts — Fed Flicks:
15 Kramer vs. Kramer	**16** The New Single Swingers - Humanities -	**17**	**18** Math News Production Night	**19**	**20**	**21** Fed Flicks:
22 Wizards — Rocky II	**23**	**24**	**25** "The Glass Menagerie" Theatre of the Arts 'Till the 29th — Math News Production Night	**26** The Man Who Loved Women Humanities Theatre — Animal Crackers Cinema Gratis C.C.	**27** Pat Geerat and Billy the Kid Cinema Gratis C.C.	**28** Fed Flicks: Start in 1 week — Fed Flicks: Star Trek 3 days

Now is the time for THE machine to take over...

The Job Matching Scheme

As every good co-op student knows, job rankings for co-op mathies must be submitted to Needles Hall today. Exceptions are those students in Applied Math, and those with interviews next week.

The ranking scheme has been changed this term. Now, you can only rank one job for your first choice instead of having multiple jobs ranked as #1. This change is in response to various complaints on the parts of both students and employers. These people have felt that multiple first choices destroy the "meant for each other" feeling between the applicant and that perfect job.

You may still have multiple job ranks of 2 through 10. However, the rankings should be consecutively numbered (ie. you cannot rank one job as 6, and then the next lower as 8. The program that does the matching will just bump the job ranked 8th to 7th anyway.) After you hand over 4 months of your life, the placement algorithm takes over. It is a two-pass algorithm.

The first pass:

For each student-job combination, a total score is calculated using the formula:

$$\text{total score} = \text{student rankings} + \text{employer rankings}$$
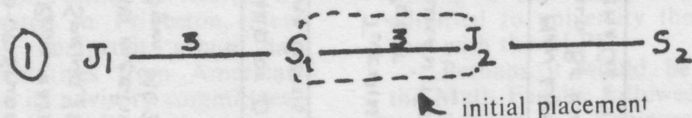
(The lowest score wins!) The student-job combinations are passed through the placement program in total weight order. This results in a set of placements where the winning score on each job is minimized. (ie. All 1-1 employer-student rankings, without ties, are now placed.) If an employer or student is not matched on their lowest score, then their lower scores were taken by someone else on an equal or lower score. Ties are resolved using a random number generator. (Again, lowest random nmber wins.)

The second pass:

During the second pass, an optimization process is used to break ties. This process takes advantage of the many tied scores that multiple ranking generates. Thus, replacements are made that will place unplaced students and conversely fill unfilled positions. No student placed in PART I will be unplaced after PART II.
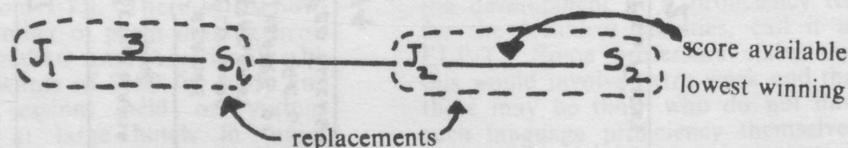
Like many mathematical algorithms an initial solution is required. PART I provides the algorithm with an initial solution. This solution may not be the optimum solution. PART I resolves ties randomly, because it does not know at that time which placement it should make in order to maximize the number of placements.

PART II makes the following types of replacements:

① J_1 ——3—— S_1 ——3—— J_2 ——— S_2

↳ initial placement

after PART I   a) J(1) - unfilled.
                   b) S(2) - unplaced.
                   c) S(1) - placed in J(2).

If PART I had chosen to place J(1)S(1) on total score '3' instead of J(2)S(1) on total score '3', then two placements would have resulted.

J_1 ——3—— S_1 ————— J_2 ————— S_2 score available
                                                lowest winning

replacements

The winning score on J(2)S(2) does not have to be '3' becase this is a solution that could have been found by PART I. In actual fact most of the replacement chains are fairly even (that's what I am told).
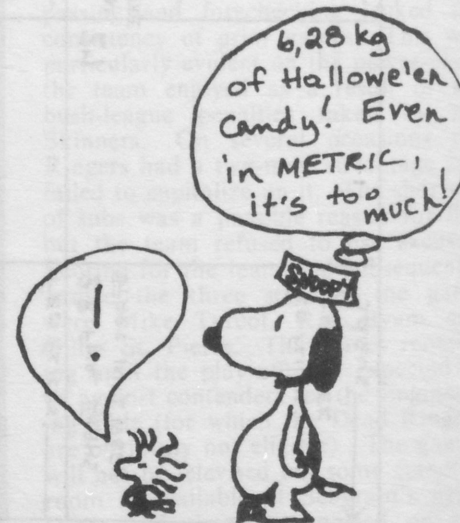
Winter Cycling
or how not to freeze in the cold!

In my few years of bicycle riding and racing, I have met a large number of cyclists who say that the cycling season exists only between May and October. All I can say is bull feathers!

Riding in the winter can be very rewarding if you take the proper precautions. During the winter you do not have to worry about such things as rain and fog. However, you must worry about the snow and the wind and the cold.... The thing to remember is to wear clothing in layers. Four wool sweaters worn one on top of the other are better than one bulky down jacket. If you get too warm, you can take off one sweater and not freeze. Another thing is to keep your ears and throat warm. If your throat gets cold, you start gasping for air, and since the air is freezing, your throat gets colder.... As for your ears, the reasons are self-evident. Frost-bitten ears hurt a lot!
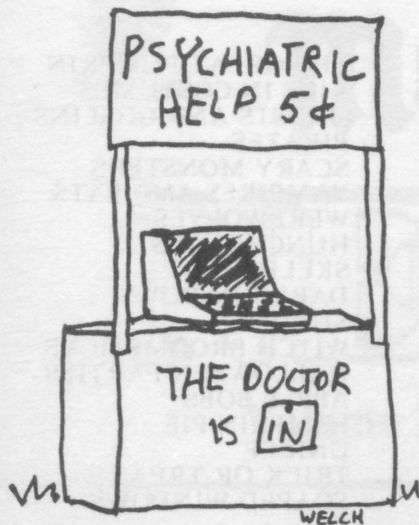
After the cold, you must now worry about riding style. When you ride over an ice patch, make sure that you are riding perfectly straight, or you could find that you are sitting on the road. When you brake, make sure that you do so very steadily. As for riding in fifteen centimetres of snow, please make sure that you use a small gear and keep pedalling. Do not stop for any reason! Otherwise, you will never get started again!

I wish you all the best of luck as you venture forth into the large blizzards of the upcoming winter, and may you not meet up with a snow plow on the way!
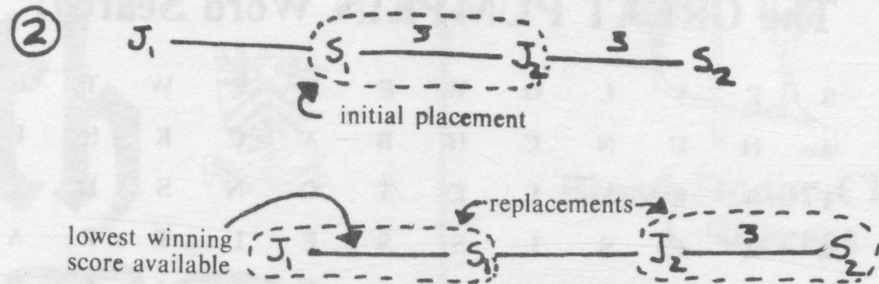
John Plaice
Mad Cyclist #1

6,28 kg of Hallowe'en candy! Even in METRIC, it's too much!

This replacement is similar to type (1) except S(1) is assigned the lowest winning score available instead of J(2).

The algorithm comes to a halt when it can no longer match remaining students to remaining jobs. It works best when there are a large nmber of ties resulting from multiple rankings. (For this reason, having only one first choice does slightly reduce the efficiency of the optimization process.) For mathies, this algorithm resulted in a 2 per cent increase in students placed/jobs filled. from 1978 to 1979, when it was first implemented. However, for engineering, science, and geography students, the increase was 11 per cent.

Thus, in a very complicated fashion, the placement algorithm shuffles jobs and students around and optimizes your chances of being placed.

Thanks go to Eric Whaler from Co-ordination & Placement and a kind gentleman from Data Processing for their time and effort (and exasperation) explaining the algorithm.

Joanne West

uw arts centre NEWS

Defusing the Arms Race

On Friday, October 31 at 3 p.m., in the Theatre of the Arts, there will be a lecture featuring guest speaker Richard Barnett, Director of the Institute of Policy Studies in Washington, D.C. and well-known author and critic regarding American foreign policy. His topic: "National Security in the 1980's (in the Nuclear Age there is no Real Security)", in conjunction with a symposium on disarmament being held on campus, entitled "Seven Minutes to Midnight: Defusing the Arms Race". Admission is free.

Rites of Passage

An anthology of words and music which explores some of the experiences of those caught between childhood and maturity, invoking the hopes and fears, pleasures and perils of that time of crisis, so-called "adolescence", which in some is brief and in others lingers on. The last showing of this play will be presented in the Theatre of the Arts on Saturday, November 1. Curtain is at 8:00 p.m. and admission is free.

Noon-time Concert With Elizabeth Neufeld, Soprano

A varied programme of art song. Co-sponsored by Conrad Grebel College and the Creative Arts Board. Theatre of the Arts, Wednesday, November 5, 12:30 p.m. Admission free.

Hoofing It Up

The widely-acclaimed National Tap Dance Company "Shuffles off to Buffalo" in an afternoon of fun-filled, show-stopping rhythm and smiles. Part of the World of Dance Series. Sponsored by UW Dance Department. Theatre of the Arts, Wednesday, November 5, 4:30 p.m. Admission $2.50 at door.

Creative Clothing Pageant

An international juried competition of creative clothing as body sculpture. Entries will be paraded in pageant as part of the jurying process. Successful entries will be exhibited in the Gallery later in the month. The $2.00 fee is for the Gallery's permanent collection fund. Sponsored by UW Arts Centre Gallery. Theatre of the Arts, Friday, November 7, 8:00 p.m. Admission $2.00.

Maxim Mazumdar in "Dance For Gods"

One of Canada's finest young actors, Maxim Mazumdar, who has won international acclaim for his original "monodramas" will perform his "Dance For Gods" November 8, at the Theatre of the Arts. "Dance For Gods" tells the story of a Greek actor-dancer at the time of Euripides.

Some "Real Dolls" Coming To UW Campus

A collection of dolls in historical costume is on display in the show cases in the foyer of the Modern Languages Building, University of Waterloo for the month of October. The display will run from October 6 to November 7 and has been planned as a lead-in to the Creative Clothing Pageant in the Theatre of the Arts on November 7 and the Creative Clothing Gallery Exhibition featured in the UW Arts Centre Gallery from November 13 to December 7. Admission is free.

"Touch of Glass" Exhibition At UW Creates An Environment Of Light

A young Canadian sculptor, Denis Bolohan, creates an environment of light through optical illusion in an exhibition of sculpture continuing in the UW Arts Centre Gallery until November 9.

Some of his first three-dimensional sculptures include various geometric shapes with self-contained light sources. His later works use the techniques of refractions, double-image, and overlap. The Gallery is open from 9 a.m. to 4 p.m. weekdays and from 2 p.m. to 5 p.m. on Sundays. Admission is free and everyone is welcome.

The GREAT PUMPKIN Word Search:

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

Search Words:

THE GREAT PUMPKIN
KIDS IN COSTUMES
GHOSTS AND GOBLINS
PIRATES
SCARY MONSTERS
VAMPIRES AND BATS
WEREWOLVES
HUNCHBACKS
SKELETONS
DARK SHADOWS
SHRIEKS
WITCH BROOMSTICKS
HALLOWEEN PARTIES
APPLE BOBS
PUMPKIN PIE
UNICEF
TRICK OR TREAT
SOAPED WINDOWS

-Randall Melhuish

Scavenger Hunt Results

Well, folks...the scavenger hunt has ended and the winning team was
    Tracy Tims   Doug Moen
Darrel Larue   Sean Mullarky
    and Maureen ? (sorry...)

In order to get their 228 points, they scavenged 26 items including the following:

One U. of T. Artsie in a gunny sack.
The centerfold of Playboy Sept. '71
A baggie full of horsechestnuts
and the rates of the wedding suite of 2 Toronto hotels....on the hotel letterhead.

The event was judged a moderate success by the organizers (MAB Garstin and myself....thanx for help officiating, Tom and fiancée to the orc). I say moderate because only 2 teams were judged out of the 6 who entered, and success because the teams that did show up had a great deal of fun finding more articles than either of the organizers had expected. Unfortunately neither team paid their $6.00 registration fee and so the prize money of $50 and the case of beer goes to the organizers.......heh,heh!!...Just kidding guys....There was no registration fee.... Oh well, hold on to your hats, folks...the Math...ahem...your Math Society won't stop here.

Andrew Welch
Director of Internal Affairs

MASThead: ugh, it's 8:30 am and we're coming to youf2 to you from the EMS Library. I have an interview at 9am, so this has got to be short and sweet. (if i don't run out of paper first). Help tonite came from david till(typin artsnews,layout)brad templeton(mono) jjlong(proficienc,interactiony)alan baker(who is this man) andrew welsh (I.A.report, scaveng,layout,etc)(etc) alan munn(photoneer)(extraordinaire), debbie adair(artnews,calendar)james puttick(anything&everything),ashok patel (ash-ed acting as editor and dead body,consultant for pseudo-co-ed) marnie shaw(social),peter rowley (movi es,previewing,hero for the day),verna (faculty notes)(ya know, the one in the undergrad off.)kerrie strathy(cuso) burloaf(badger) john plaice(2nd mad cyclist),james gardner(nite flite), randall melhuish(word search),drew p. (smarties),()mike gore(grafix-),ted Macneil(comics couldn't fit)',and many others we don't remember-would you at 8:45 in the morning?? Ashok keeps telling me this stupid type-writer doesn't work write because its Italian, and when did you know and italian xx work right???? Well, i must leave u in the hands of ashok (bye,jo)...hello this is your dead body here.... hummmmmmm ust have picked up some life lately...someone just asked why we don't photon the masthead.....is he serious????...must be new around her...oh well we must get some new input in here.... even if it isn't very good....jo want to her interview so i get eft here with a typewriter that doesn't work like normal..well i'm quitting! and that's that? bye
--ashok -ashok