

math

NEWS

Volume 107, Issue 5

Friday, July 25th, 2008

Jurassic Park to be built over B2 Green



School admits 400 extra math students as temporary feeding solution



Photography by the Hee Ho

lookAHEAD**mathNEWS**

July 25 Issue #5 unleashes the dinosaurs

MathSoc

July 29 Pints with Profs

July 30 MathSoc Office Closes

Math Faculty

July 30 Lectures End

August 5 Exams Start

August 16 Exams End

CECS

If you haven't found a job at this point, you're beyond help

Miscellaneous

July 25 Rez Council Charity Ball

August 4 Civic Holiday

August 31-Sept. 6 Orientation Week!

Winners!

We promised to give out the dough, where dough is defined as money, and here it is! Winners fo the \$25 HMV gift certificates!

Issue 1 — Megaton Panda for bringing back the good memories of the Power Rangers and making me feel uncomfortable for admitting to watching it for so long...

Issue 2 — Vince Chan for going to such great lengths to prove that he's smarter than everyone in the school.

Issue 3 — MJB for a truly awesome story for a truly awesome man.

Issue 4 — snippet for the scientific breakthrough from discovering new species we hoped never existed.

Issue 5 — Lich for giving me a great idea for an environmentally sound means of conveyance totally badass in its acquisition!

AngeLED

MathSoc Marathon Games Night*'Cause you can never lose the game too much*

Well, looks like the term is finally winding down and you know what that means: exams, EOT parties, and lengthy break to study. This time, it also means something else: Games Night.

Just because classes end by Wednesday doesn't mean we're stopping because that night, we're getting together one last time. Without any class on Thursday, we're just going to be playing all night long. Think of the longest board games you can because if we have it, you can expect to see it getting played. And did I mention there's free food?

It all starts July 30th at 6:30 pm, and we're planning 12 hours of solid board gaming, open to anyone. Have class? Just come by a bit later. The more the merrier. See you there.

Niner

S08 Games Director

**This Filler hides an article
so foul than not even a
discount, street body-retailer
would love it...**

mastHEAD

All good things must come to an end or at least peter off and become an annoying shell of its former goodness, leaving you with this yearning for the days of yore. On that note: *mathNEWS!* It's the last issue of the term! Which means you'll have to find your own way of amusing yourself without the aid of *profQUOTES* or erudite thought. Now that the term is over, we are blessed with being able to enjoy the finer things: like watching a beautiful summer day and listening to the blissful whisper of a gentle breeze from our dank pits of residency, studying as the damned artsies go out and play games of grab ass...

Now that you're thoroughly depressed and considering a major change, don't despair — this issue is rife with things that will make you smile and enjoy the simpler things. Like puppies and sunshine and an extremely pleasant visit while editing... and other things... SEGUE! *mathNEWS*ites are wonderful people who do wonderful things like help make this publication magical and banned in countries where free thought is taxed. So *mathNEWS* generously donated pizza to its cause and asked them a little bit about themselves. I asked them, along with who they were and what they were doing here, "What's your card game?" and got the following responses: Insider, 2B Software "As long as it doesn't involve Angelo stripping, I don't care", Mar², 4A M/Biz/Finance "Strip Euchre", Niner, 4C Comp. Sci "Bang!", Mark Jackson-Brown, Infinity Comp. Sci "Texas Cheerleader Hold 'em", DaFink, 2A Act Sci "Go Fish Hangman", Sarah Pidcock, 3A Comp. Sci "Hearts... BROKEN Hearts", Megaton Panda, 3x Mathematical Sciences "As long as it involves Angelo adding me to Facebook friends, I don't care", Lich, 1B Undeclared "No comment", *mathEYE*, ?? ???? "The future is coming! THE FUTURE IS COMING!"; Man o'Lead, 4A Math/Biz "Any game I don't balk at..."

As always, *mathNEWS* thanks Graphics for making this publication, which they usual deny all knowledge of and can you blame them? Thanks go to zombies (our number one fans), the freaky laser beams hidden in those new iced tea concoctions, and people less fortunate than me for hours and hours of laughter alongside an express ticket to the lowest level of every kind of hell.

Michaelangelo 'AngeLED' Finistauri, 3B Rhinoplasty "Building a house of cards and evicting the residents."

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Just a boat on the ocean, just a ship lost at sea: Michaelangelo Finistauri

Pints with Profs

*Want to find out what type of a drunk your prof is?
Well you "can't" do that here!*

Hi everybody, I'm Dr. Nick Riviera! Just kidding, it's your VPAS here and I really want you to know that this coming Tuesday is Pints with Profs. It'll be at Front Row McGinnis on the 29th starting from 4 pm. Free food will be provided. If you want **your** favourite prof to join you, I've got a list posted outside the Math-Soc office for you to nominate a prof. It'd be awesome to see you there and you'll definitely have a good time. Plus it'll give you a chance to meet your profs outside of class and may lead you to a brighter future as a graduate student.

Even if you don't want to be a grad student, getting to know your profs will increase your guanxi and recomandato.

Ammar Naseer, VPAS

Rock Band Battle of the Bands

\$100 Prize to the Top Band

Friday, August 1st

SLC Great Hall

5pm - 8pm

Find a Band. Pick a 3 song set. Sign up. Rock out.

This is not a video game tournament! This is a Battle of the Bands. A panel of 3 judges will score each band based on four criteria:

1. 40%: Technical Score (% of notes hit)
2. 10%: Costumes (creativity, team unity...)
3. 40%: Individual Stage Presence (difficulty of song, pulling off sweet solos, dancing, ad libbing, props, whatever...)
4. 10%: Teamwork (duelling guitarists, unison bonuses...)

Bands playing all difficulties are eligible and capable of winning! Entrance fee is \$5 per band member, and free for the vocalist! Go to www.uwgamers.org for more information, and to sign up your band!

UW Gamers Dude

dissedCONNECTIONS

Also known as "The reasons why the dinosaurs died"

I saw you walking through the SLC with a fur coat on, and I thought "Why the hell are you wearing a fur coat?" I mean, I know you like to think you're hot, but... no... just... no.

Furry Freak

We meet at π -approximation Day, and we talked about the significance of cylindrical fortitude. I had no idea what you were talking about, but I find nerds to be incredibly sexy. Shall we consider discussing this in bed?

π in Bed

We see that your last exam is on the 13th. We also see that you shower every day. Keep up the good work.

Cameraman from Residence

Did you diss a connection? Do you want to ruin a potential relationship forever? Email mathnews@student.math.uwaterloo.ca.

Students Offering Support

Not quite ready to write your exam? Students Offering Support is here to help!

Students Offering Support is a new Feds Club. We recruit some of the brightest students at Waterloo to run Exam-Aids: midterm and final review sessions that go over the course material from a student's point of view. You'll get a refresher of all the important course material, strategies specifically designed for the types of problems you could be asked on the exam, and even a take home package of review notes and practice questions with step by step solutions.

At these review sessions, you'll also notice us asking for donations. That's because the second thing we do is partner with a charity each year to run an annual volunteer trip with the money collected in Exam-Aids. Every penny of your donation will go towards a sustainable development project in poor countries around the world. Past examples include building a school and teachers' house in Belize (including a computer lab with some donated laptops), and helping to construct a farm for orphans in Honduras that teaches them the agricultural skills they need to survive and support themselves in the future! Our upcoming Exam-Aid sessions will be focused around final examinations. Please visit our website at www.waterloosos.com to see which courses we'll be offering our exam aid sessions for. Thank you,

Maria Christina Greco

Students Offering Support, University Operations



UW GAMERS
PRESENTS:

**CAN YOU AND YOUR BAND
MAKE IT TO THE TOP?**
...
**COMPETE AND SCORE BASED ON
SKILL, STYLE, AND STAGE PRESENCE!**



THE ROCK BAND BATTLE OF THE BANDS!

TIME: FRIDAY, AUGUST 1, 2008 (5 PM)
LOCATION: SLC GREAT HALL
FEE: \$5 PER MEMBER,
VOCALIST GETS IN FREE!

**FIRST PLACE BAND
WINS A \$100
FUTURE SHOP GIFT CARD!**



for more info, go to: www.uwgamers.org

MathCooks!

End of term delight

The end of the term is approaching us quickly, and what better way to celebrate the onset of exams than with a delicious cheesecake? Contrary to popular belief, the cheesecake is not nearly as difficult to make as one might expect. The only real hitch is the cost of cream cheese, but it's still well worth it!

This is a recipe for a chocolate marbled cheesecake that I made a few months back, it turned out really well and I was very pleased. To make the marbling happen the batter is divided into a dark and a light coloured version, and slowly stirred together.

Here's the list of ingredients:

Crust-

- 1.5-2 cups of crushed Graham Cracker crumbs
- 1/3 cups of butter
- 3 tbsp sugar

Filling-

- 4 packages (8 oz each) cream cheese (Softened!)
- 1 cup sugar
- 1 tsp vanilla extract (The real stuff is better than the artificial kind)
- 4 eggs
- 4 squares of baker's semi-sweet chocolate. (Substitute chocolate chips if preferred)

Preheat the oven to 325 degrees F. For cheesecake, I absolutely suggest having a springform pan, but you can, in theory, get by with foil/wax paper in a normal pan. Mix the crust goods to-

gether and firmly press into the bottom of your pan.

Melt the chocolate by microwaving it in a large microwavable bowl on high for 1-1.5 minutes. You can also use the double boiler method if you know what you are doing. Stir until the chocolate is completely melted. Beat the cream cheese, the sugar and the vanilla extract together on medium speed until it is well mixed. Add the eggs one at a time, and beat it on low speed until the previous egg is fully blended in. Once the batter is mixed, separate half the batter into a different bowl. Mix the melted chocolate into one of the bowls and beat well for the colour to take.

Pour the white batter into your baking pan over the crust. Shake until it evens. With a large spoon, spoon out dollops of the dark chocolate batter over the areas so it ends up like a lot of big dots are around the batter. With your spoon, slowly swirl around the blots until they form a nice swirly marble pattern. Stop when you are satisfied.

Bake the cheesecake for 45 minutes, checking periodically. Remove the cake when the center looks set. Let the cake cool before attempting to remove from the pan. Refrigerate for 4 hours or overnight. Serve as you wish! It's actually a really simple recipe. If you don't feel like marbling it, just go all solid colour and save yourself a bit of time. You can also jazz it up with jello powder like last time, or even fruits and nuts. Have fun experimenting!

Cheesy Chef Panda

Save the environment

Steal a bike

With the global warming apocalypse certain to descend upon us, we can only hope to delay the inevitable by reducing our carbon footprints, and there's no better way to do that than getting a bike. Well, the inconvenient truth is, any money you use to purchase a bike will be injected into the swine that is a capitalist economy and fuel the production of more carbon dioxide that will doom us all.

The alternative is obvious: buy second hand, but don't pay. Now, the general public usually can't perform such a feat, so this public service announcement will provide rudimentary instructions.

1. Choosing your target: you want those bikes with those password locks that's really just a loop of wire. You can practically snap them with your hands. You also want the nicer bikes, for obvious reasons.
2. Execution: you will need a pair of wire cutters, or in case of good locks, a hacksaw. Make sure people don't notice you, that's the most important part.
3. Alternatives: sometimes your skills may be insufficient; when you can't steal it, vandalize it. Slash the tires, smash the frame, remove the wheels, be creative. How this would help the environment, I'm not sure, but it must help in some way.

This has been a public service announcement brought to you by (undisclosed organization). Be sure to read our next issue on how to save the environment by stealing cars.

Lich

The Unrapture

HBO's new TV show

Premiering on September 14th, *The Unrapture* is a series about the brightest, depths of heaven. When several angels suddenly escape the celestial gates and begin to wreak peace on an unsuspecting Earth, ghetto champions rise from the crack dens and human organ wholesale stores to restore chaos to the world.

Similar to the recent onslaught of television shows where demons and fiends of hell escape to ruin a peaceful planet, *The Unrapture* will run the gamut from wrathful avengers to pacifist preachers all cutting a bloody path throughout the globe.

The protagonists are a team of brothers: Ridley (played by Macauley Culkin) is the older brother with a bad attitude and a superiority complex, while younger brother, Tim, (rumoured to be played by Stephen Seagal) is a naïve, young adult with a bleeding heart and a mysterious yet painfully unhelpful power. Also joining the cast is the plucky female companion who, regardless of her abilities as an angel hunter, needs to be saved from imminent salvation time and time again, and the caring father who is responsible for the brothers' penchant to pursue a self-righteous, vainglorious quest to maintain the status quo.

The series is expected to garner negative feedback show for its use of famous religious icons. A representative from HBO assures that the new show "...will stay true to [HBO's] roots with gratuitous, full frontal nudity and steamy, lesbian sex scenes, which should appease many of the nay-sayers. Or so we hope." Despite the nature of the show, HBO would like to remind audience members that if they don't like it then they just shouldn't watch it. If they are concerned about their children watching it, then they should probably do a better job of parenting.

AngeLED

profQUOTES

You're not a real mathematician until you've tried to prove that the World Series converges.

Wolczuk, MATH 138

Oh look, I've made it in *mathNEWS*. You guys should tell me next time so I can send a copy to my mother.

Leung, MATH 138

If you were to try to explain this to a child or to an arts student, it would be quite hard.

Leung, MATH 138

[Picks up a new type of chalk] So at x minus 8—oh my god, this is shitty! It's like a head and shoulders commercial.

Leung, MATH 138

If I don't see every one of you on Wednesday when I'm back, well, I guess I'll cry.

Leung, MATH 138

[On definition of a Splitting Field] It's like *Magic: The Gathering* — They play their "Change the Names" card, and you play "Up to Isomorphism" to block it.

McKinnon, PMATH 345

[Referring to a tail distribution] It's a blobby dinosaur with an infinitely long tail... Ok, we can make it emo if you want. [Draws an angry face on the distribution.]

Chisholm, STAT 230

[Of 20/3] I'm not good at math.

Chisholm, STAT 230

PROF: Marks are not so important compared to having fun and learning the material.

STUDENT: But do we have to pass?

PROF: That is a good question!

Amir, CS 240

[After ripping the Yellow Pages into pieces] I feel strong today.

Case, CS 134

I'm used to teaching engineers. I forgot you're Math students — you know that (1,2,3) and (2,4,6) are just multiples of each other.

Dunbar, MATH 136

What you said isn't good enough. Actually, I forgot what you said... but it isn't good enough.

New, MATH148

Doing nothing is one of my favourite things to do... I probably identify with processors enough that I think they'd also enjoy doing nothing.

Cowan, CS 251

UW accepts first velociraptor student into arts.
Thousands murdered in cultural performance piece.
See obituaries for details.

STUDENT: Can we actually [build a pipelined processor] as an assignment?

PROF: I'd have to think about that. There are some regulations about... torture.

Cowan, CS 251

What professors say about *profQUOTES* when they're jealous is "They're not paying attention to the material that's being taught."

Cowan, CS 251

And even grad students tell me "I found it in Wikipedia."

Cowan, CS 251

Now I want to show you something that is very graphic.

Cowan, CS 251

I'm trying hard to... well, I'm not trying... I'm trying hard to keep my personal opinions out of this.

Cowan, CS 251

Johnny? Sorry, I've been calling you Joey the whole time!

Cowan, CS 251

Does anyone want to change the subject before I start again?

Godsil, MATH 239

If you thought [the SOA exam results] weren't out, you are excused to go and check. You'd be just as useless in class anyway.

Till, ACTSC 232

STUDENT: I hate English.

PROF: It's contagious, isn't it?

STUDENT: It's your fault.

Till, ACTSC 232

Oh... you're not even going to answer it. That's ballsy.

Till, ACTSC 232

PROF: Happy Friday!

STUDENT: Happy Friday to you too!

PROF: Thanks. Bonus marks.

Till, ACTSC 232

If you're confused a little bit, I'm also confused. I'm not sure if I'm saying the right thing...

Ahmed, STAT 331

*Has your prof said something quotable? Type it up and send it to mathnews@student.math.uwaterloo.ca, or write it down and drop it in the **BLACK BOX** (located on the MC 3rd floor, between the Comfy and the C&D).*

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mathHELP

And I said “Let there be questions!” And there were questions. And they were good.

Dear InsideR – I had a good relationship with my girlfriend, but she just dumped me. All because she didn’t want to get laid! She’s the love of my life, InsideR! Help me get her in bed!

Dumped Out of Bed

Dear Dumped – What is your obsession with intercourse? I mean, it’s literally quite creepy. She’s clearly not ready to meet you in bed (not that I’d blame her), so try to back off. Otherwise, prepare for criminal charges.

InsideR

Dear InsideR – Every time I hear from my friend, he’s in the bar. When he should be in class, he’s in the bar. On a Monday afternoon, he’s in the bar. Forget his grades, I’m concerned about him! Help me!

Bar Bloke

Dear Bar Bloke – Chances are that something has happened to him that is deeply troubling him (a death in the family, perhaps). You need to be sensitive of this when you talk to him. If either you or he are uncomfortable talking to each other, you can refer him to Counselling Services in Needles Hall.

InsideR

Dear InsideR – WEEF is good. Because of the WEEF-funded dual-screen monitor in the Iron Warrior office, we are more than a stack of 8?x11s called EngNews with XKCD on the cover. What do you say to that?

The Iron Warrior

Dear IW – WEEF is good, you say? Good enough to make your dual-screen monitor makes the IW look and read like Imprint? I rest my case.

InsideR

mathNEWS_InsideR@hotmail.com

Tux Speaks

It was truly... interesting...

It was another ordinary production night. The writers were busy at their computers, pulling articles from places where the sun don’t shine, and laughing at puppies.

Suddenly, the door to the computer lab opened. This shadowy figure entered the lab. It was a short thing, about two feet tall, but had a very powerful aura.

Tux had entered the building. That’s right. The writers sat in awe—how anyone would react to the official mascot of many Linux distributors being in their presence. It was truly an honour for us to witness the great penguin and all of his glory.

Next thing we know, he opened his mouth. We all sat, fixed upon him. We just knew that he was about to say something important, inspiring; motivating.

“Quack.”

That was it. No words of importance, of inspiration, or of motivation. Needless to say, we were not amused. There could be only one way to deal with this imposter.

We dragged the bird up to the roof of the Dana Porter library, towards *mathEYE*’s crystal orb. Beside it lay the lifeless body of The Single Guy, just lying there after his attempts to use it. We knew that this sorry excuse for a penguin needed to be punished.

We threw it towards the orb, and a bright light shined from the orb to the point where we needed to turn our eyes away. We could hear the multiple bolts of lightning hit the roof. After two long minutes, it was all over, and we turned around to see the result.

“Quack.”

We stood there, confused. How could someone like The Single Guy be no match for the orb, but something as simple as a penguin could survive? There could be only one solution to our grave problem.

After throwing the flightless bird from the roof of DP, we returned to the MC, where Angelo and his carnivorous pizzas [*I’m sorry, what type of pizzas? — AngeLED*] were waiting for the exhausted writers.

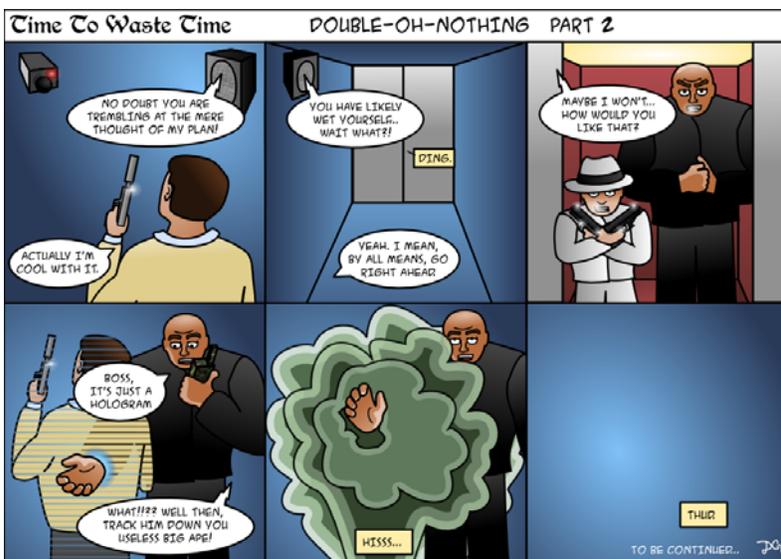
InsideR

Ways to lose the game

As covered in prior mathNEWS, now featuring new rules

- Managing to remember that you are playing: The Game
- Failing to make people lose the Game: The Meta-Game
- Believe Fox News: The basement
- Not showing up for Games Night: My game
- Making a fool of yourself: The game of disrespect
- Read Imprint: The game of futility
- Trolling forums: The you-need-a-hobby game
- Making consistent spelling errors: The game of failing ELPE
- Making fun of *mathNEWS*: Well, you’re now at level *tabloid* - 1 (unless you were already lower, which I doubt), population us
- [*Tell AngeLED that you lost The Game: the Game of Life — AngeLED*]

Niner



Whorrorscopes

It's scarier because you paid for it

ACC

This is the week to flaunt your tangible assets. Try to hide your intangibles as everyone has their dirty little secrets.

Your lucky number is 4 things people really don't want to know about

ACTSCI

You are not worthy of Whorrorscope because you are not Whory enough. Please work on that until the next issue.

Your lucky number is 8 weeks to Whore yourself up.

AMATH

You will have a major conundrum as you find yourself starting to fear numbers. Don't worry it's not too late to switch into PMATH, or jump off a building... it's really your choice.

Your lucky number is 42 feet to the inevitable splat.

BBA/BMATH

With all the time you spend playing the stock market you find no time to focus on all your class work. Watch out — exams are around the corner.

Your lucky number is 2 Laurier classes failed (you should be ashamed).

C&O

Just to show our spite. You will be devoured by a rabid bunny after being attacked by velociraptors. That's what you get for expecting a good Horrorscope.

Your lucky number is 14 *mathNEWS* writers that just don't like you.

CM

Nobody likes you, everyone left you, they are all out without you, having fun.

Your lucky number is 5 exams to study for.

CS

Red bull is not a proper substitute for blood. But you still have to feed. Don't worry there is always fresh bodies in the comfy and SLC.

Your lucky number is 8 mathies who "mysteriously" went missing.

MATH/BUS

A twist of fate has led all of your friends to have a relationship status of "It's complicated." You are left completely alone to fend for yourself. It's lonely. Isn't it?

Your lucky number is 12 friends who won't answer your calls.

MATHEMATICAL SCIENCES

You don't want to believe it. You really don't, but it's all true. WHY MUST IT BE TRUE?

Your lucky number is 4 horsemen of the apocalypse who have just arrived.

OR

Your hair is stunning everyone in your class. But be wary gold attracts the diggers.

Your unfortunate number is 7000 missing dollars from your bank account.

PMATH

You are almost out of the forest. Unfortunately it is n -dimensional and there really is no escape. Just watch out for the 4th dimensional T-Rex .

Your lucky number is not so lucky anymore.

SE

You are never safe. Both Mathies and Engies ridicule you for

associating yourself with the other. You really can't find a middle ground.

Your lucky number is 14 times your toilet covered in plastic wrap. Not just the seat either.

STAT

Are you ready to make simulations? After about ten hours of trying to figure out why they aren't working you will know exactly what a CS student feels like.

Your lucky number is 1 program you know you won't be switching into.

TEACHING OPTION

After finding yourself on the failing side of a CO exam you will enter a Euchre tournament where your luck moves from decent to horrendipitous.

Your lucky number is the 10 points you lost by.

UNDECLARED

You will be lost in thought and the regular will drift away leading you to be in a strange and confusing place. Don't worry there is always something to break you out of the spell.

Your lucky number is 8 impressions of chainlink fence on your face.

AHS

A cure for cancer is only a step away. All it takes is a minor modification to the primordial ooze. That should be easy right?

Your lucky number is 2 Ankylosaurs keeping you from saving humanity.

ARTS

Your final essays are due but you haven't started. Time's running out and your world is coming to an end. You prepare yourself to do some real work. And then it will hit you that you are in arts and go get drunk.

Your lucky number is 11 (eventual) all-nighters in a row.

ENG

You will enter a building where you will spot EngNews at every corner. It will most likely have an XKCD on the cover, feel free to think it's funny and witty (and that 2 monitors are better than one).

Your lucky number is 1 Iron Warrior brought down to *mathNEWS*' level.

E

With the growing interest in green energy you think that there may be greater demand for you when you enter the workforce. But then you remember that you are technically part of the arts faculty.

Your lucky number is 1 new lie on your resume.

SCI

The dinosaurs on the Biology 2 Green have shocked you in to cutting all your classes to investigate further. As you move closer and closer to the fence, watch out for the dino poop.

Your lucky number is 4 theses on dinosaurs on campus.

OTHER

After getting the results back from your medical tests, your doctors inform you that you will have to go to a specialist to obtain a clearer prognosis.

Your lucky number is 5 months spent waiting for an appointment.

Extensions of the real numbers

Getting complex — and beyond

Most of us are comfortable with the real numbers; they're pretty nice with all their properties. But there is no real solution to $x^2 = -1$. To fix this problem, we extend the real numbers by adjoining an imaginary unit, denoted i , which satisfies the above equation. Like the reals, the complex numbers form a field, and addition, subtraction, multiplication, and division are well defined and operate as we would expect (closure under $+$ and \times , associativity and commutativity of $+$ and \times , distributivity, additive and multiplicative identities, and additive and multiplicative inverses). A few applications: too many to name.

The complex numbers are pretty nice and have most of the useful properties of the reals, but there is one philosophical downside: the reals cannot be ordered in a natural way using the usual $<$ ordering. Although we can "easily" create an ordering for the complex numbers (which can be viewed as the Cartesian product of two copies of the reals), there isn't a very natural way of doing so. For example, viewing a complex $a + ib$ as the pair of real numbers (a, b) , we may make the ordering (for distinct points) $(a_1, b_1) < (a_2, b_2)$ if $a_1 < a_2$, or if they're equal, if $b_1 < b_2$. The problem here is that we are inherently giving the first coordinate more weight than the second coordinate. We could consider using polar coordinates in 2-space with radius r and angle t , and create the order $(r_1, t_1) < (r_2, t_2)$ if $r_1 < r_2$. To differentiate between points that are equidistant from the origin, we could place an order by comparing the sizes of the angles. However, considering the unit circle, points can be decreasing by decreasing the angle t , but passing the 0 mark and wrapping around to 2π suddenly makes the point larger.

Alright, so the complex numbers extend the reals, but we lose a type of ordering. Can we extend the complexes somehow? Sir William Hamilton described the notion of quaternions in the mid 1800's, an extension of the complex numbers by adjoining imaginary units j and k . We have the identities $i^2 = j^2 = k^2 = ijk = -1$. At first glance, it doesn't look like there is much difference between the complex numbers and the quaternions, but we notice this identity gives an interesting "twist". Multiplying $ijk = -1$ by i on the left gives $-jk = -i$ using $i^2 = -1$, so that $jk = i$. Multiplying by j on the left and i on the right gives $ki = j$, and multiplying by k on the left results in $-i = kj$. Notice we thus have that the quaternions aren't commutative, since jk is not equal to kj (since i isn't 0). We can continue manipulating these units, to get a full multiplication table ($ij = k, ji = -k, jk = i, kj = -i, ki = j, ik = -j$). Although, we have, in some sense, more degrees of freedom to work with, we lose the familiar property of commutativity that we had with both the reals and the complexes, and obviously we lost the natural ordering property that real numbers possess. A few applications: computer graphics, control theory, signal processing.

Of course, it doesn't end there. We proceed to the octonions, an extension of the quaternions. Whereas, the reals form a 1-dimensional algebra over the real numbers, the complex numbers form a 2-dimensional algebra over the real numbers, and the quaternions form a 4-dimensional algebra, the octonions produce an 8-dimensional algebra. This property of doubling in dimension is a result of the Cayley–Dickson construction, which I won't go into here. The octonions have 8 units (corresponding to the 8-dimensional algebra over the reals), $1, i, j, k, l, il, jl,$ and

kl . As you may have guessed by now, each of the units that are not 1 satisfy the equation $x^2 = -1$. The multiplication table is simply an expansion of the multiplication table for the quaternions, and it is easy to figure it out with the information I've given you. (Hint: the unit il , for example, is the product i by l . It should be easy to see $li = -il$.) Like the quaternions, octonionic multiplication is not commutative — we still have jk and kj not equal but we lose something else that seems desirable... associativity now fails. Recall a binary operation on a set S is associative if $(x.y).z = x.(y.z)$ for all x, y, z in S . To see this, notice $(ij)l = kl = -i(jl)$. Non-associative algebras are pretty weird, as you might expect. Fortunately, the octonions still have the property of being *alternative*. That is, we must have $x(xy) = (xx)y$ and $(yx)x = y(xx)$ for all x, y in the algebra. A few applications: generalization of quantum mechanics.

This concept is a nice segue way into the next topic of discussion, the sedenions. Following the Cayley–Dickson construction, we make a 16-dimensional algebra over the real numbers by adjoining e_1 through e_{15} to the normal reals (I suppose it would be messy to continue using distinct letters to denote the various units). The sedenions have the interesting property that they are not even alternative (and of course, they are not associative or commutative either). Luckily they retain the property of power associativity: if x^n denotes multiplication of x by itself n times, then a power associative algebra satisfies $x^n x^m = x^{n+m}$. It is easy to see why such a property is nice, as it is so intuitive, but losing alternativity seems bizarre. A few applications: No idea.

The process doesn't end there! We could take the Cayley–Dickson construction ad infinitum; however, I could not find any reference to larger sets than the sedenions — one can see why, as with each step of the construction, we lose another favourable property we intuitively believe with the reals. Here's an interesting question for you to ponder: what property do you lose in the 32-dimensional algebra? How about the 64-dimensional algebra?

Disclaimer: although, the title of the article is "Extensions of the Real Numbers", it perhaps should have been named "Extensions of the Real Numbers via the Cayley–Dickson construction". There are many ways to extend the real numbers, Schafer's extension gives rise to such concepts as split-complex numbers and split-quaternions, Price introduced the notion of bicomplex numbers, biquaternions are used in relativity, Cockle's tessarines are a mixture of complex numbers and split-complex numbers, to name a few. We could go into the surreals, hyperreals, and more, but that's a story for another day.

Vince Chan

Jobmine 2:

- I still know what job you didn't get last summer
- I want to believe (It's good this time)
- Evolution
- Jobmine 2 and the chambers of hopelessness
- Not living the dream
- Attack of the drones
- The Two Servers

Bored Panda

See anything wrong with this?



You should

Urinal Etiquette

It has come to my attention that not everyone around Waterloo is aware of, or practices, proper urinal etiquette.

The first and more important rule to remember is that one empty urinal should be left between any two people at all times. However, this rule can be ignored if there are dividers between urinals. In addition, this rule may be waved when there is a lineup of 3 or more people waiting to use the urinals. But what if you walk into the bathroom and all the urinals are vacant? You have your choice of which one to use, but there is still etiquette which must be followed. Never choose one of the urinals in the centre of the line; this restricts the choices of anyone who comes in after you. Instead, choose the urinal at the end of the line, the farthest away from the door. This allows the maximum amount of space between yourself and the next person who chooses a urinal (said person should choose the one on the other end of the line), and also prevents a newcomer from having to walk

MC Gossip!

Hey Gossip fans!

I know, I know, you are all dying to know what gossip has been going around MC since the last edition of *mathNEWS*.

But first...

An update in regards to the stolen CS statue!

Apparently, it WAS removed because of the construction going on and the statue has been stored until construction is complete... in a few years.

To ensure that my last column was not a complete waste of life, below is a picture of the CS statue that was defaced in 2003. This picture was submitted by Alice Pfeifer Hanov.



Conspiracy Right Beside MC!!!

That “new building” that is supposed to be going up... not a building at all! It’s actually a cover for a new Jurassic Park that is going up! Why do you think the fences were put up so quickly?!

So, I’ve also been hearing that CS students are stealing Engineering Student’s girlfriends!

Engineers have girlfriends?! Since when?! I will get to the bottom of this!

THIS JUST IN!! AngeLED is having YOUR babies!!

[For breakfast — AngeLED]

Stay tuned for the next set of juicy gossip that’s been floating around the MC.

XOXO,
8-Ball

past you while you pee. And really, there is nothing worse than walking into a 3-urinal washroom to find that the middle one is taken. Then you have to wait, letting your hate for the uneducated fool who has broken urinal etiquette rise higher and higher.

Moving on from positioning, we will examine other behavioral norms of the urinal world. Talking is strictly prohibited; just don’t start a conversation. Seriously. If someone starts talking to you, ignore them or end the conversation with simple phrases such as “Shush” or “Shut your trap”. More vulgar phrases are encouraged. Do not make eye contact at any time with another person using a urinal. If eye contact is accidentally made, nod upwards and look away. The event should be presumed to have never happened from that point onwards. Remember the rules which have been presented in this article, and practice them; help make UW urinals a better place for everyone!

Wings

Jurassic Park to be built over B2 Green

Drawing attention from many a passerby, the large security fence has been disrupting many activities on campus, from throwing around frisbees to getting to class. Yet it turns out that it is not being used for construction of the nano building: that was completed last fall. Instead, *mathNEWS* has discovered that it is being used to house a dinosaur exhibit.

The theme for the exhibit is the late Cretaceous. Though, we were unable to find a definitive list of organisms, it is rumoured to be containing velociraptors. Management, when asked, told us not to worry, as the fence will be electrified to contain them, and they will be shrunk down using newly developed nanotechnology. To provide food, we are told that a herd of microceratops will be provided.

The exhibit shall be available for a limited time at first, but it has been promised that, if successful, its stay will be extended. Students are advised to stay clear of the fenced area for the time being.

“What we need to remember is that this is one giant experiment,” said the director, who will not be named due to the fact that he cannot speak to the media. “The ecosystem is still unstable and anything could go wrong.”

As soon as that was said, our reporter was suddenly eaten by a Tyrannosaurus Rex. We ran for our lives, and decided that our investigation was complete.

The Producers

You know you are a UW student when:

- Your #1 obsession is Jobmine: regardless of how many times you've checked Jobmine in the last 15 minutes, it's not enough. You need to make sure to be the first to choose the interview slot. Sadly, no matter how often you check jobmine, someone else will beat you to your favourite slot and you end up having to skip class anyway.
- The word “geese” is synonymous to big, mean, long-necked aggressive poopers that yap like crazy every morning as if it's mating time, at the expense of waking you up at 7 am every day, including weekends, if you live anywhere close to the village green. You just want to hang one up by the neck and use them as a piñata.
- Your school did not hesitate to kill a beaver, but is unwilling to do anything about the geese. Discrimination, anyone?
- Your bike gets stolen, regardless of whether your bike is locked or not. Or, if you get a really, really cheap bike and a really, really nice lock... you fear that they will steal your expensive lock instead.
- You wonder why we have the worst cafeterias, **ever** (real food, anyone?)
- Your life is divided into segments of 4-months: alternating terms of pretending to learn stuff, and forgetting the stuff you pretended to learn.
- Just the mentioning of “PD” makes you suicidal. NURRRRRGGGGH.
- Oh and you're stuck in school in the summer. Hooray!

arcsin

The definitive list of dinosaur rankings

Since UW is apparently bringing in a dinosaur park as an attraction, I decided to share my thoughts on which Dinosaurs they should be bringing in. Make no mistake, if you disagree with me you are wrong!

1. **Ankylosaurus** - Make no mistake about it: this majestic creature was by far the coolest amongst its prehistoric pals. With a shell shield on the back and a sledgehammer tail as a weapon, it is, in a word, godlike.
2. **Velociraptor** - This speedy predator gets by with raptor-like quickness and its giant claw on its toes. If you've ever seen Jurassic Park, you would know why it's so darned awesome.
3. **Triceratops** - With three large horns and the build of a tank, this deadly herbivore is freaking jacked. Its dash attack could impale various predators with ease.
4. **Stegosaurus** - Despite being believed to have two brains, this plated beast was no smarter than any other dinosaur. Having tail spikes of 2-3ft long is just deadly, but the lack of combat function in their plates leaves something to be desired.
5. **Tyrannosaurus Rex** - This giant predator may be cool to little kids, but everyone knows how far down the real list it falls. It doesn't even have real hands! Just trip it and BAM! It's down for the count!
6. **Apatosaurus** - It's huge but it's definitely not in charge. However, everyone knows its tail whip can only lower defense so it's not a real damage dealer.

And the wussiest of the species award goes to... **Maiasaura!** It's a damn Platypus in lizard form. Seriously!

Prehistoric Panda

The Rage

Who put up the damn fence?

We knew that engineering was taking our green for a new idiotic piece of concrete and iron that calls itself a building. They have taken away one of the last places to play Angry Frisbee (which is so much better than that miserable excuse for a game called “Ultimate Frisbee”).

But never did I expect to see the piece of pure morosity that surrounded this piece of green.

WHO WAS THE GENIUS WHO PUT THE FLIPPING FENCE ON THE SACRED PATH? BOTH SACRED PATHS!

I mean, all access to the SLC from everywhere on campus has been blocked off by some genius (note the sarcasm) who thought that they needed the entire campus for the building! The paths are not made for you to force us to go through MC or risk our lives jaywalking on the street. In fact, that's why they put the paths there in the first place! So much for engineering being about protecting life.

We shall personally revolt! I will send my *mathNEWS* Sites [Wait, did you just say **your** *mathNEWS* Sites? — *AngeLED*] to this sorry use of metal, and we shall cut as many links as is required to destroy this piece of idiocy and restore a sensible path between anywhere on campus and the SLC.

And in other news, Niner just made me lose the freaking game! He is now no more. The blood has been cleaned.

The Rage

What's REALLY up with the high school math curriculum

Like many of you, I was shocked when I heard that Calculus was being taken out of the grade 12 math curriculum. I remember having a temper tantrum in front of my math department head. He understood, and just about everyone I spoke to agreed that it was a dumb move that will only make students dumber. This article isn't; however, another attack on the new curriculum. I was just curious, and decided to see what really changed in the new curriculum. I looked up the new curriculum document, which can be found at <http://www.edu.gov.on.ca/eng/curriculum/secondary/math1112currb.pdf>.

Looking through the file, I did not notice any changes in the "Data Management Course". The major change occurred in the other courses that used to be called "Calculus" and "Geometry and Discrete Mathematics". The two new courses are called "Advanced Functions" and "Calculus and Vectors". The other course that seemed to have changed a bit is the grade 11 math course. Here are the topics covered in those three courses:

Functions and Applications (MCF3M)

1. Quadratic Functions
2. Exponential Functions
3. Trigonometric Functions (sine law, cosine law, periodic relationship and the sine function, problem solving)

Advanced Functions (MHF4U)

1. Exponential and Logarithmic Functions
2. Trigonometric Functions (radians, graphs, trig identities)
3. Polynomial and Rational Functions
4. Characteristics of Functions (average & instantaneous rate of change, addition, subtraction, and composition of functions, problem solving)

Calculus and Vectors (MCV4U)

1. Rate of change
2. Derivatives and their Applications
3. Geometry and Algebra of Vectors

So what to make of this? Well, the good thing is, of course, that calculus is not actually taken out. It is introduced later in the

curriculum, after more emphasis has been put on functions of various kinds. There is more emphasis on trig functions (which we didn't get to). The grade 11 course covers much less material than before (no trig identities and no conics), which my math teachers may be happy about (since I have heard complaints about the grade 11 course covering too many topics). However, the drawbacks really outweigh the gains:

1. **There are lots of repeats in the curriculum.** — Quadratic functions are covered in grade 10 and grade 11. (note: gr 9 and 10 curriculum were revised as well, and I double-checked that this is still true). Exponential functions: grade 11 and 12. Trigonometric functions: grade 11 and 12. I think that we can waste a lot less time by teaching a certain topic once and teach it completely.
2. **Students will need to waste time taking two courses** when, previously, one sufficed. This is especially true for people that only wanted to take calculus. They now need to take two courses: one after another. This will mean a loss of flexibility in their timetable. This will also mean that people may have to give up an extra course (if the person would have chosen Geometry anyway... well, now they don't have that choice).
3. **Geometry and Discrete Mathematics** is almost completely GONE, with the exception of vectors. This is really bad. Geometry and Discrete Mathematics was perhaps the most difficult but most interesting course in the high school curriculum. This course began by presenting the idea of mathematical proofs, which is really essential in the study of mathematics. Teaching this kind of deductive reasoning is also something that can potentially change a student's way of thinking, even if they do not plan on going into mathematics. Taking out counting is understandable, since much of it is covered in the Data Management course, but taking out the concept of a mathematical proof is not.

arcsin

Career Services hosts efficient insult workshop

Iron Warrior's Counterpoint encouraged to attend

It's the time of year when the people who weren't able to get a job are scrambling to find some measly excuse to make them more appealing than their competition. UW's Career Services is responding to this by offering a workshop to help desperate job seekers mock their competitors in what can be referred to best as a political debate.

The main topics of the event are:

- The lesser of two evils
- The King of Douche Castle and the Duke of Douchington
- Answering the question in the form of "the other guy is a bed wetter"
- Scandalous rumours about someone's mom
- Here's an answer that you didn't ask for
- Telling them you're useless in a proactive way
- "I'm so awesome, I don't need to be right or competent"
- How far is too far (for your head to be shoved up your own ass)
- My dad could beat up his dad

The workshop will also have professionals in blowing smoke from out of uncomfortable areas in the body like industry professional, Will Farrell.

One of the objectives of the workshop is to bring out the *Iron*

Warriors' Counterpoint writer, Sylvia Wu, who, in the July 9th, 2008 issue of the publication, made a comment about *mathNEWS* utilizing a kick-ass xkcd comic for a cover. "She's going in the right direction in terms of starting a career of writing and away from the complicated, thinking stuff," says Terry Bullmeyer, event coordinator, "... She needs to realize that many employers are not at the same level of intelligence as [she is]. In fact, many interviewers no longer read pop-up books or watch Sesame Street for the letter of the day to be topical in the workplace".

Whether or not her comment is an insult is still currently under investigation, but the committee in charge of the workshop all agree that the amount of money going into a project doesn't make it good. "Let's not forget the Matrix Trilogy and Fed Hall (soon to be renamed the 'Kevin Royal Hall of Gathering, Well, Only When Google Comes')", says Bullmeyer.

For more information about the workshop as well as other events to make you more employable due to an obvious problem with you, please go to the Career Services website, www.careerservices.uwaterloo.ca and prepare to change your life for the better!

AngeLED

DHS contemplates giving passengers shock bracelets

Oddly enough, not a joke

News surfaced this month of plans to marginally improve airport security at the expense of liberty, in the particularly laughable memo of a senior DHS official promoting the idea of strapping so-called “safety bracelets” on passengers, coded with their flight plan, and providing circuitry to allow them to be shocked remotely. This would take the lace of a boarding pass, and is naturally asking for trouble. Don’t believe me? Wait until an old lady — or you — gets shocked by mistake.

Still, you have to wonder what other means the US TLAs will come up with to make travel as annoying as possible. Here’s a list of nine such ideas, as have been leaked to me:

- To jam any terrorist communication signal, all planes will be equipped with an easy-to-access EMP device to destroy any electric equipment, including unauthorized cell phones, radios, and flight control systems.
- All in flight movies will be replaced with images of “Dubya” and patriotic music to brainwash any terrorists, preventing them from carrying out their dastardly plans; as an added benefit, any that remain will be mauled by insane travellers.
- Air marshals will be trained to give swirlies to any passengers deemed disruptive to the safety of the flight; this includes the use of any electronic device that may interfere with the flight control systems.
- All passengers will be put under with sleeping drugs, and stuffed into a train to their destination, thereby preventing a hijacking. And at the penalty of a few more days’ delay.
- The no-fly list will be expanded to include anything matching the regex “.*”. This will catch every terrorist, known or not, at the terminal.
- Any flight deemed at risk will be accompanied by an Air Force escort.
- Flights will leave at random, preventing any terrorist from finding the appropriate plane.
- Caged velociraptors, to be released in the event of a terrorist hijacking.
- Orbital nukes; it’s the only way to be sure.

Niner

mathNEWSQUOTES

Crazy things you hear at a mathNEWS Production Night

When Angelo’s Not Around

Megaton Panda: I just want to steal these balls. They’re so nice and...

Megaton Panda: I’ll suffice you, if you know what I mean.

Man-o-Lead: I have every doubt he will suffice me.

Megaton Panda: Is it because I’m Chinese? Half an hour later you’re hungry again?

Brucy Pi: You know the song Bringing Sexy Back? Well, I’m Bringing Back Dirty.

Things mathies hate

Or maybe it’s just me

So I’m sure anyone who’s set foot on the first floor has noticed some weird construction going on that doesn’t seem to be accomplishing anything, just smells bad and prevents free movement throughout the large halls of the first floor. It seriously looks like some random scaffolding placed for the benefit of gremlins that come in at night through the ceiling to... I don’t know... break random swinging chairs in classrooms that happen to have them (e.g. MC 1085, MC 4059) or sprinkle nasty brittle liquid on all the chalk. Speaking of things mathies hate, why do people who discover a swinging chair that is no longer fixed to the arm that attaches it to the table just place it back in position such that it still looks like a chair in perfect working order? Then the next person that comes along, namely me, will sit on it and immediately get dumped unceremoniously on the floor. Would it be that hard to just put the chair by the side wall of the classroom to make it obvious that the position where it was dislodged from is not a viable place to sit? As a possibly added bonus, Plant Ops might actually notice at a glance that there’s a broken chair if it’s been set aside. In no particular order, here’s other things mathies probably hate that I don’t have time to get into detail about:

- The fenced off area around the B2 green forcing people to walk through B2 or SLC to get from the bus stop/Ring Road to the MC and forcing people to walk through the MC to get from the Rock Garden to the SLC. Not only did they remove a valuable recreation space on campus by building on B2, they’re inconveniencing lots of students while they’re doing it [*Surprise! Undergrads don’t matter! — AngelED*]. Hence, I don’t think building the Nanotech Building actually qualifies as the glorious “progress” that top university officials make it out to be.
- The broken wall socket next to the large table outside the C&D. That table used to be such a vibrant meeting place for many but now is not a viable meeting place for those who possess laptops with terrible battery life
- Not having a readily available caffeine fix at 3:00AM. Been there, done that with the whole Timmy’s not being open 24 hours in the summer argument.
- All those little kids clogging up pathways during class changes with possibly dangerous science experiments (the one where a counsellor was waving around something that was on fire immediately comes to mind). Seriously, find an unused parking lot [*Or freeway — AngelED*] somewhere. Just stay out of my walking space.
- People who try and validate their really crappy argument by stereotypically dissing something they don’t know anything about. Case in point, the writer of the Counterpoint in the July 9th issue of Iron Warrior.

snippet

More stuff the production staff says...

8-Ball: How should I write this?

InsideR: Usually with a keyboard is good.

8-Ball: Well, your mom.

DaFink: Your dad.

8-Ball: What about him?

DaFink: He’s a sexy man.

8-Ball: Glad you think so.

The Hee Ho's Half-Assed Music Review

Musical Fruitcake by The Klein Four

We've all seen the live performance video of *Finite Simple Group (of Order Two)* online, but not many people have had the chance to listen to the rest of their music. This is, in my opinion, a bit of a blessing. The group consisting of members of the Northwestern University mathematics department, definitely has some strengths and, disappointly, weaknesses.

The best part of the group is their sense of rhythm and usage of vocals as instrumentms. This is a necessity that most a cappella groups must master in order to be successful. It's easy to get lost in their beat and rhythm due to the sheer awesomeness of it. Also good are the math references, perhaps the best being the hit "Finite Simple Group (of Order Two)". A humorous fact is they did a rendition of Grover Whashington, Jr. and Bill Withers' *Just the Two of Us* entitled *Just the Four of Us*, and it's interesting to note that the Klein Four has five members, which makes me kinda curious which one is the guy that just tags along and no one has the heart to tell him to leave.

Their major problem, and it's sad to say since I really wanted to enjoy the CD, was their pitch. Dissonance can be a very lovely thing as demonstrated in most jazz groups; however, dissonance can also remind you of the cat that you left in the blender too long. Sometimes they noticeably sing out of their ranges, sometimes they go off key and you're not quite sure if it was intentional or not, and the rest of the time they are pure awesome. I think their album is definitely worth a listening to, but they need some fine tuning on the product. Their CD, *Musical Fruitcake* can be found on either www.cdbaby.com or the groups super-cool website: www.kleinfour.com. Hope you've taken the time to try out some different music this term! Now I must hee-gress, ho!

The Hee Ho

Drywallen

"Listen up. Our client isn't picky, as long as each square has the right number of walls surrounding it. Sounds a little tricky, but we didn't get to be the #3 drywall outfit in town by being lazy."

Also:

- There's a wall around the outside
- They want exactly 14 rooms

2	2	2	3	3	2	2	2	3	4
2	2	1	1	2	3	3	2	1	2
2	1	0	1	3	2	3	4	2	2
3	1	0	2	3	2	2	2	2	2
3	1	1	2	1	1	1	1	2	2
3	2	2	1	0	0	0	0	1	2
3	2	2	1	0	0	0	0	1	2
2	2	2	1	0	0	0	0	1	2
1	2	3	1	0	0	0	0	1	3
2	2	3	2	1	1	1	1	2	4

SIGHT

The precious 10x8 grid that we call home has been infiltrated. Signals intelligence tells us that the following agents are somewhere nearby, all they can tell us about their locations is

- How many squares in a row or column are occupied
- They've been ordered to disperse so they aren't touching, not even diagonally.
- Remember: they can rotate.

Tin Man

Horse

T-Bone

Double Cross

The Rock

									1
									1
									1
									3
									2
									1
									1
									5
									3
									0
0	1	4	1	3	0	7	2		

Confessions of an Internet Forum

- Two years ago I wasn't interested in girls anymore. I mean completely apathetic about vaginas and stuff. I tried to wank at some gay pictures, but with no result. My penis stayed dead. It was just a private test to find out if I was becoming gay.
- There's this girl who is pretty cute, but I always get caught looking at her butt. I think she thinks I'm checking her out her face or boobs or something, so she always keeps her back to me. But that's what I want her to do. Plus, I found her Myspace and can look at her front any time I want, so wtf. gg me
- I had a ton of internet girlfriends during my teen years. One after another. My internet bill was through the roof, but it was basically my only social interaction. I went to a small school with very few girls. I met some of the girls from the internet and those all went well. I even had an IRC wedding once, actually twice but the other IRC wedding I got stood up at. It's pretty funny to think about now.
- My wife knows I love her deeply and would never cheat on her. But she's still very jealous. Well a few nights ago I had a dream about my mother in law, who is very, VERY physically UNattractive. In this dream I had sex with her in front of my wife. I was physically repulsed and disturbed. Thing is I can't tell my wife because she'll think I'm a freak. But it's really bugging me.
- When I was about 15, the local bully in my neighborhood (who I believe was about 18 or 19) would push me around. I did nothing. Then one day he started chucking acorns at my brother and me when we were walking past. This infuriated me because he actually hit my little brother in the head a couple of times. I yelled, "STOP!" but didn't do anything other than running away from him with my brother. Feeling helpless and like a big pussy, I got even more mad. I fixated on this image of bashing his face in with a brick. Another week passed and I saw a classmate at the local community center. He asked if I had heard about what happened to Bill (the bully) the previous week. I hadn't. It turned out that he wasn't watching where he was going when he crossed the street and a car hit him from behind. He was thrown a good distance and landed by the curb, head first, cracking open his skull and killing him. For a while I imagined that I had some sort of horrific super power.

NeoGAF

More funny than a barrel of monkeys. On FIRE!

Niner: I'm special!

8-Ball: Do you ride the short bus?

Niner: Typically the buses I ride are 40 to 60 feet long.

8-Ball: That's what she said.

8-Ball, taken out of context: I can't get it to stay up.

InsideR: You laugh too easily.

8-Ball: Small things amuse me.

Megaton Panda: So Wings [8-Ball's boyfriend] amuses you all the time?

Megaton Panda to Wings: You do *prof* like a pro.

8-Ball: You do *profs* like a pro?

Speed dating redefined

Dating... on speed...

More than a few of the math dropouts never adored the life of long hours in the lab working on CS assignments, or anything else for that matter. In fact, they were complete and utter animals, often sneaking into all the local campus pubs, getting wasted off their asses, and subsequently attempting to engage in violent copulation with anything on two legs. While those who engaged in such activities may or may not have been enjoyable at the time, imagine if these moments could be relived... on speed. Here is a redux of the life and times of some of our faculty's bastard children with the help of their favourite addictive substance.

Ex-Math/CA — There she is in the middle of the dance floor, dancing her ass off in an outfit that shows off a little too much of her tangible assets... and her not-so-shy date decides to exploit the situation. She sneaks in a touch of the amphetamines before he does... and the room suddenly becomes more lively than the liquid in a Bacardi Mojito commercial. With none of her math/bus company to save her from herself, she flees the club in a nude frenzy, clutching what's left of her scant clothing. A stupified look followed by a resounding "WTF?" comes from those passing by her on the way screaming back to rez.

Ex-CS — This one's in stark contrast to the guys slaving away back in the lab. He's lining up the hits before he even gets to his artsie date's residence room. After some heavy drinking at the bar they sneak into and whining about how much life in his program sucks, they proceed to the dance floor. Several hits later, and there he goes! He's writhing so uncolltrollably, he puts the mosh freaks at a punk rock concert to shame. Everyone on the floor around him are laughing their asses off at his wild attempts to do a spinerooney. He at last falls out of his speed-enhanced experience and into the depths of a dizziness induced unconsciousness, while those around him, including his date, have doubled over roaring amusement.

Ex-Undeclared — If there was ever any doubt that mixing pre-drinking for a date and speed (and other drugs) was a bad idea, here's an episode to disspell it. It starts off well: the conversation's alive, the amphetamines are just starting to kick in, and then it hits his abdomen full force. A rapid flight to the bathroom ensues and he plonks himself down on the pot. Suddenly, the walls of the stall begin to close in around him. He jumps back at the sound of a rottweiler barking, it's head and paws scraping against the door. The sirens ensue, the police burst into the wash-room and begin taking a battering ram to the door. One strike before the stall door breaks from its hinges, the distraught addict swings it open and bolts to his feet as though waking up from a nightmare... only to find that the nightmare has only begun, in the form of his date standing at the door to the restroom gaping in shock at his urine-stained pants.

Man o' Lead

So much fun to share amongst so few people!

Man-o-Lead: Because people have dirty secrets.

Brucy Pi: I'll give you my dirty little secrets.

8-Ball: I just joined a group on Facebook called Nerdy Pick-Up Lines. I will read them.

You should have been here!

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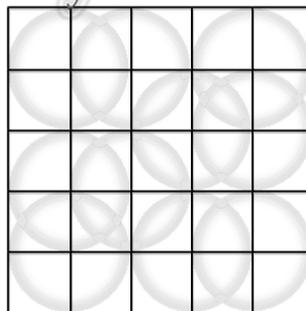
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umbrellas



Place the following 10 squares on the 10 circles so that the overlapping numbers match up.

5	4	8	5	7	8	9	8
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8	9	1	2	7	5	6	1
2	0	7	7	9	2	3	7
9	6	3	7	<i>Curica</i>			
0	9	2	7				

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