

arsonist 6,
Security 0.

accident?

"The fire which destroyed a piece of computer hardware in the math and computer building Saturday morning was the result of an accident, not arson, it was learned Monday." [Gazette, January 28]

However, the Comterm room on the fifth floor was the scene of another fire during the weekend.

This fire, and the other two that were set over the weekend, bring the score to arsonist 6, Security 0.

As a result of these fires, ideas which have been dismissed as being too strict may be revived. A number of students, staff, and faculty expressed concern that such measures as closing the building after normal working hours would be instrumented.

This time the arsonist was almost caught. Moments after a fire was set in MC 4053 (the "hack room"), one of the ever-present hacks, who had just stepped out for a moment, appeared on the scene and extinguished the small but growing fire.

As stated in the last issue of mathNEWS, the situation is starting to get very serious. One of these times somebody is going to be seriously injured

or killed in a fire. It is our responsibility to try and stop this person. If anyone knows anything related to the fires, see Security. If anyone hears or sees anyone or anything suspicious, report them immediately to Security. You may be wrong, but if you are right you will be protecting your own interests and possibly giving someone the professional help that they obviously need.

One is tempted to conclude that all of these fires are the work of one person. While an open mind should be kept, in view of the possibility that more than one person is out to destroy the building, the pattern of attack so far, indicating a fanatic hatred of anything connected with computers, suggests that there is indeed a single mind behind it all. Yet while computer accessories, peripherals, and printouts have been subject to attacks, there has been no direct attempt to damage or destroy any of the machines themselves. The Honeywell and the Red Room are fairly secure, but many smaller computers, like the minicomputer lab, or the 1710, or the Unix or WIDJET PDP-11's, or even the unused 360/44 are very

vulnerable, located in rooms which are often both open and empty.

So far, we have been very lucky. None of the intentional fires has done much significant damage, except for destruction of printer paper (which is getting more expensive).

A large number of people who work or attend classes in the building would be inconvenienced by any move such as locking the doors at night and on weekends, yet we must face the fact that, as matters now stand, continued free access may jeopardize the lives of these very people. Yet simply too much must be done here to get done in 40 hours a week.

One of three things must happen in the near future: the arsonist will give up and quit, will be caught, or will succeed, with math classes held temporarily in the engineering or arts lecture halls. The vision of several hundred math 122A and 132A students trying to use the Engineering Debug facility is a nightmare I hope we never have to face.

The conclusion is clear:

If we want to continue to use the building, we will have to make sure it is safe.

FRIDAY, FEBRUARY 13, 1976
ISSUE A.4

math NEWS

Police!

GUESS WHAT?

If you guessed that the T-shirts have been stolen again you are absolutely right. These T-shirts were ordered in October and finally arrived by mid-January. The theft is not only a letdown after all the effort spent in trying to get the shirts within a year, *but is also a loss of over \$1,100.*

Thus it has been decided to take legal action against those who consider this a harmless prank. We no longer feel these thefts are funny and our case is being taken to the regional police. All we want is for the shirts to be returned and if this is done before it gets too far out of hand, the whole matter will be dropped.

Building to Close at 10:00

Last fall, in a somewhat arbitrary move designed to save money, the Executive Council of Deans decided to lay off night-time security guards in various buildings.

Earl Bowman was then the night-time guard of this building. Little trouble occurred during his 7 years here, due to his good relations with professors and students. Earl was often able to prevent trouble by just talking sense to the potential violator.

Losses due to theft, arson, and vandalism since last September in this building have totalled approximately \$50,000. This is over four times the annual salary of the former guard. You would think that the Executive Council would realize their past mistakes, and hire back the security guard.

Instead, though, rumor has it that this group will try to get the math building *cleared out at 10 p.m. each evening and shut as tight as a drum.*

TEN P.M.! 22:00! Do you believe that? No Honeywell access, no IBM access, no library... how do the students get their assignments done with a packed system during the day? How do they get a quiet place to study? Imagine the inconvenience and hardship!

This move should not occur.

Apparently most of the damage has been directed against the Computer Science department. Rumors have it that the workload in some courses has been unbearable. Apparently some of the better professors are on sabbatical. Whether such things are true we don't know, but such *rumors* could be the cause of the damage.

to page 2

One or two lunatics must not be allowed to cause such interference with the vast majority of law-abiding students. **mathNEWS** does not believe that these acts should cause the building to close. We warned of such trouble when Earl Bowman was laid off last September. The Executive Council should take the best course possible to prevent further damage: rehire a night-time security guard for the math building.

Questionnaire Fed privilege cards

Through various sources **mathNEWS** has learned that the committee investigating Federation privileges has reached a tentative decision regarding the Federation special "freebie" cards. They have decided to keep many of these cards. It has been felt by many students in the past that these cards represent a sense of elitism on the part of the Federation. In fact, one card-holder gave up his card because he felt he was not being representative of his constituents, and another (who happens to be a society president) wrote to the Chevron complaining about the use of these cards. **mathNEWS** wants to know how you feel about these cards. Please answer the following questionnaire and return it to **mathNEWS** at MC 3038 or in our third floor mailbox.

I believe that Federation privilege cards should be [please check one of the following]:

- abolished
- greatly restricted
- cut back slightly
- retained as they are

Other comments:

48-2 AGAINST & 47-3 AGAINST

Two weeks ago, **mathNEWS** published a short questionnaire, soliciting reaction to the recommendations of the Faculty's Curriculum Committee. We received 54 responses, but 5 of these were *identical* so they were counted as *one* ballot, bringing the total down to 50.

Of these 50, 2 ballots favored the six-course restriction but were opposed to the four-week drop period, 3 ballots favored the six-course limit but opposed the four-week drop period, and 45 ballots (the 5 identical ballots were in this group) were opposed to both recommendations.

Although many students indicated strong feelings on the matter, only one ballot, which supported the four-week drop period, was signed (by, if we read the writing correctly, Norm Collins, a third-year student).

One student abandoned the provided form and covered both sides of a piece of output paper (the small perforated portion to the right of the output) with his "answeraire". He/she pointed out that what many Honours students do not realize is that the 24-course requirement means that they *must pass* all six half courses each term. Any failures would have to be made up with a seven-course term or an extra term. Many students also felt that an increase in the minimum mat average for the Honours degree was unnecessary, since the Honours program is already more difficult than the General program.

A number of other interesting responses were received:

+ "If Mathsoc doesn't start a petition they will show themselves to be rudd flaming twits"

+ "The suggested restrictions are inconsistent [sic] with ... other changes (*intended to*) ... liberalize the learning situation ..." - Italics ours.

+ "Those students who need to pick up a course because of a failed one usually don't have the minimum 75% average."

+ "prerequisites clearly stated in calendar" - We are not sure whether this is a comment, complaint, suggestion, or simply garbage...

+ "When will the situation for transfer students be clarified? As a matter of fact I'm not even sure how it stands now"

The students of the Math Faculty, or at least 50 of them, have overwhelmingly denounced these proposals for their lack of fair, reasonable consideration. The obvious conclusion is that an opportunity for direct student response to the committee responsible would point out numerous and valid criticisms of the proposals and some changes might be made. We can hope that such an opportunity will be announced soon, far enough in advance that **mathNEWS** will be able to inform the students at large.

One unsigned comment was:

+ "How about reinstating Denn Mullin as editor, and moving the production meetings to Ottawa? Then might get some breakfast on Wednesdays..."

Computing Centre Courses

To register, see Dianne Hart, MC 2008; for more information, see Clive Knowles, MC 2002.

Introduction to SPEAKEASY

SPEAKEASY is an interactive language run under CMS. Its vocabulary of 400 words allows the user to quickly formulate and solve problems in a desk calculator mode. Built-in functions make it simple to use for plotting, integration, statistical analysis and other applications.

This course will be taught on February 16th, 3:30 to 5:00 p.m., by Paul Snyder.

Introduction to Computer-Assisted Instruction (CAI)

This course involves discussion of current uses of computers as instructional aids to increase material presented, improve teaching quality, increase numbers of students per class, and decrease student time, cost, and administrative load.

The course will be taught on February 17th, 3:30 to 4:30 p.m., by Eileen Elkeer.

Introduction to CMS

CMS (Conversational Monitor System) is an interactive terminal system under VM on the 370/158. It provides file manipulation, editing, and execution facilities for most Computing Centre processors and applications, and is the only system on which the PL/I optimizer and SPEAKEASY are available.

The course will be taught February 17 and 19 (two parts) at 1:30 to 2:30 p.m., by Sally Riggs.

Course Authoring for CAI

The Interactive Training System is an authoring approach and language to assist in creating computer-assisted learning modules. Examples and special features will be demonstrated and discussed.

Prerequisite: Some computing experience or attendance at the "Introduction to CAI" course.

The course will be taught February 19th, 3:30 to 4:30 p.m., by Eileen Elkeer.

Tic-Tac-Trob

The subject of this week's report is noughts and crosses, alias "tic-tac-toe". This fascinatingly simple game has several interesting mathematical aspects. For instance, if you play until the board is covered, and then see who got three-in-a-row first, you can play 362,880 (=9!) different games.

You can relax, however. The number of games which are significantly different from one another is considerably smaller, on the order of a hundred. This fact has made it a natural choice for computer game-writers, some of whom have been more successful than others.

Successful writers of tic-tac-toe programs (i.e. writers of successful tic-tac-toe programs) have realized quick that there are only three basic first move and have written programs which play predetermined, sure-fire strategies. For instance, a first move to a corner offers your opponent 4 ways to force a tie and 2 ways to lose.

Less successful programmers have attempted to make programs which scan the board for twos and threes in a row. Most of these never realize that by playing on a "magic" square (see *Scientific American* for January), they need not add numbers attached to subsets of three of each side's occupied squares. If either side has three squares whose assigned values total 15, they've won.

Of course, some people cannot be satisfied with games which have been reduced to such trivia. Thus you will find various combinations of larger size or more dimensions, or variations of rules or pieces, some of which are commercially available (Qubic, for instance).

Thanks to something called an mrduff our COMPUTER_OF_THE_WEEK is... (are you ready for this, folks? tl 'bun? the 370? WIDJET?)

No, our COMPUTER_OF_THE_WEEK is the Physics Nova.

This Nova is located in PHY 342. operates in Basic only, and has only 11-12 K of memory. Peripherals include disk drives, one of which is available for storage of user programs, a printer, an HP plotter, a few cassette drives and CRT's. If you are interested in getting an account, see D. L. Roberts in PHY 25.

Tune in next week for another exciting COMPUTER_OF_THE_WEEK!!



Mathsoc fee to increase?

A request will come before the math council at its next meeting on Tuesday, February 24, to increase the voluntary society fee by \$1.00 per term, from the present \$2.50 to \$3.50 per term.

At this time the society:

[A] sponsors- 1. mathNEWS, a weekly publication (if possible) of all that is Math. 2. an athletics programme called Mathletics. 3. Antical, a class survey that is printed annually.

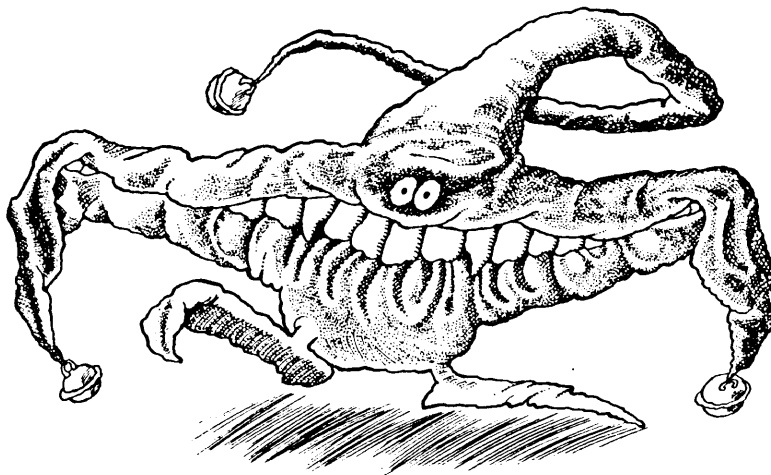
[B] backs- 1. a coffee and donut stand. 2. a computer science club.

[C] maintains- 1. an office. 2. various objects for loan such as cards, chess sets, and outdoor recreational equipment.

[D] and- supports various groups that need financial assistance and puts together activities like those during Orientation month, Math-Arts Week, and Math-Arts-ESS Week.

The present fee has not been adjusted in 5 years, but the cost to Mathsoc for the above has risen, and extension of services and new ones are impossible at the moment.

Please direct comments and opinion to the Mathsoc office (MC 3038) or attend that meeting of council. Time and place can be obtained at the office.



Letters to the Trob

Dear Trob:
What does "Q" stand for?

Puzzled

Dear Puzzled:
All Science students, and even a few jineers (fewer than n, however), know that Q is the charge in coulombs.

Exil Q. Trob.

Dear Trob:
What does it mean when I turn on a 2741 and get this:

```
0125001
wATERLOO 6060 ~UF 10TH _ER 76 23(52, 35 USERS
USER ID ++
```

A Perplexed Looker

Dear A.P.L.:
Your problem is obviously terminal balls.

Exil Q. Trob

Dear Trob:
Can you make a lemming joke?
My Poor Dolly

Dear M.P.D.:
There are two schools of thought on this. Some people claim that they are inherently incapable of such activity. Others maintain, however, that you can make them do anything by correct application of B. F. Skinner's techniques of reward and punishment.

Exil Q. Trob.

The human brain is not only the greatest computer ever devised, but it is the only one produced by unskilled labor.

BURLOAF



Here's a note of interest: Confucius say: "When walking on ice, he who doesn't see sharp will be flat."

The Mad Creller (as he is known to the hacks it is generally believed that the math building nuisance who has been setting fires and vandalizing things started his career by "crelling" the hacks' user ids, i.e., deleting all their files.) struck again on the weekend. It seems that the Mad Creller-cum-Vandal-cum-Arsonist chose the Hack room as a target, setting two fires in the room around 9 on Sunday morning. However, quick action by one of the hacks who returned to the room minutes after the flames were started prevented any serious destruction. Damages were estimated to be reaching into the tens of cents (a notebook cover was slightly charred).

A couple of hacks have come up with the suggestion that Mad Creller T-shirts be made up.

The University of Waterloo Student Chapter
of the Association for Computing

THE ANSWER BURLOAF

Dear Burloaf,

While supposedly doing an algebra assignment I happened to be perusing a copy of the latest issue of Mathnews. Noting your comments regarding the Kelvin temperature scale, it occurred to me that, since the purpose behind all this metrication is supposed to be to make life simpler, we should not measure temperature in any kind of degrees at all, but rather in *radians*!!

Adrian Pepper

Dear Adrian:

Not a bad suggestion. However, it seems to me that using radians is a rather round about way of measuring temperature. (and the correct spelling is **mathNEWS**!)

In logic class a student was heard to sing, "I can't get no satisfaction."

A few days ago, there was a hole punched into the window of a door in the building. The windowpane is the type that has the wire mesh embedded in the glass. The shape of the hole suggested someone had made it by putting his head through the window. At first we thought that whoever would pass his head to do this wouldn't get too far after doing the damage, but then on second thought, anyone who would think of using his head to smash a hole in a wire meshed window probably has a head capable of resisting such things.

Here is a problem with which you can fill in your time on Friday afternoon. It had a good number of hacks pushing pencils and coming up with statements like "there must exist an odd number which is a multiple of 5". I think it is a neat problem, so here it is:

$$2x + 1 = a^2 \text{ and } 3x + 1 = b^2.$$

Show that, if x , a and b are all integers, then x must be divisible by 40.

Positions open!

Mathsoc council reps, pres, v.p.
Anticalendar co-ordinator

Elections for the new council will be coming up very soon. Positions available will be the President, Vice-president, regular student reps and the appropriate co-op student reps. Shortly afterwards, a new executive will be appointed: Speaker, Administrator, Treasurer, Internal Affairs Director, Education Director, Athletics Directors, Social Director. Note that if the new constitution goes into effect the Treasurer will also be elected.

We are looking for an Anticalendar Co-ordinator: someone to organize the distribution and collection of the questionnaires. This position is a paid one and will involve some extra time. Please come to the office, MC 3038, if you are interested.

Comment in Anticalendar: "Professor X covered the subject extremely well. Whatever he did not cover in class, he covered on the final examination."

The quickest time I saw for the solution of this problem is about one hour. As you tackle this problem keep in mind that this problem was found in a booklet aimed at high school students.

Now, we present our regular feature, the *INTEGER_OF_THE_WEEK*. This week's Nifty Number is:

26

26 is 2 times 13, which suggests it's twice as unlucky as the unlucky number 13. This probably isn't so, though, because two negatives make a positive. The English alphabet has 26 letters; Half of a card deck has 26 cards. This issue of **mathNEWS** should appear on Friday the 13th of February. February is the second month of the year and 2 times 13 is 26. This is the second friday of February and Friday is the sixth day of the week. Combining, we get 26.

NOTICE TO GRADUATE STUDENTS

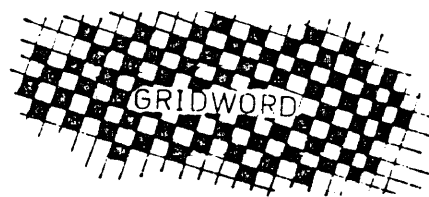
All degrees conferred by the Faculty of Mathematics during the years 1972-1974 inclusive have been recalled due to the discovery of a misprint in the Tierney first year Calculus textbook (Theorem 3-XXII: Mean-Value Theorem). A short course designed to correct the defect will be scheduled as soon as the extent of the damage has been assessed.

In the meantime, all students in possession of a previously valid degree are strongly urged against the use of the mean-value theorem, nor should they associate themselves with this institution in any way.

We apologize if this causes you any inconvenience.

New stereo system

Great news! The new stereo has now been installed, along with the two speakers for the smoking side of the lounge. In order to benefit from this purchase, cable was also put in to gain access to a wide variety of channels on the radio. If you have any records or tapes that you wish played, bring them to the office and we'll see what we can do.



GRID COMMENT

This week 30 submissions of *Gridword* were received at our end, along with the solution, which we at first thought was a submission (it was incorrect). This does not count the 3 submissions that were late for the issue before, of which only Carolyn Smith had the right solution (be on time this week and you might win). Of the 30 entries, 8 were correct and 22 were incorrect (not counting the solution, of course. :boff seems to be the only one around who can't spell mnemonic). At first we thought there were 9 possibles and attempted to find 2 three-sided coins to flip, but we ended up flipping a 10-sider instead (bouncing it violently off a wall, actually) and hoping... and the lucky winner is

H. O. Boyd

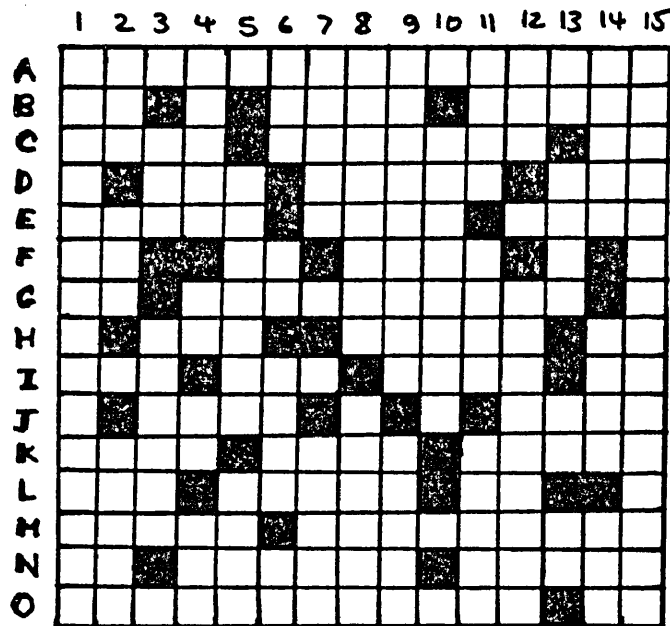
who can pick up a T-shirt certificate at any mathNEWS production meeting, or whenever he can catch an editor. Catching a T-shirt might be a bit more difficult though... it would seem at present to involve crawling through some very obscure bowels of n-jineering. We discovered that Tom Weber was also mistaken when trying to find a solution to print. But he gets a T-shirt anyway 'cuz he showed up to claim the one he won 13 months ago.

And on the subject of T-shirts, Gregg Williams (and the boys of 508G) created this week's grid and are thereby also awarded a T-shirt (cheer up, boys, by the time you read this, we may have them back).

This week, Rob, the coin was kind, but you were wrong.

- A1 belief in the omnipresence of Christ's body
- B1 Hitler would have said "nein"
- B6 archaically "you"
- B11 the other bakery
- C1 Christian name of the library dedicatee
- C6 what you do to your budget in a depression
- C14 aluminum to a chemist
- D3 Kreskin's alleged power
- D7 Waldo Pepper
- D13 teacher's blackboard note to janitor
- E1 quantitative relationship between 2 magnitudes
- E7 a mischievous deception
- E12 snatched away
- F1 abbreviation for what you forget in your letter
- F5 French article initializes coastal city
- F8 set this to catch prey
- G1 the sun god
- G4 Olga Korbut excels here
- H3 wet spongy terrain
- H8 coniferous forest
- H14 familiar rye brand
- I1 forget (Fr.)
- I5 these are fertilized by sperm
- I9 Shangri-La, the ___ horizon
- I14 Santa's favorite word
- J3 twice the name of Henry VIII's spouse
- J12 Kubrick's *Barry Lyndon* is one
- K1 giving up around Easter
- K6 hyphenated ski lift
- K11 concrete building blocks
- L1 in Algol, matches begin
- L5 strength; or loudly to Ashkenazy
- L11 here!
- M1 a knot on a tree limb
- M7 New Zealand's neighbor
- N1 prefix denoting "good"
- N4 bowers are sought in this game
- N11 prefix meaning "many"
- O1 partial equations
- O14 ___ Salvador

- 1A deprived of basic social rights
- 2A this creature crushes its prey
- 2E distinguishing characteristic of film (initials)
- 2K boredom
- 3C tennis essential is less than gross
- 3H eldest NFL player
- 4A seemingly
- 4G compile link & ___
- 4J National Taxation
- 4M the fans always hate him
- 5D many-sided planar figure
- 5L chimney passage
- 6A multi-national corporation
- 6F between midnight and noon
- 6I power for rejection of action
- 6N balances with debit
- 7A upper leg
- 7K astronomer Tycho
- 8A certificate of illness permitting exemption
- 8J last planet visible to unaided eye
- 9A practice
- 9K give a variable a previous value
- 10C government needs this, so they say
- 11A aid and ___
- 11F Porky & three little ones
- 11K its government resides in Rangoon
- 12A sister
- 12G feline-like scream, as with saxophone
- 13A De Gaulle would have said "dans"
- 13D cats and dogs have 4
- 13J this letter associates itself in all circles
- 13M general abbreviation of "lines"
- 14A Indians used to do this to cowboys
- 14H stylish
- 14M suffix meaning "connected with" or "belonging to"
- 15A World War II inflammatory grenade

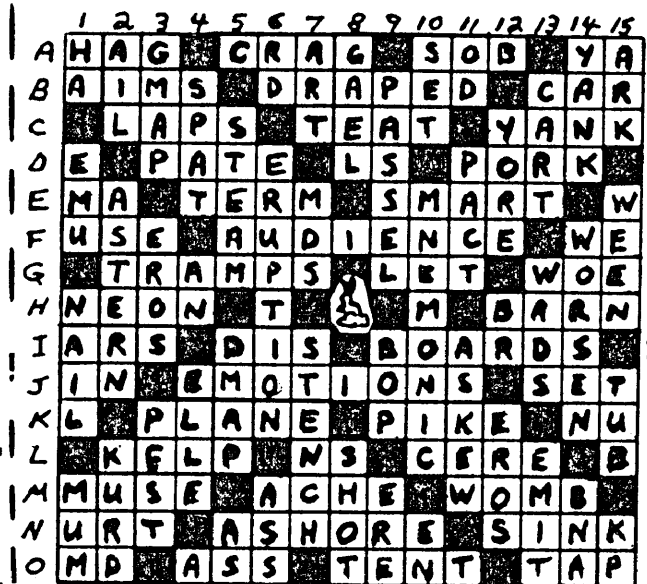


Label?

Location?

Logo?

Lithography?



:boff

This will be the last appearance of the Problems Section since this column will be discontinued after next week.

The Problems Section was started early last fall to see if there was an interest in problem-solving among the general readership of *mathNEWS*, to promote any such interest among students, and to provide any potential problem-solver with a medium in which to display his or her mathematical talents. It appeared for eight weeks last term, posing three new problems every week, printing the solutions to the previous week's problems as well as providing information on the various contests being written (*i.e.*, the *Big E*, *Special K*, and *Putnam*). There was little difficulty in presenting new problems for the first few weeks as we received a great deal of contributions, even from non-mathies. However, when the results of *mathNEWS*'s survey were revealed earlier this term, it became evident that the students who were sending in problems and solutions represented only a small fraction of *mathNEWS*'s readership, and that the majority of math students were not really interested in the Problems Section. So although those who sent in contributions regularly might like to see the Problems Section continue, this column is being withdrawn to provide space for other articles which will be of greater interest to the majority of readers. Perhaps it may return next fall for a few

weeks prior to the *Putnam* to provide those students writing it with some additional practice problems to work on. Who knows?

Many thanks to all those contributors who sent all their problems to me (and for which I was sometimes able to find solutions, and if I didn't, some other astute readers did). I've enjoyed reading through the problems and solutions sent in, despite the troubles encountered with trying to get a 2741 to type them up correctly. And a special thanks to Matthew Smith who spent many sleepless Tuesday nights here helping me to put the section together and who recently left us to take a much needed rest.

R. Morrison

Since we have not yet printed a problem that we haven't given the solution to, the following is the solution to last week's problem. Also, three final problems are presented for your your enjoyment. No solutions to these will be given next week and no solutions are requested, these are for you to try on your own. So on with...

The LAST



Q26. If $p = \prod_{k=0}^n (n+k)$ and $N = (n+1)(n+6)$, then $n = (N+\theta)^4$ where $0 < \theta < 1$ and n is a positive integer.

Solution: We have $p = \prod_{k=0}^n (n+k) = \prod_{k=0}^n (n+k)(n+7-k)$

$$\begin{aligned} &= \prod_{k=0}^3 ((n+1)+(k-1)) \cdot ((n+1)-(k-6)) \\ &= \prod_{k=0}^3 [(n+1) + 5(n+1) - (k-1)(k-6)] \\ &= \prod_{k=0}^3 (N - (k-1)(k-6)) = N^4 + 4N^3 - 36N^2 - 144N > N^4 \end{aligned}$$

(Since $4N^3 - 36N^2 - 144N = 4N(N-12)(N+3) > 0$ if $N > 12$.)

But since n is a positive integer, then $N > (1+1)(1+6) = 14$

So $N^4 < p$. Also $p < N^4 + 4N^3 + 6N^2 + 4N + 1 = (N+1)^4$, since $N > 0$.

So $N < p^{1/4} < N + 1$, and hence $p^{1/4} = N + \theta$, where $0 < \theta < 1$.

i.e. $p = (n + \theta)^4$.

A. Prove that if $x^2 \equiv n \pmod{65}$ has a solution then so does $x^2 \equiv -n \pmod{65}$.

B. Let x, y, z be complex numbers and consider the corresponding points in the Argand plane. Show that these points form an equilateral triangle iff:
 $x^2 + y^2 + z^2 = yz + zx + xy$

C. Let p stand for any prime digit. Identify the multiplication:

$$\begin{array}{r} p p p \\ p p \\ \hline p p p p \\ p p p p \\ \hline p p p p p \end{array}$$

(N.B. The p 's need not all represent the same primes.)

JJBT forever?

Last week marked the real emergence of the JJBT. All members are now expected to be named to the Canadian Sports Hall of Fame. Our fearful leader Catfish stung almost all the opposition as he buzzed his way to a third-place finish in the spelling bee.*

Not to be outdone, no less than 14 active players and our press corps showed up to prove that JJBT is everything. The Gnomes proved to be no opposition as JJBT breezed to an early 10-2 lead and coasted on to a 15-13 obliteration of the enemy. The reincarnation of the Gnomes returned to again see themselves behind 10-2 and later lose 15-13.

When interviewed after the game, the team spokesman of the Gnomes was speechless. Highlights of the evening included Errol fanning on a breakaway after he broke his volleyball stick. Roscoe and Paul set a new record for bodychecks in a game by colliding for an unbelievable 53 times. The reappearance of the JJBT team bat was a contributing factor as it accounted for all home runs during the game.

The following day Catfish, Wrong-Way Boon, and Paul were up bright-eyed and bushy-tailed as the JJBT slide-rule team. They brought more fame and fortune to rest on JJBT as the only student team to enter the second round. Wednesday evening, careful viewers were able to see JJBT members skulking their way to the PAC for a match against Virtual Machine-A. The opposition was virtually a machine as they gave JJBT the toughest time yet. In the only non-exhibition game of the evening JJBT snuck by with a 15-13 win.

In the ensuing two exhibition games, with the pressure off, JJBT played much looser volleyball and allowed VM-A to regain some composure with wins. Unfortunately, Catfish was unable to contact the VM captain to explain that the last games didn't count. VM "virtually" sealed their doom by arrogantly assuming that they could score points with Graham playing for JJBT. Just to prove it, Graham connected for ± 3 straight points forthwith. The game was marred by a vicious assassination attempt by Gord, on the life of Catfish, but fortunately quick feet and cooler heads prevailed.

JJBT was also involved in court action this week but the scores were too large to fit in the article.

*See article
on page 7
at right

Career Information Centre

Some snippets from *Career Information Centre News*...

The *C. I. C. News* spotlights some of the information available through the Career Information Centre. Space limitations oblige us to include only those items of greatest importance. Students, faculty, and staff are urged to visit the Centre and research the many possibilities available to them. The Career Information Centre is located on the first floor of Needles Hall, and is open Monday to Friday, 8:30 a.m. to 4:30 p.m., Wednesday until 8:00 p.m.; university phone extension 3001.

Coming Events

Various career talks planned for late February include: Teaching (Faculty of Education, Nipissing College, North Bay), on Tuesday, February 24, in NH 1020... *drop in between 4 and 6 p.m.*; and Real Estate, on Thursday, February 26, also in NH 1020, *at 3:30 p.m.*

For details on other career talks check the bulletin board in the Career Information Centre or Career Planning and Placement.

Counselling Services is sponsoring a series of groups during the winter term: Self-Directed Behavior Change, Couples/Marriage Enrichment, Assertion Training for Women, Bibliotherapy, Relaxation Training, Sensitivity Group Dynamics, Seminar and Test Anxiety Management, and Vocational Interest. For information, contact Counselling Services, NH 2080, university phone extension 2655.

Job Postings

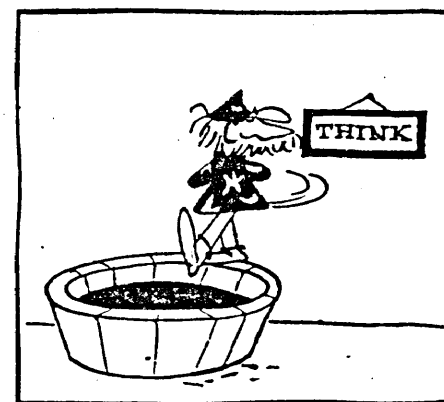
...and information related to summer employment for UW students, can be found at Career Planning and Placement.

*Spelling Bee...

First place in the individual contest went to 2nd-year mathie Mike Moran, who wrote the five correct answers faster than mathie Mark Brader, who got more correct than mathie Owen Leibman (who misspelled *diaphanous*).

In the society executive contest the math team of Dryden and Brader outspelled all opposition to complete a math sweep.

Words used included *hemorrhage*, *mythopoeic*, *non sequitur*, *onomatopoeia*, *parallel*, *rhomboid*, *scission*, *syzygy*, and *weird*.



unclassifiable ADS

mathNEWS will print your ads free of charge. Just jot them down on a piece of paper and put it in our mailbox on the third floor across from the C&D lounge, or take it to Mathsoc and have them put it in our mail slot, or put it in the mail addressed to mathNEWS, MC 3038, or send them in the mail subsystem on TSS to userid mathNEWS.

To Sublet: 2-bedroom apartment, Spring Term (May-August) 1976. 5 minutes from either university. Only \$235/month. Call 885-2522 after 6:00 Monday-Thursday. Jim <illegible>.

For sale: TEAC 3605 cassette deck, 6 months old, superlative performance, new = \$550, sell = \$300. 884-9463. (plus blank C-90 CrO₂ Memorex tapes).

Looking for a person (M or F) to share apartment until end of April. 5 minutes from bus to university. Ask for Bob, 743-7137 (after 5:00 p.m.).

For sale: Perpetual motion machine (batteries not included).

For sale: We hear the U.S.A. wants to sell the geodesic dome that was their pavilion at Expo 67, for \$1, to anyone who can transport it away... and that an interior temperature increase of 2° would be sufficient for it to become a hot-air balloon...

Toronto living, summer 1976. 2-bedroom apartment in Thorncliffe Park to share. 1 bedroom is available for two people in a large clean apartment (one person is staying for the summer). One parking space, air conditioning, utilities included. Fifth of six floors. Close to Don Mills & Eglinton area and good TTC to downtown Yonge & St. Clair. Buses stop outside door, and travel to subway. City park (with tennis courts) and a shopping plaza a few steps away. For more information, call Gregg at: 416-443-7147 (7:30 a.m. to 3:00 p.m.); 416-425-9367 (otherwise) If not in, leave a message and your call will be returned.

Girls require a furnished 2-bedroom apartment for the summer of '76. If possible, would like to continue renting on a rotating basis with other co-op students. Preferably within walking distance of the university. Please reply to: J. Termeer, #47-1196 Shillington Ave., Ottawa, Ont. K1Z 8L4

Two opinions against the changes

Dear mathNEWS:

You ask for opinions on the proposed changes. I am not in favor of the 4-week drop period: it is a little short. What I find totally unacceptable is the requirement that a student may only take 6 courses per term unless he achieved 75% on the previous term. This does not permit a student to catch up when he misses a course. Also, I do not think the student's ability to handle 7 courses depends on the previous term's average. I have taken 7 courses and my average was 5% above the previous term when I was only taking 6.

D. R. Mowbray

Dear mathNEWS:

Re the suggested curriculum changes. I do not think that it is necessary to raise the required averages in any of the programmes. It seems to me that it is hard enough trying to get through university without worrying more about our averages. I don't believe that everyone is in the Math Programme just to get a Bachelor of Mathematics degree. There are many of us who are here to learn about mathematics, computer science, business, accounting, etc.; and then use what we have learned in the working world during our work-terms and after graduation.

H. Van Krieken

It is 5 minutes past one in last Wednesday afternoon, the latest finish of the term; and the first appearance of the "new look" mathNEWS. The masters are produced on the MFCF's Photon Econosetter, which was described a couple of issues ago, and will NOT be reduced when Graphic Services produces 1200 copies of these pages... the last mathNEWS that wasn't reduced was our third issue, dated Thursday, February 8, 1973...

Would you believe that all the articles were finished eight hours ago, and most of the intervening delays have been caused by various bugs in the Photon's software plus minor hardware difficulties? (There was also a 2-hour wait while the Honeywell was down for preventive maintenance ...it crashed three times in the hour after that, too; and there were false fire alarms at 6:12 AND 9:07 a.m., both set off by the oversensitive smoke detector in the Honeywell's machine room, which has done this several times recently...) ***mathNEWS is financed by, but independent of, Mathsoc*** This issue was assembled by RANDY no longer a problem MORRISON, PETER C jjbt CHYNOWETH, RAG on fire WHITE, GARY various Mathsoc items entered without Roff/Proff commands PRUDENCE, JJ incumbent recumbent LOG, i mean LONG, PETE seven entities RAYNHAM, JOHANN Photon programmer (a help or a hindrance? not sure...) GEORGE, EXIL Q fib-bunny-accian TROB, and the infamous editors RANDALL S McDUGALL and MARK S BRADER who actually were awake and operative at the same time for a few hours (right now for instance)! We also stole a filler cartoon from the Chevron and our lead paragraph as you noticed, from the Gazette... the time is not not now 1:26 p.m....



mathNEWS welcomes your criticisms, comments, suggestions, etc. All letters should be signed, but if requested, a pen name will be used. Put your Feedback articles in our mailbox on the third floor outside the lounge, or mail it to us on TSS to userid mathNEWS, or take it to MC 3038 and have it put in our mail slot, or put it in the mail addressed to mathNEWS, MC 3038.

Enter via MC 6038.

mthel 206A inquiry

Dear mathNEWS:

A few issues ago in one of the other newspapers of this campus, I read an article concerning the amusing museum of ancient monuments upon the 6th floor of our glorious Building. Today I ventured up there. I was definitely above my element. I know the first 3 floors and a bit of the 5th (never touch the 4th), but the 6th is virgin territory, as I'm sure it is to most math frosh. I found myself in the world of Rec & Kin, needless to say, much to my distress.

To those of innocent character, there exists, up there, a labyrinth that would confound a well-seasoned n-jineer or psych person. But being a determined mathie, I persisted. Certainly, there is a mythical hero that could relate to my predicament, but his name eludes me just now.

It pains me to tell you that I failed in my quest, but like Christopher I made an accidental discovery. I found a new computer and a herd of CRT's.

Anyway, I thought mathNEWS, being the mouth of The MC Building, could tell me precisely where the amusing museum lies.

John Bozdell

Only 8 out of 30

Dear mathNEWS:

The Gridwords are not getting easier, nor are we getting any smarter. You just put all the clues in for once. No wonder you got so many correct answers!

H. P. Russo

So how do you account for this week's results?

Editor

Dear J. J. Long:

One question: how would you go about implementing mthel 206A as a course offered for all math students instead of exclusively to 2A teaching option students?

I have been refused entry to teaching option, but feel that this course would still be to my benefit because I intent going through to teachers' college.

Some material may overlap that of teachers' college, but I think that familiarity would be an asset.

I feel that by not offering this course to all students, there is an injustice done to those who did not get accepted in the option.

Thank you.

H. A.

Dear H. A. (whoever you are):

I don't know too much about mthel 206A, and generally I find trouble seeing much use in mthel courses, however they do exist and do serve some people. I am somewhat concerned about your problem. This rule does seem very arbitrary and unfair. Through my position on the Curriculum Committee, and Faculty Council, I shall try to look into your problem. I am not sure how far I can get but I shall try. Maybe you will be allowed to take this course in the future. If enough people like you in your situation get together and complain strongly enough we may be able to get this somewhat unfair rule lifted.

J. J. Long

If you are really interested in the content, you could always just attend the lectures without registering...

Editor