



*The Mathematics and Computers Building. Your new home.*

Once upon a time, in a land they would soon call Waterloo, a farmer wandered into his field to tend his crops. All of a sudden, he heard a voice:

"Build it and they will come."

Thinking it was just the wind, he went back to tending his crops. Then he heard it again:

"Build it and they will come."

At this point, he pledged to cut down on the drinking and to stop talking to his livestock. So he went back to tending his crops. And then voice spoke again:

"Yo, pal! I'm talking to you! Build it and they will come! Are you even listening to me?"

"Yes, I heard you! But build what? What am I supposed to build?", he answered.

But the voice did not reply.

He pondered for awhile what it is that he had to build. A new barn for his livestock? An addition to his house? A baseball park? A great university? He didn't need a new barn nor an addition to his house. And seeing as building a great university by himself would be difficult, he decided to build a baseball park. For weeks, he was ridiculed for plowing under half of his crop just to build a baseball park that some voice told him to build. Ya know, when you think about it, it does sound kinda stupid. Anyways, after it was done, nothing happened. No one came to play baseball. No ghosts of dead baseball greats came to visit. And winter was coming. Only half a crop. Mortgage to pay. Mouths to feed.

"I built it! So why haven't they come?", he screamed.

Suddenly, the voice responded.

"You idiot. You should have picked the fourth option. Build a great university. Do I have to spell out EVERYTHING for you?"

After feeling insulted, he went into his house and started drawing up plans for a great university. Unfortunately, his only ideas were a long driveway, a sizeable parking lot and big building with a sign that said "University". This wasn't going to be an easy task.

The mortgage was due. He decided to sell his farm and all the surrounding land to people who would have some clue on how to build a university.

And then it begun.

Over the next few decades, buildings started popping up all over the place. The university was starting to take shape. Enrollment went up and up. They were coming. And then some.

Everyone wanted to come to this great university built on farm land where farmers would hear voices. Despite this fact, people were coming here. There were reports the people who were coming here were hearing voices. But no know one really knows for sure. However, the first degree they handed out here was to a dog. There's a good chance that some weird voice told somebody to do that.

Today, the university hands out degrees to people. What started as an empty farmer's field has turned into a bustling student environment and community. And the voices? Well, if anyone's hearing them, no one is admitting to it.

And what ever happened to that farmer? Not sure. Probably took the money and ran. Maybe he's still hearing that voice.

But that's another story.

## Hello and Welcome

Over the years, *mathNEWS*, the University of Waterloo Faculty of Mathematics Student Newspaper, produces a frosh issue that is sent out with the frosh materials or is included with the frosh kits. This year, however, we're doing things differently.

While most of the *mathNEWS* Frosh Issue concerns itself with entertaining you, it also serves to inform you as well. So, we've put together a *mathNEWS* Frosh Primer, full of most of the things you'll need to know for a least the first few weeks of classes. There will be a Mathie Handbook included with the frosh kits, and that'll have most of the things you'll need to know for your extended stay here.

Take a look through this little handout. We think that most of it will be useful to many of you, so you may want to pay attention. Nobody else pays to attention to us.

## Stuff to bring

So, you're moving away from home for the first time. You've had absolutely **no** experience moving before. Well, let me tell ya, this is not just some long sleep-over or extended camping trip. You will have to **live** here. That means you're going to need some helpful. Here's a list of the some of the more helpful items... keeping in mind that this list is not meant to be comprehensive, but only to suggest ideas.

### *Things to bring from home*

#### Official Papers

- registration and fee statement (vital!)
- bank books, chequebooks, etc. (basically financial stuff... the university just loves your money...)
- Health insurance cards (Health insurance is good.)
- ID, e.g. driver's license, SIN card (The bars around here really like proof of age stuff.)

#### Clothing

- Clothes for all kinds of weather (hot, cold, rainy, snowy, etc.)
- It's not called Waterloo for nothing. Bring a raincoat and/or umbrella... trust us. You'll need them.
- And what applies in the summer also applies in the winter. Bring snow boots or some kind of snow-repelling footwear.
- Interview clothes (business best) for co-ops (Gotta look sharp for those employers.)
- Sewing kit. Always helpful.

#### Other Stuff

- Money (and lots of it... you'll need it.)
- Towels, sheets, blankets, pillows
- Some of your parents' recipes (and parents to cook them if you so desire)
- Cutlery, cups, dishes, small kettle (more for those of you without a meal plan of some sort)
- Alarm clock (don't worry... you'll learn to ignore it.)
- Toiletry items (enough to last until you buy some here)

- Your bike (U(W) has excellent bike access)
- Your bike lock (U(W) has excellent bike thieves)
- Basic tools (screwdriver, bottle opener, wrenches, sledgehammer, etc.)
- Posters (if you're allowed in the place you're staying)
- Comfort items, e.g. stuffed animals, bust of Elvis, etc.
- Scientific (or just a regular) calculator and pencils (mechanical or wooden... we don't care)

### *Things to buy when you get here*

No, we're not a getting a cut from the Chamber of Commerce. You can bring this stuff with you from home for all we care. But it's just not worth the hassle of hauling this crud when you can get it here.

#### Stuff

- Paper, pens, binders, erasers, rulers, pencils (Why not start fresh — leave that high school gear at home)
- Food (if you're not in Village)
- Laundry and dish detergent
- Quarters and Loonies (Laundry, video games, vending machines, etc.)
- Aspirin and other equivalent medications
- Bandages
- Beer (And if you don't drink, you can always give it to the editors of *mathNEWS*)

## WARNING!

*This is the solution to the GridWord at the back of this primer. Don't peek if you want to solve the puzzle first!*

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## Frosh's Guide to Course Selection

Since you probably don't have much of a clue what your courses will be like, the staff of *mathNEWS* has put together this list (mostly at the last minute and at great personal expense) to help you out. Listed are the first-year core courses and some popular electives. If you have any questions about some of these courses, just ask anyone who's taken it.

- **ACC 121/122:** Accounting for non-accountants. Easy if you've taken accounting in high school, although there are some new principles.
- **BUS 111/121:** Taught at WLU, these courses teach you the basics of the business world. Business courses are WLU's speciality, and these two are always taught.
- **CHEM 120:** Introduction to Organic Chemistry. You need OAC Chemistry and Calculus for this one. Quarter credit lab available.
- **CS 120:** Recently introduced. Using computers for problem solving. For students who have little or no computing experience. If you have some, then we would suggest...
- **CS 130:** For those who do not have "substantial" programming experience (whatever that means.) Basically, if you know some programming, take this.
- **CS 134:** Continuation of CS 130. You can take this course first if you want, but you better know a lot of programming.
- **ECON 101/102:** All the econ a non-major needs. Easy to pass, hard to ace, lots of reading.
- **FR 151/152:** Basic French. Emphasizes comprehension, grammar and basic speaking skills. If you've taken up to Grade 10 French, take FR 151. If you've taken up to Grade 11 or 12, take FR 152.

- **FR 192 A/B:** Continuation of OAC French. A little more intensive than FR 151/152, but can be fun at times.
- **MATH 135/136:** First-year algebra courses. MATH 135 covers such things as number systems and some cryptography. MATH 136 covers vector spaces, linear transformations and matrix algebra.
- **MATH 137/138:** First-year calculus courses. Derivatives, integrals, differential equations and sequences. Builds on OAC material.
- **MATH 145/146/147/148:** Advanced versions of the above. More emphasis on theory. Only for you really, really smart folks.
- **MTHEL 100:** Commercial and Business Law for mathies. Pretty much says it all. Multiple choice tests, too!
- **MTHEL 305 A/B:** Intro to Life Insurance. Exactly as exciting as it sounds, but a required course for you ActSci wannabes.
- **MUSIC 100:** Intro to Music. History of music through the ages. Since it's also a music appreciation course, you do a lot of listening. And you get to do concert reviews, too.
- **PHIL 145:** Critical thinking and argument analysis. Interesting and easy.
- **PHYS 121/122:** Physics. Continuation of OAC Physics. Some find it easy, some find it tough. Required for all you Applied Math wannabes.
- **PSYCH 101:** Intro to Psych. Interesting, lots of memorization. Easy to pass, hard to ace, and you might get to participate in some psychology experiments.
- **SCI 238:** Astronomy. Difficulty depends on instructor. Plenty of formula plugging, basic math and reading.

## So what exactly is *mathNEWS*?

Well, we don't quite know.

But here's a general idea of what we are:

We are the University of Waterloo Faculty of Mathematics Student Newspaper. *mathNEWS* is a student-funded, all-volunteer information and humour publication designed by and for mathies. Our purpose is to inform and entertain the student body. We publish an issue every 2 weeks (usually every other Friday) and we contain stuff like faculty notices, MathSoc events, *profQUOTES* (more about those later) and generally interesting or twisted articles.

As an all-volunteer operation, we obviously depend on the contributions of volunteers (Duh). On our production nights (generally held every other Monday night), we need people to write articles, proofread articles, draw some artwork and other odd jobs. You don't need any experience, just interest. Then we bribe you with food and drink.

We always need people who can write. If you don't think we're funny (or funny enough), write something funny and it will generally be printed. If you're more of an opinionated person, and just want to get something off your chest, write it down and submit it to us. And if you're prof says something funny, write

it down and submit it to us. *profQUOTES* is a regular fixture of *mathNEWS*, and some profs deliberately say funny or weird things in class to either make sure you're paying attention or to be quoted in *profQUOTES*.

Our (dis)organizational meeting is usually held within the first week and a half of classes (plenty of time to recover from Frosh Week). Feel free to drop by the meeting and say hello. Say you're frosh and we'll welcome you even more.

*mathNEWS* has been around since 1973, meaning our 25<sup>th</sup> anniversary is coming up soon. We have always depended on the contributions of volunteers. We hope that after we leave, students who are dedicated and committed to this as we are keep *mathNEWS* going for another 25 years.

Assignments and projects will make you go nuts after a while, so give us a shot. It's only every other Monday night, you know. And there's nothing like seeing your name in print. (Makes you look cool around your friends.)

Brian Fox  
Matt Walsh  
Editors, Spring 1997

## The Best of profQUOTES

profQUOTES are definitely the most popular feature of mathNEWS. All the quotes submitted to us are from you, the students. Whenever you hear you prof say something funny, weird or stupid, write it down and submit it to us. Some profs say funny, weird or stupid things to either make sure you're paying attention in class or just to be quoted in profQUOTES. If the editors agree that the quote is good, then you could possibly find your profQUOTE printed in an issue.

So here's a sampling of some of the best from the past year. You might get some of them, you might not. But we're just giving you an indication of things to come.

"I ran out of chalk at the end of my lecture so for the last bit I just licked my finger and wrote on the blackboard... luckily, I've taken a chalk-ingestion course."

Talvila, AM 351

"We'll have to use calculus to do this proof, but that's okay because calculus is a subset of algebra."

Dickey, MATH 135

"You all should know that algebra is just a subset of calculus."

Lu, MATH 237

"Now we simply finish this equation with... [stares at board] Where'd that 'y' come from?"

Schellenberg, MATH 135

"I would say 'Good morning, everyone!' except that 'everyone' isn't here."

Denley, C&O 230

"...the Greek letter rho. Now you know where the sing 'Rho, rho, rho your boat' came from. There was also a song 'Omega, omega, omega your boat', but it never really caught on."

Talvila, MATH 138

"This is statement is true in my world."

Atlee, CS 246

"Imagine you were using three blind mice to solve a quadratic equation..."

Jackson, MATH 235

"That's the determinant. It's one of those big words like 'marmalade'."

Best, C&O 367

"There are four S's in 'STATISTICS': one, two, three... There are **four** S's in 'STATISTICS'."

Chen, STAT 230

"This is one of the course textbooks. If you throw it hard enough, you can probably kill a cow."

Mann, CS 488/688

"MAPLE is very easy to use. You type maple, and press Enter. Then you type help."

Stewart, MATH 145

"You're not allowed to drink unless you bring enough for me too."

Astles, MATH 136

"I urge you to try and forget what you learned in high school."

Willard, MATH 136

"Remember when you were six and had a lemonade stand? You had 2 cans of lemonade and had to buy 3 more. What's the total cost?" (long silence) "I know, you're six, it's a difficult concept..."

Allan, BUS 121

## mathNEWSquiz

Hello and welcome to the Squiz section of mathNEWS. Every issue, we have 3 or 4 categories of about 4 or 5 questions to test the limits of your knowledge. Well, actually, they're usually just silly little trivia questions... but we try and make them hard! (Honest!)

Anyways, there's a Squiz in every issue. And we always hand out prizes to our winners (the usual voucher for the C+D). Here's a sample squiz for you... designed to really test the limits of your knowledge.

### Potpourri

1. Why do they call them "speed bumps" when they cause you to slow down?
2. Why are there interstate highways in Hawaii?
3. Do people actually pay money to watch golf?
4. Why am I here? Why are you here?

### Sports

1. Upon what surface do ice-skaters skate?
2. In basketball, how many do you get for a "three-pointer"?
3. How far apart are the yard-lines on a football field?
4. What sport is a hockey stick used for?

### Song Lyrics

Name the song and artist

1. Keep on rockin' in the free world  
Keep on rockin' in the free world
2. Her name is Rio, and she dances on the sand  
Just like that river twistin' through a dusty land
3. My bologna has a first name, it's H-O-M-E-R  
My bologna has a second name, it's H-O-M-E-R

## The Frosh Dictionary

Or... terms and phrases you'll hear and need to understand

**Arts:** The faculty that's so easy to make fun of. Also the faculty that some mathies eventually end up in.

**Bombshelter:** Or "The Bomber", the original campus pub and party place. A great alternative to Fed Hall and always open for lunch. Wednesday is the most popular night, but you gotta be 19 to get in (any time of the day).

**C+D:** Or Right Angle Café, The MathSoc Coffee and Donut shop, a food bonanza full of ice cream, caffeine and pastries at good prices. Located on the 3<sup>rd</sup> floor of the MC, it's a great place to get lunch when you still have money. Just follow the smell of coffee and bagels.

**CIBC:** Canadian Imperial Bank of Commerce, campus branch (in the SLC). Their machines are everywhere on campus.

**CSC:** Computer Science Club. MC 3036/3037. Lively social atmosphere, large library, couches, members that can answer your questions about *anything*, and powerful staplers.

**Campus Centre (CC):** Old name of the Student Life Centre (SLC). Oldtimers still refer to the SLC as such. (See Student Life Centre.)

**Comfy Lounge:** Big hangout place located on the 3<sup>rd</sup> floor of the MC. Nice place to do homework, talk with friends and play cards. Still waiting for a big screen TV, however.

**Dana Porter:** The Arts library. The big sugar cube at the centre of campus. According to legend, it's slowly sinking due to the weight of its books.

**DavisWorld:** Like the Eaton Centre with computers. It's an adventure in colour, a twisty maze of tiny rooms, no two alike. And don't forget about the magic mushrooms pooping up everywhere.

**Endless Loop:** See Loop, Endless.

**Feds:** The Federation of Students, a campus-wide "organization" that aims (and sometimes misses) to represent the student body. Has useful services like a cheap bus to Toronto on Fridays and most of the businesses in the SLC.

**Fed Hall:** Big party place on campus. Has concerts from time to time. Open to all U(W) students, regardless of age.

**Fed Hall bouncers:** Big like tree, smart like rock.

**Guelph:** The sound a dog makes as it tosses its cookies.

**Imprint:** U(W) student newspaper. Great for lining birdcages. Shipped in bulk on Fridays.

**Loop, Endless:** See Endless Loop.

**Math:** Your new Faculty, a great place for learning, meeting new friends and generally enjoying a productive and all-too-brief university career.

**mathNEWS:** Math student newspaper. A bastion of humour, bad puns, a little math and even less news. Run by student volunteers.

**MC:** Home. The Mathematics and Computers building, located at the North centre part of campus. It's big, grey and cubic. Toasty warm in the winter, a block of ice in the summer.

**MathSoc:** Located in MC 3038, the place to go for social information, photocopies, and copies of old midterms and finals.

**Natural Log:** The official MathSoc Mathscot, the symbol of our society, essentially a laminated log but we love it anyway.

**Needless Hell:** (also Needles Hall) a place (and a thing) all co-ops pass through.

**Oxymoron:** Any set of words with a self-contradictory meaning. Classics include Postal Service, Good Morning, Civil Engineer and Village Food.

**Pink Tie:** MathSoc's other Mathscot, also the symbol of our Faculty. Our visible symbol of pride (would you rather wear a twig?).

**Recursion:** See Recursion.

**Rhursday:** The day between Wednesday and Friday at U(W).

**Ron Eydt Village:** Formerly known as Village Two, the other on-campus residence, mostly double rooms.

**Security:** Have flashlight, will travel.

**Student Life Centre (SLC):** Student building between MC and the PAC. Houses all of the Feds' businesses, and well as the Bombshelter.

**Village Food:** Illustrates the difference between well-cooked and cooked well. Food fit for a king (Here, King! Here, boy!)

**Village One:** The closer on-campus residence, laid out like a medium security pen, mostly single rooms.

**Village Two:** What oldtimers call Ron Eydt Village.

**Watcard:** Your U(W) student card. Has all your information on it. Big brother is watching.

**Watpubs:** Mobile Bombshelters, pubs held in various Canadian cities once a week for co-op students on work term and U(W) alumni.

**WLU:** The high school down the road (Wilfrid Laurier University).

## Introductory gridCOMMENTS

With every issue of *mathNEWS*, we have a regular feature called the *gridWORD*. Once you get there, you know that the issue of *mathNEWS* is coming to an end. Sad, but true...

Anyways, they either come in a conventional/cryptic format, or just the plain crossword format (as we have in this installment).

The first issue of *mathNEWS* has the first *gridWORD* of the term. Solve it and submit it by the date and time specified in the *gridCOMMENTS* section. You can submit it into the BLACK BOX on the 3<sup>rd</sup> of the MC across from the Comfy Lounge, email it to [mathnews@undergrad.math](mailto:mathnews@undergrad.math) or hand it in directly to the *mathNEWS* editor(s) in MC3041. The *gridMASTER* then chooses the winner out of all the entries. And we always have cool prizes. Okay, the prize is a voucher for the C+D... and there's nothing wrong with free food and drink, right?

The puzzle on the back page is one from the Spring 1997 term. There's no prize for it, but try it anyways! The answer is hiding around here somewhere...

Good Luck!

# GRIDWORD

1	2	3	4	5		6	7	8		9	10	11	12	13
14						15				16				
17						18				19				
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34					35					36	37	38		
	39									40				
41										42				43
44						45	46			47		48		
						49				50				
51	52	53	54	55			56			57	58	59	60	61
62							63			64				
65							66			67				
68							69			70				

## Grid Clues

### Across

- Under the roof
- A word used to scare
- Frequently
- Truth
- Measure of resistance
- Not far apart
- North or South
- A draw
- Concise or brief
- Super Bowl MVP Bart
- No, his mind is not for rent
- Abner, for one
- "Phone home."
- Rate of speed in music
- Always
- Swamp
- Drifts freely
- To get out, barely
- Carlo or Cristo
- To have a clue of what's going on
- Writer of illegal cheques
- Northern Ontario town
- Utilize
- til ready; musical term
- Writer Ferber et al.
- Suffix sometimes used in plurals
- Consume
- Nuclear facility location

- Racket
- Small cove or bay
- Cup
- River or virus
- To direct
- Just finished consuming
- Submarines use it
- Rise over run
- Illegal narcotic (abbr.)
- Chairs

### Down

- Questions
- To blow one's horn
- Kind of antelope
- Journey (Lat.)
- North Carolina city
- Glass or plastic
- Buckeye state
- Southern Ontario town
- Prefix meaning eight
- away; left by air
- Jean Charest, for one
- Ending for fin, beginning for nce
- Not ever, in poetry
- Cal's still got one going
- Monogram of old Raiders' coach
- Tickle-me dolls... lots of 'em
- She's gonna make it after all (Last name only, please.)
- One of the *Turandot* threesome
- Poison
- Nobleman
- Turandot* is one
- Lightbulb company (abbr.)
- Waiter
- It's Barry White's weakness
- Beginning for id or le
- Manchu
- "— the World Turns"
- Beast
- To have someone classified
- Whiz
- Worldwide abbreviation
- Queen of the Nile
- To hold on to
- To be, in France
- "Oh, — !" (Darn it!)
- Woodwind instrument
- New York college
- Thin strip of wood or metal
- They got drums and anvils