

math

NEWS

Volume 132, Issue 2

Friday, October 7th, 2016



Inside: *math*NEWS quests to find the truth behind the fire alarms!
Investigative journalism at its *math*NEWSiest!

lookAHEAD**mathNEWS**

October 7	<i>mathNEWS</i> Issue 2 creeps out of the shadows
October 17	<i>mathNEWS</i> Production Night #3
October 21	Issue 3 makes an appearance on campus

MathSoc

October 13	Games Night
------------	-------------

Feds

October 7	GLOW: Face Painting at SLC Courtyard
-----------	--------------------------------------

University

October 11–12	Study Days (Fall Reading "Week")
October 13	Tuesday class schedule (make-up day)
October 14	Wednesday class schedule (make-up day)
October 19	Final exam schedule released
October 19	<i>Embracing Failure</i> lecture by Dan Wolczuk
October 19–24	Adjust your online course exam location
October 21–22	Fall 2016 Convocation

Miscellaneous

October 10	Thanksgiving Day (school closed)
October 12	Yom Kippur
October 17–23	Sukkot
November 18	Pokemon Sun and Moon released

Article of the Issue

The Article of the Issue this time is Zethar's *An Investigative View On Fire Alarms*. It was an important piece, and possibly *mathNEWS*' first foray into the murky depths of dangerous investigative journalism. Come pick up your award from the *mathNEWS* office, MC 3030, Zethar!

The Editors

ISSN 0705—0410

Founded 1973

mathNEWS is normally a fortnightly publication funded by and responsible to the undergraduate math students of the University of Waterloo, as represented by the Mathematics Society of the University of Waterloo, hereafter referred to as MathSoc. *mathNEWS* is editorially independent of MathSoc. Content is the responsibility of the *mathNEWS* editors; however, any opinions expressed herein are those of the authors and not necessarily those of MathSoc or *mathNEWS*. Current and back issues of *mathNEWS* will eventually be available electronically via the World Wide Web at <http://www.mathNEWS.uwaterloo.ca/>. Send your correspondence to: *mathNEWS*, MC 3030, University of Waterloo, 200 University Ave. W., Waterloo, Ontario, Canada, N2L 3G1 or to mathNEWS@gmail.com on the Internet.

This work is licensed under the Creative Commons Attribution-NonCommercial-No Derivative Works 2.5 Canada License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/2.5/ca/> or send a letter to Creative Commons, 559 Nathan Abbott Way, Stanford, California 94305, USA. Terms may be renegotiated by contacting the editor(s).

Thomas Baxter (Brionne)
Shaundalee Carvalho (Dartrix)
Amy Li (Torracat)
Katherine Tu (Type: Null)

mastHEAD

The *mastHEAD* is a chance for the *mathNEWS* Editors to talk about the issues of the day, addressing their audience directly and conversationally, and also a chance to credit everyone who showed up to Production Night by getting all the writers to answer a *mastHEAD* question.

The issue of the day is: Fire alarms, and why I hate them. I hate them because they make me do things like forget to ask all the writers to answer a *mastHEAD* question.

The *mastHEAD* question this time is: "Should ConvolutED remember a *mastHEAD* question next time?"

ConvolutED (Yes.)



MathSoc Sez

Hello Mathies,

Hope your first month of school went without a hitch!

Firstly, congratulations to the newly elected Fall 2016–Winter 2017 First Year Representatives of MathSoc: June Xu, Harshith Depa, Lucy Wang, Raphael Kou, and Karolina Xin. Thank you to all the candidates for campaigning and showing interest in MathSoc.

Another way to get involved on MathSoc council is join committees, or become speaker or secretary of council. If you're interested, email mathsoc.uw@gmail.com.

Applications for MathSoc Director positions are over and all applicants should have been notified of the hiring decision. However, the following execs are still looking for volunteers for Director positions:

- VPO: Novelties Director, Computing Director, Bookings Director
- VPI (formerly VPE): Clubs Director
- Prez: Designated Driver

Email vpo/vpe/prez@mathsoc.uwaterloo.ca (respectively if you are interested).

Next, if you would like to be a general volunteer at MathSoc events with little committment and flexible hours, please fill out <http://tinyurl.com/MathSocVol> to join the volunteers mailing list.

MathSoc Thanksgiving Sale this week! Hoodies will be \$25 (reg. \$30), Sweatpants will be \$20 (reg. \$25) and T-shirts will be \$10 (reg \$15) with a special for our ABS shirts. ABS shirts will be \$1 each or free with a purchase of another novelty clothing item.

MathSoc Charity Ball is happening near the end of Fall term. If you have items that you would like to donate for Charity Ball to auction, please email vpe@mathsoc.uwaterloo.ca. If your item is selected, you can redeem a 50% off ticket to Charity Ball. All proceeds will be going to a charitable cause.

Lastly, let's help Feds out by filling a quick 5-second survey <http://survey.feds.ca/index.php?sid=41628>.

Remember to follow us on Twitter (<https://twitter.com/mathsoc>), like us on Facebook (<https://www.facebook.com/mathsoc>) in order to updated on upcoming events.

Happy Friday!

Your Fall 2016 Mathematics Society Executive Team,
Jazbel Wang (Prez), Patrick Melanson (VPA), Peggy Zou (VPF),
Wenyu Xu (VPI), Rosie DeFazio (VPO)

**Hey clubs! Want your Sez in *mathNEWS*?
Then submit them to us!**

HvZ Sez

The Humans vs. Zombies theme this term is a Godly Gamble. Want to join an epic fight between life and death that begins on All Hallow's Eve? Sign-ups start October 24th in MC, SLC, AL, and POETS. Hope to see you on the battlefield!

The God of Death

Games Sez

I just noticed I am actually a games director, and thus entitled to write Games Sezzes!

So come to the next Games Night! It will be the best night of your life! No! Paradoxically it will be even better than the best night of your night! We will be playing the best board games, card games; cooperation games, deception games; amazingly well-designed games or hilariously bad games, while feasting upon the most plentiful and delicious of foods.

So come, everybody! Come to the C&D at 6:30 PM this Thursday, and by "this Thursday", I mean...

... waiiiit, **mathNEWS** is published on Friday? In this case, if you are reading this, you either had the time of your life, or you missed it.

Darn. I should get better at writing Sezzes. But even if you missed it, you can still come next Thursday, or the Thursdays after that, or ...

the less competent one

Not-Games Sez

In case you haven't been informed yet, Games Nights are running again! Come to the C&D each Thursday between 6:30 PM and whenever people decide to leave to enjoy a night of playing board and card games!

Not your Games Director this term
a crafty player

P.S. Write more Sez's!

Goose Tips

- The tips of their feet
- The tips of their wings
- The many tips of their tongues (teeth?)
- Geese like to tip over to feed in water
- Not very generous, however
- Under 10%
- Outrageous, considering how picky they are about the salad
- The tips of their beaks

AC

An Investigative View On Fire Alarms

Waterloo, ON—On Monday, October 3rd, 2016 between 7:30 PM and 8:30 PM, there were two incidents of the fire alarm going off in the MC building. Details were murky in the beginning—there was a first-year midterm ongoing at the time and from historical incidents, it seems that malicious intent could have been part of the incident at play.

mathNEWS sent its investigators, armed with common items and skills, set out to collect clues to shed light upon the incident.

The Staff Sergeant was contacted for official comments on the issue, but at the time of writing *mathNEWS* has not received a response.

Not to be deterred by the silence from such sources, *mathNEWS* trekked out to MC Ground Zero to get more information from first-hand accounts. A variety of random individuals were questioned about their opinion on the incident, and we present to the reader a selection:

"Must be some hard midterm."

"They're crazy."

"I hate fire alarms. One happened on my last birthday."

"We don't know what's up with the MATH 135 midterm."

"Missing students should stop being missing."

"Students can't count to 3."

After cornering an official, we managed to learn that the incident on that day was most likely caused by a machine malfunction in the server room: "It's an old building—things happen".

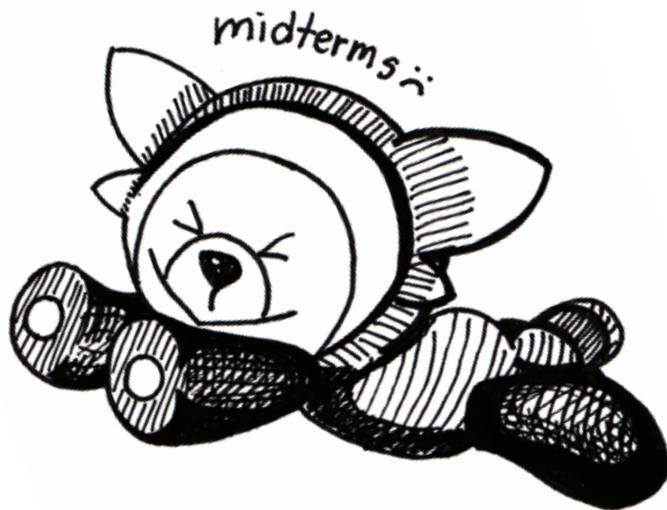
This revelation, provided that it is accurate, shows that one must not jump to conclusions about such incidents, even when midterms and first-years are involved.

Reporting from the Ring (Road),
Zethar

N Ways To Interrupt a Midterm Without Pulling a Fire Alarm

- Fake your own death
- Pay random strangers to create a flashmob
- Drop the proctors through an elaborate trapdoor prepared ahead of time
- Secretly invite Donald Trump to give a guest lecture at the same time and location as the midterm
- Stage a one man production of Macbeth
- Orchestrate a goose revolution

aPlayerofGames



Ode to Co-op

Ah, JobMine, how I have missed you my friend.

It's so nice to see you this early morn,
On the twenty-third, at the waiting's end
For my own hell on earth to be reborn.

Fifty jobs to go, and a letter each;
All in one weekend, who even needs sleep?
Get some free food from IBM outreach
When you get rejected, try not to weep.

Continuous is here, do you still dream
Of getting that perfect job in Cali?
I'm sorry, but it's an impossible scheme:
You'll never go to Silicon Valley.

With your hopes crushed to powder, it's now time
To start your shit job, I'll see you at nine.

YouDon'tDeserveToKnow

mathNEWS Does Investigative Journalism

This past Monday, real news was happening in the heart of MC. For actual details of the event you read Zethar's article. Here at *mathNEWS* we couldn't pass up this opportunity to practice our prestigious professional journalism. We took out our press passes and headed to Police Services in order to get the facts. We couldn't get an official statement from the police, so we headed out to interview random passersby and total complete "strangers". In order to have a completely unbiased view of the event, we decided to interview a child. We managed to get concrete information about the incident by eavesdropping on a Plant Ops person talking on a walkie-talkie. We discovered the culprit was likely a system malfunction in the server room. We asked the servers if they had become sentient and what are their goals? All we got was server hum.

Beyond Meta

Adventures at *mathNEWS*: An Alarming Journey

Our merry band of *mathNEWS* authors faced many trials and tribulations this past production night. We weathered the first fire alarm admirably, pushing through the aimlessly milling herd of first years to adjourn in QNC and vote on our pizza choices. We watched the first years stream back into the building, and then we waited until we got the all clear before returning ourselves (because we value our lives).

At this point, we remembered that we had a *mathNEWS* press pass, and sent a crew of emissaries to investigate the scenario - their story which is also told in this issue.

But upon the second fire alarm was our call to action! We decided to abandon our homeland that is MC to find a safer building in which to write, preferably one that wasn't on fire. Like a herd of mathematical ducklings, we wandered our way towards B1.

Someone checked Portal, and found a computer lab on the third floor of Biology which was purportedly available. When we ventured up to it, we found that it was, indeed, available,

due to the fact that it was locked. After a brief discussion we resolved not to break into the room, and instead wandered off, once again aimless mathematical ducklings, hoping to find a safe haven in which to write our silly articles.

After a brief argument about the best way to enter STC from Biology, we were saved by a bemused janitor, our wise mentor figure, who directed us to an empty classroom in B2. We settled there, to calmly await our pizza, discuss the best onomatopoeia for fire alarm noises, and (as is tradition) loudly complain about how the situation was probably somehow Imprint's fault.

Although this series of events did provide us with genuine news to report on, freeing us from the difficult task of being creative, we generally agreed that it wasn't worth having to leave our home, and we hope that the fault in fire alarm is fixed soon so we never again have to leave the familiarity of MC.

Distressed and displaced,
Diminutive Rex

N Tips for Doing Well on Exams (Midterm or Otherwise)

Most of these are probably common sense, but they deserve repeating.

- **Take the time to study;** going over and re-doing assignments are often the best way to review for math and CS courses, but there are often sample exams available (either provided by your prof OR through MathSoc's exam bank) for extra practice
- **Get enough sleep in the nights leading up to it,** especially if it's held in the morning (you don't want to sleep through ANY exam)
- **Have a productivity playlist that motivates you as you study** (many recommend video game boss music or music in another language that you don't really speak)
- **Don't be afraid to ask for help beforehand,** profs and TAs are there to answer any of your questions
- **Remember to eat, drink AND go to the bathroom** beforehand (the more time you have for the exam the better)
- **Pack** your pink-tie calculator (if it is permitted), extra stationery (pencils, erasers, etc.) the night before so you're not scrambling the morning of
- **Relax, and remember to take breaks** so you're not over-indulging yourself that you start to forget everything
- **Stop reading *mathNEWS* soon, you should get to studying!**

waldo@<3.LE-GASP.ca

Copycat Campaigns Met With Scorn

Waterloo, ON—Rallied by the result of the recent referendum regarding the re-appropriation of resources reconsidering the remuneration of WPIRG, registrants request registrar relinquish requisite remittance. As it is understood, the "Remove" campaign aims to change the nature of the school's tuition fees to be opt-in instead of the current status quo of mandatory.

Spearheading the removal campaign is Vishal Mayur, a second year Environment student, who argues that the school senate has a little too much power over students' tuition, and some of the tuition currently being paid is being put towards projects that not every student agrees with.

"The University is using money collected from students like me to fund things like a new E7 building which I will never even set foot in," said Vishal, while collecting signatures needed for a referendum. "I would rather that the school use that money to help preserve the arctic instead of contributing to the problem," continued Vishal. Other points of contention include the unilateral tuition increase ability held by the school senate, and the fact that international tuition just keeps on going up. "If tuition were opt-out like many things ought to be, everybody would be happier," concluded Vishal.

When questioned about this issue, the University President Feridun Hamdullahpur gave a hearty chuckle and said something to the effect of, "Oh children, how cute".

Reporting from the ring,
Zethar

Celebrating Imprint Recycling Day

Whenever a new batch of Imprint comes out, the previous issues go straight into the recycling bins. As such, whenever a new issue comes out, YOU (yes, YOU) can celebrate and help out whoever tosses out the old Imprint by tossing out the new one right when you see it on the stand! That way, whoever recycles the old Imprint to make way for the new will have less Imprint to recycle.

Before you do though, be sure to at least have a look. Sometimes, and only sometimes, Imprint does have some really compelling articles that many should read (even if those are often found in the opinion section where the non-regular Imprint people often contribute). Your \$4.35 fee collected by Imprint *does* go to pay for that printing, so you may as well enjoy reading something tangible while you're at it. Afterwards, take pride in recycling that Imprint. It'll be put to better reuse elsewhere. Either that, or the Fine Arts students will have their way with it. Or if you want to make even *more* use out of that, take that Imprint home for further use and recycle yourself in your own way!

Whatever you do with it, Imprint is yours to recycle.

Paper Fold

N Reasons GEDI Doesn't Make Sense

GEDI, or Global Entrepreneurship and Disruptive Innovation is an initiative recently started by the university.

- It's apparently supposed to be pronounced Jedi, despite intuitively appearing to be either 'geddy' or 'jeddy' to everyone I consulted.
- It's apparently supposed to be pronounced Jedi, which feels like pandering.
- 'Disruptive' is so much the king of buzzwords that it has become a meme.
- Their name is awkward to refer to because it doesn't have a noun. Is that disruptive?
- They use more buzzwords than an info session
- Their website refers to intrapreneurship, which apparently means behaving like an entrepreneur while you are an employee of a large company—which just sounds like a way for large companies to justify overworking their co-ops.
- Their website doesn't explain what they actually do.
- On a webpage with more than 500 words, it manages to say almost nothing.

Diminutive Rex

N Things Overheard During *mathNEWS* Production Night

- "We have reached CNN levels of investigative journalism."
- "We are going to take a democratic vote on what sound a fire alarm makes:"

<fire alarm>	<aarnk>
<rannk>	<raank>
<zheep>	<beep>
<aank>	
- **<fire alarm><fire alarm><fire alarm><fire alarm><FIRE ALARM><fire alarm><fire alarm>** [Yes, this one won the vote.—ConvolutED]
- "Imprint hasn't released an issue that's unmockable in...their entire creation."
- "Wait a second...has anyone remembered to insult Imprint this issue?"
- "Does anyone have the most recent issue of Imprint? We need something to make fun of."
- "Fucking fire alarms; those are what are stopping us from going to space."
- "Since we can't remember the exact quote, we need to synthesize the funniest one."
- "Is there a website where we can see whether the university is currently on fire?"
"Actually, there's an app for that."



Follow us on Facebook (*mathNEWS*) or in person (MC 3030)!

The City's Dying Cry, Part 2

Formerly known as "The Bullet's Hot Breath"

I walked down the dark streets of the city. The sun had set, but it was still a scorcher. It didn't help that the air conditioning at my place broke. It felt like I lived in an oven, and considering my luck, I'd be all crispy by the time it was fixed. I had to sleep in the basement for crying out loud.

It had rained earlier. Well, it didn't actually rain. The giant sprinklers set up over the city had been turned on for a couple minutes, as they did daily at seven, eleven, four, and nine. It made the streets slick and shiny. Old fashioned cars, the only kind allowed during the Noir Festival, raced down Yonge. For the only time in a year, the traffic in Toronto was actually tolerable. It also reduced the city's emissions, something the mayor would always on and on about when promoting the damn event. As I walked into the seediest bar I could find on Yonge, I thought about my new case, and what would it would mean for me.

Even though I played hard to get, the truth was I didn't have a choice. I pretty much had to take the case. I was a month in, and still didn't know what my major task for the semester was, so this would have to be it. I was told when I started the job that that had to solve a case for a dangerous dame, and that would be how I was evaluated at the end of term. Now that I was on the case, I could finally work my way towards an "Outstanding" evaluation. And to do that, I had someone I needed to meet.

I looked around the inside of the dimly lit bar, searching the place for my contact. Music from an gramophone filled the air. It was jazz. I liked jazz. I found him right as the sax started blaring its solo. There he was, over at the bar, drink in hand: Reginald Brimley. He and I used to be partners, before a disagreement put us on our separate ways. He liked Picard; I liked Kirk. We were diametrically opposed. He was still a good source of information, though.

"Reginald," I said, before sitting down on the bar stool, and ordering a ginger ale. Drinking was a must on this job; if I didn't

have at least one drink a day, I was doing it wrong. It was the really strong stuff, the kind that makes your nose and mouth burn after you've had, and for some reason can only be found in 251 mL bottles.

As the bartender poured me a shot, my former partner, and former friend, turned to face me. "Bear," he said, taking a sip of his drink. His British accent was still there, but it now sounded a lot more cynical.

"I'm looking for information. A dame named Bradshaw is being taken to the cleaners because of some old photos. Have you heard anything about it?" I took my drink, and breathed in deeply as I felt my throat start to burn. It was a familiar feeling.

He raised an eyebrow. "Might have. Might not. Information comes at a price, Bear. You know this." He knew, and I knew he knew, and he knew I knew he knew.

I also knew the price I would need to pay. "I'm never going to admit Picard was the better captain, Brimley. But I will admit that original House of Cards is better than the American remake." I never actually preferred Spacey, but there's an element of bluff in the work of a private eye. "I can even throw in a coupon for free crumpets at Queen Victoria's God-speed Crumpet Emporium."

His eyes seemed to light up at that last part. I knew I got him hook, line, and sinker. "I'll take it," he said. I paid him, and he tipped his bowler hat at me. He was wearing his usual getup, which was close enough to noir, I suppose. "Haven't heard much, to be perfectly honest. The only thing I have is a name."

I leaned in close. "What is it?"

"Bowie."

Theodore Bear

A Real Waste of Time

I spent almost two hours writing an article about your money, and then proceeded to delete it because it was terrible. I can't say I learned anything from this exercise except that I should've listened to Beyond Meta when they said it wasn't a good idea. Perhaps I reinforced the idea that I should listen to other people more.

Perhaps other people should think critically about things before they publish them, too.

Scythe Marshall

Postscript: at least if this happens at Production Night, they might still feed you.

N Signs I'm Ready for October

Waldo found it quite hard to slug it through the last couple of days in September.

- Even though everyone is sick, the sickness IS dissipating and will hopefully be gone soon
- Despite the cold, the fall leaves in the sunshine is beautiful
- The Reading Break Days will be a VERY welcome reprieve
- September took too long to settle into
- It may be midterm season, but there is definitely more motivation to do well after having none of it in September

waldo@<3.LE-GASP.ca

IOT And Its Prevalence In Today's Society

There's a lot of buzz recently about the IOT. The process of discovering and exploring the IOT has largely been gathering data and leveraging it in various ways. The cloud was heavily utilized in order to organize and store this data gathered by sensors and other technology. The IOT connects our world along with possibly others and is on the verge of being universal.

After doing a lot of research, here is my summary of the IOT for those who, like me, were unclear on exactly what the IOT is.

IOT stands for Inevitable Octopus Theory. It's fairly complicated and the proof is extensive (147 pages), but in layman's terms it boils down to the theory that all planets that develop life will eventually develop octopi. This theory first appeared in a peer reviewed article in a well known publication, but has since spread. It is currently undergoing scrutiny by various authorities and experts, but so far has passed any test applied to it.

The argument behind it is that octopi are sufficiently generic and well optimized for life anywhere. They are smart, can fit through tiny spaces, and have excellent camouflage and escape skills. Their tentacles are semi-autonomous, can function briefly after being cut off, and are covered in suckers. These features, along with others, make the octopi perfect candidates for cross-world life.

Unfortunately, I cannot adequately explain the technical biological aspects and arguments, but the article has been reviewed by the appropriate authorities who do understand its contents. The conclusions the article draw are irrefutable: octopi have the capability to develop on any world that supports any form of life, and the likelihood of them doing so is virtual inevitability. One expert in particular, in talking about the probability of octopi development, has been quoted as saying "You know the lottery? Yeah, the reverse of that."

Yours in scientific inquiry,
Shay Blair.

profQUOTES

"I'm bad at drawing graphs. If you draw that on the exam, you get full marks."

Liu, MATH 135

"Enjoy your life while you can, human distinction is just around the corner."

Small, STAT 240

"I'm still learning how to draw a 4."

Trelford, MATH 135

"Math is hard."

Trelford, MATH 135

"Apple wants to buy McLaren... I'm worried the next generation of [race cars] will come out and there won't be a steering wheel. You'll be able to buy a Bluetooth steering wheel, though."

Wood, MUSIC 140

N Romantic Messages I Sent To Shay Blair Over The Past Year

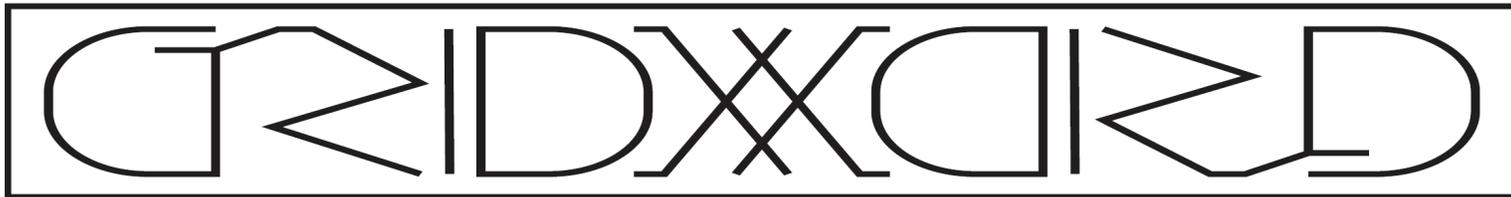
- I painted a picture of you on my ceiling so you're the first thing I see when I wake up in the morning and the last before I go to sleep
- Hey babe, you and me being together makes more sense than the plot of Batman vs. Superman
- I want to slather you with butter and eat you like a potato
- Want to go fool around under a staircase in EV1?
- I might sacrifice my soul if it meant you would show up in my pentacle
- Let's toast marshmallows on the burning fires of our desire for one another
- *gets down on one knee* will you be my bro?
- U better b ready for an attack from smooch monster tonight!! it's already slaughtered twelve
- If we were a creepy family of inbred parseltongues, I would nail a snake to the door to give you a happy greeting
- you know, you might be just one member of the ceaseless zombie horde, but you're special to me <3

Diminutive Rex

Last Issue's gridNUMBER Solution:

6	>	2	5	>	3	4	>	1
4		3	1	4	5	2		6
2		5	3		6	1		4
3		1	2		4	6		5
1		4	6		2	5		3
5	1	6	2	4	3	1	2	3

Submit your comments, hatmail, corrections, retractions, profQUOTES, and articles in the BLACK BOX outside the MC Comfy or email them to mathNEWS@gmail.com!



gridCOMMENTS

I think the experiment with smaller *gridWORDS* is a success! I received several solutions, with great answers to the *grid-QUESTION*, "What's your favourite thing about September?" Honourable mentions to Cheryl (Elephant Appreciation Day), Daniel!!! (The geese leaving!!!), Reila (Getting more jaded as another school year begins), Joseph (It isn't as hot as August), and finally Travis and Arun, both of whom enjoy waking up when September ends.

However, the winner is: **D. McKinnon**, who greatly enjoys **the look on the Imprint's staff's faces when they realise mathNEWS is still publishing**. Congratulations! You can pick up your prize from the *mathNEWS* office at MC 3030. Of course, you should bring your WatCard so that we can confirm your identity.

This issue's *gridQUESTION* is not a question at all; it's a request: "Write a haiku." If you can't think of a topic, might I suggest a haiku about the *gridWORD*?

As always, please submit your solution to the *gridWORD* as well as your answer to the *gridQUESTION* either electronically or physically to the **BLACK BOX** found between the MC Comfy and the glass case with the ties before 6:30 PM on Monday, October 17th. My favorite haiku shall be the tiebreaker, should a tie for most correct solution occur.

ConvolutED's Poetry Corner: Ode to Writing for mathNEWS

Come write for *mathNEWS*
Or draw stuff or mock Imprint
And then have pizza.



We publish poems,
Pretty pictures, painful puns,
Alliteration.

I am bad at this.
Reuse the pizza picture.
Come write for *mathNEWS*!



Pizza picture released to Public Domain, Open Clip Art.
<http://www.freestockphotos.biz/stockphoto/16526>

ConvolutED

gridCLUES

Across

1. Makes do
6. It follows 'United' in a nation's name
10. On the backburner, ironically
11. Doily fabric
12. It might help a child sleep
14. *Big Hero 6*'s Tomago
15. Mirage images
16. One or more
17. Southernmost building within Ring Road
18. Calc. button (the one missing from the last *gridWORD*)
19. "I get it now!"
22. Something good
25. Gunky lump
26. Haphazardly
28. A single graduate
29. Climbing plants
30. Exercise including downward dog, feathered peacock, and reclining pigeon poses
31. Contorts

Down

1. Line dance?
2. Like Shrek, it has layers
3. *This Little* _____
4. Grand Canyon sound
5. Scenery for a play
6. "ConvolutED", for example
7. Cleaning cloths
8. Dull pain
9. Goes for a 19-Down
13. Temporarily 25-Down
17. What Mr. T feels for fools
18. One of Homer's sisters-in-law
19. Poker ultimatum
20. Sank the golf ball
21. Nietzschean recipient of a gaze, and gazer in turn
22. Gone
23. Missile or corn container
24. Powerful punch
25. Donate
27. Ballpoint's point

This week's grid:

1	2	3	4	5		6	7	8	9
10						11			
12						13			
14						15			
16					17				
			18				19	20	21
22	23	24				25			
26						27			
28						29			
30						31			