

Volume 110, Issue 6 Friday, July 24th, 2009





lookAHEAD

mathNEWS	
July 24	Issue 6 barrel roles into our stacks.
July 31	The <i>math</i> NEWS End of Term party destroys some poor person's house
MathSoc	
Tuesdays	Movie Nights 7:00 in comfy
Thursdays	Games Nights 7:00 in comfy
August 1	24 hour games day (starting at noon)
Math Faculty	
Questions about thes	e? See an Academic Advisor
July 28	Classes END!!!!!!
Aug 4- Aug 15	Exams :(
CECS	
Ongoing	Continous round of Interviews
Ongoing	Many many workshops, see them all at
	http://www.cecs.uwaterloo.ca/students/
Miscellaneous	
Upcoming	Exams. Deal with it.

CSC Flash

Now with 50% more Silverlight!

The Fall Term is looming. Now is the time for all good chairbeings to come to the defense of their school — er, to reflect on the events of the term. The CSC hosted a talk by Professor Prabhakar Ragde about the History of CS Curriculum at UW. Yesterday, there was the first offering of the Unix 103 Tutorial. It covered the topic of version control for source code management. Before that, there were three successful Code Parties in the Comfy and a night at Dooly's. Paper Club made an appearance, as did Unix 101. As always, you can pickup the latest Ubuntu Desktop Edition CD's for 32-bit or 64-bit computers in the CSC office. You can also go to the Campus Stapler Club in MC 3036 for all of your campus stapling needs! Our website is http:// csclub.uwaterloo.ca/

> Calum T. Dalek Chairbeing Extraordinaire

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The editor(s):The Rowdy Rough Boys, Brick, Boomer, and Butch: John Stevenson, John Baxter, Rami Finkelshtein

*mast*HEAD

To Whom This May Concern,

Have you ever had one of those moments of extreme clarity when you just figured out that someone's been lying to you for some time? Sort of like catching your girlfriend sleeping with another man... and another girl... and another pillow (for the additional person who was not supposed to be in **MY BED**) and you realized that maybe she was lying when she said she cleaned the linens.

I had a similar experience, minus the months to years of pleasure you received from your girlfriend, with my family. Specifically involving alcohol... not sex. Pervert.

In order to prevent me from drinking at an early age, my parents gave me alcohol at 5. Said it was beer. I found out at age 12 that it was actually spirits from Czech. In short, I stopped pretending to love my family the minute I found I was tall enough to reach the liquor cabinet.

In short, don't lie. It makes Baby Jesus cry.

Question: What lies have you told recently?

"Hi. I write for a famous reputable paper." (42), "I don't lie" (Angelo),"I have such a hard on for you!" (RamED), "*winks at RamED*...ohh it was a lie? that's embarrasing" (prime8), "What's up? nothing *wink at RamEd* you have pretty eyes (Queen B.), "Everything I say is true" (Monkeyspoon5), "Everything I say is a lie" (MonkeyPox),"There is truth in all I say" (The Unnatural Historian), "Hi I am the editor of Imprint and proud of it" (StaticED), "I don't serve the king!" (The Vid Hee Ho ED), "Bah! The pizza is a lie, so come and and write for *math*NEWS" (Unja), "I *swear* I wrote for *math*NEWS. Can I has food now?" (Nadz), "Stephen Fry is (im)mortal. THE MAN IS BRILLIANT!" (tossayo), "42 isn't annoying" (snippet), "I didn't just come for the pizza" (Food Vortex)

InpulsED I tell children that Jesus loves them. **Prez Sexz**

Hello hello dear students! By the time you read this Friday morning (or afternoon for those of you that get to sleep in Friday mornings), the term will be mostly over, which means that I don't have very much to say about it. If you haven't come out to any of our events yet, then it's now officially too late. I know, sad face. But there's always next term.

In overall news, lots of great things happened at the Math Society this term, although not many of them involved math students directly. But since we're always working to "serve you better", never hesitate to email any of the executives at mathsoc@uwaterloo.ca and pitch in your ideas, complaints, and other appropriate words which you think will be useful to someone (really, anyone!).

So, I hope you've enjoyed your term - and that you're still not too stressed out for exams. And after this is over, the co-op half of us will enjoy our bi-yearly two weeks of a break, woo-hoo! (I remember when I first got into university, I called my grandma and she asked, oh, when's your next full term vacation? and I said, hm, maybe in five years...) I personally am planning on vegetating on a sunny beach and drinking away all the memories of exams! Hopefully you'll do whatever makes you happiest =)

Nadia Novikova, your prez for another day and a half

Letter to the editor

I'd like to respond to Emily Chan's letter to the editor from the last issue of *math***NEWS** (Volume 110 Issue 5).

Ms. Chan's first point does not make any sense at all, because Mr. Finistauri's article did not say that making high school more accessible for men would have to come at a cost to women. I am not sure what she was reading at the time, but it was clearly not the same article I read. I fail to see how efforts to increase the percentage of men who graduate (to the same level as that of women) costs women anything.

She also attempts to argue both sides of an issue, perhaps hoping no one will notice. She notes that the majority of math and engineering students are male, and implies heavily that this is due (at least in part) to discrimination against women in these areas. However; when talking about affirmative action, she points out that "women might actually be qualified to begin with" when they are admitted. Aren't men also sometimes qualified for the programs they are admitted to, Ms. Chan?

This is besides the point. However; Mr. Finistauri's article was NOT about the proportion of men and women in various programs, but rather the proportion of men enrolled and succeeding in post-primary education. Indeed, one can argue that it is societal attitudes and not the university system which results in the imbalance for math and an engineering, since women in math and engineering perform at higher levels than their male

Senator Sez

I know that hardly anyone reads this section, however it is still this senator's duty to report her constituency about the ins and outs of UW Senate - and what better way to go about with this other than through *math***NEWS**? Earlier this year, UW was seeking an outstanding academic leader for the position of Vice-President, Academic & Provost and on July 20th, 2009 both Senate and the Board of Governors voted in favour of appointing Dr. Feridun Hamdullahpur as Waterloo's new VP, academic and provost. Hamdullahpur succeeds Amit Chakma in this position who has now been appointed as President and Vice-Cancellor of UWO.

Hamdullahpur's first term at this university would begin on September 1, 2009 and will be running up until June 30, 2014. He has extensive administrative and academic experience from Carleton University and will be using it to bring out the best in our university.

For more information about this - check the press release from earlier this week - http://newsrelease.uwaterloo.ca/ news.php?id=5092

> Ajnu Jacob Math Undergraduate Senator

Untrue Rumours Are Untrue

It has come to our attention that someone has been spreading rumours of Capture The Flag at midnight on Sunday the 26th of July, 2009. These rumours of a so-called "MCTF" are entirely untrue and unfounded. Under no circumstances should you be outside of the Comfy at midnight this Sunday. No one will be there. Please avoid being there yourself at all costs.

> Thank you for your co-operation. The Management

counterparts. For those programs, the percentage of graduates who are women is slightly higher than the percentage of admitted students who are women (StatCan 2007), i.e. the failure rate is lower for women. Finally, the fact that "at least one school" does not apply affirmative action in a negative way is meaningless. Equality should be universal.

Ms. Chan finishes her letter by saying that "claiming one is in favour in [sic] equality does not necessarily make the person actually in favour of equality." If Ms. Chan wishes to call Mr. Finistauri a sexist, she should do so outright and not hide behind implications and poor sentence structure. Bizarrely, I am forced to assume that she didn't say "I am in favour of equality" herself in order to make it seem like she is in favour of it. However, her sexism is shown when she insinuates that men would not seek personal help at a Men's Centre, and thus, such a centre is not needed. The view that men are unfeeling beings carved from stone, who do not need or will not seek help, is just as archaic as the view that women are intellectually inferior.

Finally, if the Women's Centre is really devoted to helping **all** students, then they should change their name to something neutral. I, for one, had no idea that they would "provide resources to all students, regardless of ... gender", and even now would still not feel comfortable going there.

Matthew Read

VPAS Sez

Though I walk through the valley of the shadow of exams, I will fear no evil

Greetings, fellow mathies! Term is drawing to a close, and I hope you've all had a great time. To finish off the term in full revelry, we have planned one final event: a twenty-four hour games day. There will be games! There will be snacks! There will not be sleep! The festivities will commence on August 1st at noon, in the comfy. Show up for as long as you care to, and remember, studying is over-rated.

And with that, I leave you. Good luck on your exams, En Taro Adun, and may the force be with you.

Ian Charlesworth VPAS Spring '09

CONVERSATIONS WITH MATH SOC

Re: Letter to the editor

I'm not going to go give a full response to Emily Chan's response to my article since I feel that I would just be repeating Matt Read's response except in a more polite tone.

First thing to note is that when people believed that women were being shortchanged by the education system and "oppressed" it had been drastically changed. There are conferences, and huge changes to help encourage girls and women in the education system. However, men are the majority of dropouts and men are doing worse overall and none of the same effort which goes into helping women has gone to men. That's sexism. This isn't even an outlier, either. This is a trend. If you look more closely at the StatCan files over the years, this will become apparent.

I would like to remind you that in my original article, I mentioned that male dropouts (who are the majority) reported that they were not engaged in school. The whole point of public education is that it's supposed to be accessible to everyone. This should be a sign that we need to make changes to help it be more accessible to more people.

I would like to retract the wording in my original article, which sounded very accusative towards Affirmative Action (which it is also called in Canada; we use both terms). I find Affirmative Action to be illogical at this point for a few reasons. The first is that I do not have discriminatory practices; I hold one person to the same standard as everyone else. So then why is it fair that I potentially be discriminated against because someone else who was like me has done so in the past? Secondly, the major con-

Sunday night, I went to tea with a couple of female friends and we got to talking about equality. In particular, equality in the education system. That got me thinking again about the articles that we've all seen in *math*NEWS these past couple of weeks, so I decided to add one on of my own. I'll try to be brief, I really only have three things to say.

I'm all for equal rights. I'm a feminist in that respect all the way. The only thing I do not understand is why equality is no longer defined as equal opportunity, but now by equal returns. Yes, 80% of students enrolled in architecture or engineering in 2006 were male. And, yes, 74% of students enrolled in math or computer science in 2006 were also male. But, is it not possible that the number of male applicants also far outweighed the number of females? Don't get me wrong, I recognize that the trend of engineering and math being a more male-dominated field may be the work of some oppressive forces during elementary or secondary education. However, I also recognize that even though we boast about how women can do whatever men can do, we don't necessarily want to do what men do. Not because it's for men, but simply as a result of a lack of interest, or interest elsewhere. I do not dispute the fact that a woman is capable of doing tasks that men do, but I wonder if that woman has the desire to do so. And one cannot, in the name of feminism and equality, force a woman to do the same things as a man. But she certainly has the right to do so if she feels like it. As crude as it may sound, equal rights means equal opportunity - it does not mean equal outcome.

cern is that, why should Affirmative Action be, in this instance, placed against the minority? Third, this is still saying that it's okay to discriminate. This doesn't even guarantee that someone who was discriminated against can be compensated.

In response to my suggestion for a Men's Centre, Ms. Chan suggested that men use the resources from the Women's Centre. One statement she omitted from the Women's Centre is the sentence before her quote. "(About the Women's Centre) We are a Feds service, run by volunteers, who aim to provide and safe and supportive space on UW's campus for all women." For all women. Men have different needs than women, they have different issues, and the resources available for the Women's Centre is likely to help be supportive and welcome to women. Which is why I think we should have a Men's Centre. Also, the scorn and aggression which Ms. Chan has shown me is the same which feminists received in their struggle to bring equity to women.

I have included the link to the stats which both Ms. Chan (presumably) and I have based our arguments on. I would like to point out that architecture, engineering, math and computer science comprise less than 20% of degrees granted. If the trends in this data continue, there will be the problem in which a subculture of the population is being systematically (even unintentionally) undereducated. The number of female graduates matter to the feminists in the same way that the proportion of males matter to equalists and feminists alike. http://www.statcan.gc.ca/daily-quotidien/090311/t090311b2-eng.htm

Michaelangelo Finistauri Still concerned

We're arguing the wrong point, gals

In a lot of debates over feminism and equal rights comes the question of women not being well represented in math and engineering but being very present in the arts and humanities. As long as the opportunity and choice is available to do either, I honestly don't see an issue here. Really, all that is being said is that math and engineering are better fields, that they are of higher worth and the students accepted are of a higher calibre. Essentially, we're saying that the women are in arts because they couldn't do any better. Ouch. That says more about the arts faculty than it does about women. And that's not true. I'm in math because I wouldn't last past 1B in the arts faculty. So what if women were as visible in math and engineering? What of it? Though we are correct to celebrate the ones who are there, we are also correct to celebrate the men who achieved this position. Men are dropping like flies in the education system. According to StatCan "women's participation in university has outpaced men's since the late 1970's." In 2003, 26% of 19-year-old men had attended university. Conversely, 39% of women of the same age had done so. Overall, young men do poorly in standardized testing and have lower educational expectations placed upon them than females. So it's just assumed that women will succeed in education. Isn't that what we were going for as women? To have the opportunity of a great education? To be accepted? Now, we're finding that it's simply assumed that we will go to university, because it is available and because we're capable of achieving that. Shouldn't we be celebrating? I am.

Celebrating women AND men in ALL faculties,

Introduction to Quantum Computing

I've heard a lot of misinformation regarding quantum computing and algorithms lately. I've heard explanations of the quantum factorization algorithm, for example, that range from the totally unbelievable to the plausible but completely incorrect. Being in CS 341, I am clearly an expert on all algorithms, so here is a quick and definitive primer on quantum computing.

In the Beginning

Quantum physics was invented so that there could be something more complicated and weird than Einstein's theory of general relativity. This was no easy task, so it took a while.

Fortunately, a really smart guy named Richard Feynman was clever enough to beat Einstein. He realized that the only thing more confusing than a weird answer is not to have an answer at all. Soon it was decided that in order to make the universe as confusing as possible, you should be allowed to know some of its state, but not the whole thing at any given moment. At some point during this, some guy decided to kill a cat, but he was probably just a sadist.

Of course, Einstein, whose reputation as the most confusing physicist was at stake, took issue with this theory. He pointed out, correctly, that it didn't make any sense. Fortunately for integer factorization, no one listened to him.

Applications

Surprisingly, a theory based upon the premise that we can't know the state of the universe has applications that can actually help us compute things. Here are a few algorithms that use quantum mechanics to help compute things faster and better than ever before.

Quantum Bogosort

Bogosort is one of the worse sorting algorithms known. It works by taking an unsorted list and repeatedly randomly permuting it until it becomes sorted. This basically taked $O(n^*n!)$ (number of permutations times time it takes to verify whether one is in order or not) time, so it is pretty bad. Quantum Bogosort, on the other hand, solves this problem simply. Some versions of quantum theory hold that for every possible choice, separate universes are created for each outcome. Thus, if we randomly permute an unsorted list of numbers once, in at least one universe the list must have been sorted correctly. This leads us to the following algorithm:

```
quantum_bogosort(int[] A) {
   randomly_permute(A);
   if (in_order(A)) {
     return A;
   } else {
     destroy_the_universe();
   }
}
```

Whichever version of us exists in the next moment will then have a sorted list, yielding an O(n) sort.

Isn't quantum mechanics great?

Quantum physics isn't just applicable to boring CS problems. It can also be applied in everyday life. Next time you're stopped for speeding, just remember that quantum mechanics allow for imaginary velocities, and in the absence of measurement, you might be right to have the following conversation:

"Do you know how fast you were going back there?" "3i km/h, I believe, officer."

"...Is that less or more than the speed limit?"

"I couldn't say, sir, you can't place an ordering on the complex numbers."

It can also solve some of life's oldest mysteries:

"If a tree falls in the forest and no one's around to hear it, does it make a sound?"

Yes and no.

Conclusion

I hope I've given you some insight into the wonderful world of quantum physics. If anyone at the IQC is looking for a graduate student, I'm graduating in 2011.

Jeremy



profQUOTES

I wish I could ... I wish I could ... (waves hands over head) could ... ARTICULATE

P. Hoffman, PMATH 330

Instead of worrying about political issues you should be worrying about procreation.

Z. Miskovic, AMATH 353

So let me do some mathiness here \dots

R. Melko, PHYS 334

(After confusing gamma and niu) That's precision physics right here.

R. Melko, PHYS 334

On the exam, you'll get an integral formula sheet, so you can be almost as lazy as me.

R. Melko, PHYS 334

I could draw these functions, but some nerd already programmed a Java applet to do it for me.

R. Melko, PHYS 334

We can choose one of x, y, or z. We'll choose z just so that when you go to the US you can freak everyone out . They say "zee."

R. Melko, PHYS 334

This is way too much work. Well maybe not for an assignment, but way too much work for me.

R. Melko, PHYS 334

(After making a mistake on the board) Well, you get what you pay for.

R. Melko, PHYS 334

They (functions) have to be "self-conjugate" but I don't think I should be saying that in class.

R. Melko, PHYS 334

At that time, most of the traffic is university students who, of course, wear seat belts all the times because they're highly educated. (Class laughter) You don't need to laugh at that.

P. Marriott, STAT 231

0.1 is exactly as magical as 95%. That's a theorem.

P. Marriott, STAT 231

This is a homogeneous Poisson process — I just put 'homo' there, it doesn't mean homomilk.

(Sunny) Xu Wang, STAT 340

Prof trips and falls How'd that happen? I'm perfectly sober! No really, I am."

Anon

You behaved as a group as I would expect humans to behave, which makes sense because most of you are humans ... I think. P. Marriott, STAT 231

It's an annoying scale; it's linear, it's stupid. Aside from that it's fine.

P. Marriott, STAT 231

This is a much more precise way of doing it. That's crap! P. Marriott, STAT 231

So Randy takes his 100-sided die because he plays Dungeons and Dragons...

Orchard, CS 370

I tried it on my Mac and my Windows and it works on both; what else is there?

Orchard, CS 370

Prof: What word has different meanings? Student: Coke? Prof: Sure, are you offering?

Orchard, CS 370

Student: What's the motivation for this? Prof: Grades, mostly.

Orchard, CS 370

If you are drunk inside an interval, how long will it take to get home?

Chan, CS 466

You have sex with stupid people and bad things happen.

L. Smith, ECON 102

(On German teacake) If you gotta die, that's the way to do it. L. Smith, ECON 102

Stalking people at the ATM is not a good thing to do. Take it from me.

L. Smith, ECON 102

This student said: "I have all this Canadian Tire money, let's do something useful with it; get drunk!

L. Smith, ECON 102

It's crawling with security guards, but no real people. L. Smith, ECON 102

(On head of central US bank) This is not a job you'll find on Jobmine

L. Smith, ECON 102

This is the answer you never give the bank: "I would like the proceeds in low-denomination bills in a brown paper bag".

L. Smith, ECON 102

There's Manulife, there's Sun Life, there's AIG ... no, wait ... L. Smith, ECON 102

I need a drink ...

L. Smith, ECON 102

Mathies will explain it to you. They have no friends.

L. Smith, ECON 102

Prof: it is probably NP-hard to find an algorithm with approximation factor better than 2.

Student: i think i know how to get an optimal algorithm. Prof: tell me, i'll put it on the homework

D. Chakrabarty, CO454

Scala is freaking awesome!

K. Czarnecki, SE 464

Student: Since the midterm is cumulative, how much of it will be on the first few chapters and how much will be on chapter 4? Prof: The proportion of the midterm that will be on chapter 4 is Pi, where Pi is an unknown constant.

P. Marriott, Stat 231

All Night Gaming

To finish off the term in style

So this was an interesting term for the gaming nights. We have now been meeting weekly for the past term and we have some awesome news! First of all, we have spent nearly \$400 on new games (and we have some awesome ones), from nice and simple games (like qwirkle and jenga which seems to be a huge hit at the mathSOC office) to a little more heavier (but nevertheless fun) games like formula D, cash N Guns (where you get to point foam guns at all of your friends) and Space Alert (which is most likely the most exciting and stressful 10 minutes EVER). The second piece of awesomeness that we have achieved this term is the WatSFiC/mathSOC agreement, which gives us another bookshelf worth of games (and they have quite a collection), so in all it has been a good term.

As a last note: On Saturday August 1st we are holding a mathSOC/WatSFiC 24 hour games day, where we will play all of our new games as well as old favorites with light snacks and food to be provided. Come out and enjoy yourself before horrible exams set in and you are left an empty shell!

The Most Important Numbers in Math

- 1. Zero. Invented in India, the cornerstone of the Arabic numerals, and the identity for addition. Be glad you're not using Roman numerals. [If zero is so important, how come this sequence begins at 1? — RamED.]
- 2. One. A relatively uncontroversial number as the first natural number, and the multiplicative identity.
- 3. Pi. Known since antiquity, and erroneously celebrated last Wednesday. Irrational to the last digit.
- 4. e. The base of the natural logarithm, and described only centuries ago. Essential to the calculus.
- 5. i, the imaginary number. A controversial number and derogatory name. Was not accepted until relatively recently.
- 6. Phi, the golden ratio. Discovered in ancient Greece, and found in architecture with aesthetically pleasing proportions. The closed form for the Fibonacci sequence includes the golden ratio.
- 7. Gamma, the Euler constant. Appears in the zeta and gamma functions. The later relation signifies the number's salience to the fields of probability and statistics.

Games Director

Movies Headlines that I Want to See Produced

Because 2012 and G-force Seem to be the End of Hollywood

- Judy Dench in a Michael Bay Film: Exploding Nanny
- Land Before Time XXX: The Destruction of Sodom
- Angelina Jolie in: Where in the World is Carmen Sandiego?
- Johnny Depp in: Where's Waldo?
- Angelina Jolie and Johnny Deep in: Where's Waldo? In Carmen Sandiego!
- Jim Caviziel as Adolf Hitler in a movie banned by the FCC
- Chuck Norris in his own autobiographical movie (because nobody else can play him)
- Michael Cera as: Angelo, the Mathy who Mathed Forever
- Russell Crowe in Gladiator 2: Throwing Phones in Another Life
- Starcraft the Movie: Christian Bale as Tassadar, Seth Rogen as Raynor, and Tom Cruise as the Overmind

- Reboot: Windows Vista
- Leonardo DiCaprio in: Chernobyl, a Greener Solution
- Sean Connery in Alex Trebek's Mother
- Pac Man (Would star Keanu Reeves, but he's not two dimensional)
- Pong with Keanu Reeves
- Rodney Dangerfield and Billy Mays in: Loud Outrageous Zombies
- Peter Jackson and Michael Moore in: Epic Obesity Documentary
- Blue Man Group as: The Smurfs
- Leonard Nimoy and Morgan Freeman in: 2 Narrators, 1 Movie
- Jason Statham and Vin Diesel in Army of Bald

Nice knowing you, my friends

Hi peoples, clearly mathNEWS readers!

The term is ending!! Aarrgghhh!!! Isn't it scary? I thought that 2 weeks ago, it was only June. Well, anyway, so I thought I was going to continue what I wrote in the last issue, I won't even bother. I got confused about what I was writing and people think that my entry was funny. I decided to talk about something kind of important to me: friends. Hey! Give me a break! If they are not there, I think I would already be at the lowest point of my life.

Let me tell you, being an international student here, you get to meet a lot of different people from different backgrounds. Plus, even if people come from the same background, they still have different characteristics, each and everyone of them. Sometimes, you just can't count with your fingers and toes anymore. Google defines "friends" as "people you know well and regard with affection and trust"; Isn't it cool that they say, "regard with affection and trust"? But maybe we do actually trust them with our feelings. It's like being friends is a trust exercise. Here, let me list some of characteristics of friends for you.

- 1. There's the ones that listens to all your rants and stuff and you trust them to keep it a secret
- 2. Then, there's the ones that listens to you and say they'll keep it a secret, but they just go around telling people
- 3. There's the ones with all the ego and they ALWAYS want everything to go their way
- 4. There's the ones that says that they'll be there for you, but ditched in the end
- 5. There's the ones that don't even give a damn about you
- 6. There's the ones that always wants to know what's going on with you
- 7. There's the ones that takes things too personally
- 8. There's the ones that's too sensitive
- 9. There's the ones who just don't give a crap about what they do when it really affects you
- 10. There's the ones who don't think before speaking
- 11. The ones who just won't shut up
- 12. The ones who just don't keep their promises
- 13. The ones who takes advantage of a lot of things / their friends
- 14. The ones that just annoys you all the way
- 15. The ones who catches you when you fall

Well, okay there's probably more but I can't think of any right now. I think I should give them a break, too. Nobody's perfect,

right? But, I mean, think about it. Would you want your own friends to do whatever bad things you do to you if you treat them badly? Yes, humans have their egos. Some have a giant huge one. (Okay, now my English just goes wrong). I just think that there's a time for you to be however you are, but there's a certain time when you should just lay low. Don't keep on doing it because it might hurt some people who are close to you. It's like, you think you're not doing anything wrong but it kinda affects your friend and they don't bother telling you just because there's no use. I think it's bad if someone would think that there's no use of telling another person that they're doing something wrong because they've done it too many times or like, someone just directly says "it's kinda expected" to your bad habits.

Yes yes, we humans don't really like to hear the ugly truths about ourselves. I, myself, don't like it, either, but I just tell my friends to tell me what they don't like about me. Well, if there's no wake up call, how can we wake up and change? Okay, I think I want to share a story in here. So last term, I wrote for *math*NEWS as the Sexy Whore, and I retired because of some guy. That guy kinda ditched, and I was in MathSoc afterwards with three of my other friends. Hmm, I'll call them Kat, John and Rick. John and Rick were away about the story, so I just kinda told them the story about how it all started until the end. I even got to clear the air with John. OMG, talking is the most effective way to know what's going on. Assuming is very bad! (I know this from experience.) If the three of them weren't there, I think I could've broken down, but something else was going on at that time that made me start laughing again. I'm pretty happy that now everyone's just kinda hanging out in MathSoc. I'm not saying that you only have fun when you hang out in MathSoc, but to know that you have friends who will be there to laugh or be sad with you is pretty sweet. Also, I think that when you're unhappy with someone, you shouldn't just glare at them because sometimes they won't know what's wrong - you should talk to them instead. If they get mad at what you tell them, then it's their loss for not appreciating someone who cares for them.

Oh well, I think I'm done talking/writing now. I'm going to continue my assignments now. sigh.. But be happy, the term is ending! See you next term!

xoxo peace friends,

Queen B.

Today I Am Dead

To the tune of "Today I Awake"

Today I awake, and dirt is above me! I'm trapped in this box, alone in the dark! For I wasn't dead, I merely was sleeping! I really had thought that they'd check my pulse.

Life in High School was Easier

Seriously. Here's dury even have to give your name - they'd take anyone out. It's awesome!

Math Classes

You know what I'm talking about! If they take two years to teach you the concept of "slope" (which, by the way, is simply the tan of the angle of the tangent to the curve), I'm not quite sure how anyone can get lost. And then, when in final year, you are finally faced with the frightening concept of "proof" and all the non-future-math-majors huddle under their desks and cry, you can finally chuckle to yourself and begin solving test questions in less lines than the marks they're worth.

• All Classes

Ok so maybe a couple of English essays stomped you, but they were no match for the English teacher when you pulled out the tech vocab and graphs full of code and equations. Everyone gets intimidated at the look of the future millionaire =)

• Dating

Ok, so dating was so much easier before all the boys grew facial hair. You'd never believe how awkward it is trying to tell someone that he needs to shave - and the more he needs to shave, the more awkward it is! Seriously, is personal hygeine so much to ask for?

Oh, and the selection. Now, high school may have had its standards, but if you wanted to date the average kind of mathie or engineer you find here nowadays, it wasn't very difficult, all you had to do was pass over your number. You • Cliques

Admit it, they made everything easier. Whenever you wanted to refer to someone by the right word or whatever, it was just always there, available at the tip of your tongue. And there was always someone to fit in - even if your thing was about fitting in with the misfits. Oh, and they always told you who to be jealous of and who to make fun of. It's like all your *math***NEWS**-entertainment was right there in front of you (you just can't always laugh out loud)!

• Drinking

So much easier to just grab from the parental's bars downstairs. Just gotta keep them thinking that you're still nice and innocent.

• Jobs

That's right, I had a burger-flipping job in High School. And guess what? The students where expected to fail! We were watched over every second, and if someone made a mistake, the supervisor was blamed (because how exactly do you blame a junior?). Nothing like co-op at all, where your employers actually expect you to know something and be able to do something on your own. Strange...

Nadz

Who wants to burn her High School Have You Ever Considered Becoming Nocturnal?

Night is the new Day

Is the sun too bright?

Do the tribulations of the morning people prey on your sensibilities?

Are there simply too many distractions to get your work done in daylight?

If you said yes to any of these questions, then you could be suitable for a Nocturnal Lifestyle!

There are many reasons to be one of the people of the night. The main one is that there are way fewer people. To truly be nocturnal, you must get up at sunset and hit the dorms at dawn. This is typically untenable with the usual course schedule beginning at 8:30 am for the atypical morning person. This article will tell you a few tips and tricks to make the most of the moonlight hours.

First how does one actually maintain good grades? In this respect, there are many options. Get friends to video tape the lectures. Take the 3 hours evening classes only. Or best yet, Distance-Ed. UW has a huge number of Distance-Ed classes and it is, in theory, feasible to complete a degree doing it. But this doesn't work for us mathies. For this I recommend taking classes that only require the course-notes or a standard textbook. To study off of, of course. Borrowing friends' notes is also a must.

But what are the benefits of this strategy? You never need to

invest in sunscreen. There are less people around, so there's less to distract you from the all important getting things done. For those few you who have no friends (and we know you exist, you are reading *math***NEWS** after all), this won't be a burden at all! For those of you with friends, you'll be able to out-drink, out-stay-up and generally outlast all the rest of your friends at your inevitably epic parties.

But the people you do meet are far more interesting. Like MonkeySpoon5! He lives on the internet. Also werewolves and vampires? How could you meet Dracula unless you're up at all hours of the morning? As a person of the day, how many knife brandishing singing hobos do you know? Zero! Exactly my point! I know five, and we play poker on Wednesdays. Salt of the earth, people!

Speaking of people on the internet. No news happens in the middle of the night, not for any readers of slashdot or other news sites! No need to compulsively check email or your rss feeds since they won't be updating! With so few distractions being nocturnal ends up being the best productivity tool!

So how does one join the eminent ranks of the nocturnal? It's simple! Just submit a self address stamped envelop and a blank check to the *math***NEWS** Express Payment Box (AKA the black BOX) on the third floor and we'll send you the key instructions you'll need to start your journey into the dark side!

Dark Side Cookies sold separately.

Horrorscopes

These were written with a little help from my girlfriend so, y'know, blame her this time

ACCOUNTING: You fall asleep in your Advanced Addition for Accountants class, and are rudely awakened by your professor screaming at you. He chews you out in front of the entire class, ranting about how important it is for accountants to be able to accurately perform addition. He starts frothing at the mouth, and you run away. Next class your new professor informs the class that he had rabies.

Your lucky number: 3 + 4 = 5. (Pythagoras, bitches!)

ACTSCI: As a play on your program name and *Scientific Ameri*can, you start a program-specific newspaper called *Scientific Actuarian*. A classmate begins arguing with you over whether "actuarian" is even a real word. You tell him that you thought *Scientific Actuary* sounded stupid. He points out that it's friggin' stupid regardless and stabs you in the liver.

Your lucky number: 39 stitches.

AHS: You apply your health science to Michael Jackson's body and manage to revive him. People with no lives rejoice, but you are burned at the stake as a witch in New Salem, Texas. As the flames eat at your body, all you can think about is how you could make a funny Mongolian Grill joke if only you were descended from Genghis Khan.

Your lucky number: 32+ million people are actually descended from him. Look it up.

AMATH: On one of your final exams, you are asked to apply maths to the age-old question, "How much wood would a wood-chuck chuck if a woodchuck could chuck wood?" You try setting f'(x) to zero, to no avail. Even setting f''(x) to 0 goes nowhere. Grasping at straws, you set the integral of Aboreal Muskrat Boner to 0 and start to solve for the limit, but run out of time.

Your lucky number: As much wood as a wood chuck could chuck (if a woodchuck could chuck wood).

ARTS: Your parents are miserly and you were too lazy to get a job in highschool, so you have gotten a headstart on being poor and living in a box. You put that box in a bigger box and then you mail that box to me, and when it arrives I SMASH IT WITH A HAMMER! I then proceed to make terrible jokes about it being Hammer Time. My girlfriend is ashamed and sells me.

Your lucky number: 1 ("Cos that's as high as an Arts student can count," she says).

C&O: After tossing and turning for an hour you go to the living room, where your roommate is watching TV. He suggests that you try counting sheep. You take his suggestion, but start trying to apply enumerative combinatorics so you can find the number of sheep more quickly. You are an insomniac for the rest of your life.

Your lucky number: Twelvefold.

CS: You take CS 349, User Interfaces, in the hope of getting hired by Apple. However, your interfaces are not "simple" enough and sometimes require the user to have a rational thought process. The Wonderful Wizard (Woz) starts screaming about chimpanzees and hits you over the head with a Mac Mini.

Your lucky number: 2 times the price, half the productivity.

ENG: This week you are in chemical engineering. You have no student debt because there are 300,000 scholarships for chemical engineers and no one knows why. All the other engineers who are paying exorbitant fees without any help gang up and kill you. At the funeral, your parents announce that they are creating an endowment fund in your name. The murderers die

of irony poisoning. Your lucky number: \$2,000 awarded to "A student in Chemical Engineering who once blew up his highschool."

ES: You move up North to get in touch with Nature. Nature tells you to stop but you just keep on going. She calls the cops and you are labelled a dangerous sex offender. You go to jail and spend the days soul-searching, but your inner child calls the cops too. Pervert.

Your lucky number: 163-year sentence.

MATHBUS: You become a successful enterpreneur by inventing and selling a better paperclip. However, another company perfects digital paper, replacing the need for multiple pages with a "next" icon, and you start to lose business. You hire a hitman to kill their CEO, but you get caught. You die in an epic car chase while fleeing from the police.

Your lucky number: 7.

MATHSCI: You start your own paper, *Scientific Mathematician*, and get into a feud with the editors of *Scientific Actuarian*. You write a nasty article involving their mothers and a barrel of monkeys and are sued for libel. You settle out of court and retire from the newspaper business.

Your lucky number: \$400 cash and a barrel of monkeys.

PMATH: You secretly try applying maths, and become addicted. The Guild of Pure Mathematicians learns of your depravity and bans you from ever practising pure math again. You leave the halls of academia forever and become a productive member of society, discovering mathematical models that are actually useful and benefit large numbers of people.

Your lucky number: However many pure math students it takes to screw in a lightbulb.

SCI: You decide to become a mad scientist and create and interesting monster with an even more interesting hairdo. The hairdo requires immense amounts of gel so you set out to invent a cheaper, stronger alternative. After months of research, you release Jekyllide on the market. Beehives make a comeback and I find you and slap you with a trout.

Your lucky number: \$2 per bottle.

SOFTENG: For your Software Architecture course, you write a drafting and modelling application for architects. Your professor attempts to explain to you that that isn't what software architecture is about, but you ignore him because he is boring. You spend the rest of the lecture playing Tetris.

Your lucky number: 464.

STAT: For your birthday, your girlfriend (play along) gives you a gift certificate for Abacus World. You go to the store and are awed by their selection. You eventually settle on an oak frame with brass wires and green marble beads. "Finally," you think. "Finally, I am a real abacist."

Your lucky number: 000-0-00.

UNDECLARED: For your birthday, your boyfriend gives you a gift certificate to Reitman's. Only old ladies buy clothes there, but you go anyways to make him happy and are awed by their selection. The only problem is that you can't decided on anything. "This one's too hideous, this one's orange, this one smells like my grandma," and on and on. You are kicked out of the store and are hit by a bus while walking home.

Your lucky number: 2-tops-for-\$40 sale ON NOW!

Unnatural History

math*NEWS*

In the begining... there was math. Then we tacked **NEWS** onto it. But that's not the whole story. For the whole story we must go back. Waaaaaaay back. To the start of the epoch. Ok, shortly after the epoch. Give it a year. The mathies were restless. They had been doing their math for a full graduating class. But they didn't feel satisfied. The must have been more. Something beyond the integrals, the analysis, and the batch jobs that suffused their existance. Great ground was being broken in math and CS! But the mathies no longer wished to us their creativity! So one day. In 1971. They wrote an article. And it began like this... "They did and it didn't" And then they wrote about real news, they reported about the nice things. Like the C & D. When it was just a stand on the 3rd floor. And for a time... it was good. And then it got better! Puzzles were placed. Gridwords were generated. profQUOTES were professed. And columns came and went as students graduated. And that's the truth. Or so I shall tell you. The real story is way more exciting. It has dinosaurs. And high powered lasers. And several rings of power. I recall a time machine was involved. How did you think the science paper *Dark Matter* came about? At one point there was a division by zero. The less said about that, the better. In either case. the mathies rejoiced. For they had *math***NEWS** !

The Unnatural Historian

CONVERSATIONS WITH MATHSOC When I fall, I usually think through the safest way to land ... When I fall, I think "AAAH! I'm not attached to the ground!" and then there is GOTO LINE 1, and a Thump!

19 Drinks and No Regurgitation

I do not suggest this. Really, don't do it.

- 1. Tequila, complete with salt and lemon.
- 2. Guiness.
- 3. Alexander Keith's.
- 4. Jagermeister.
- 5. El Nino at Mongolian Grill.
- 6. Dr. Pepper (shot of whiskey dropped in beer).
- 7. Goldschlager.
- 8. Rocky Mountain Bear Fucker.
- 9. Something with Kahlua in it.
- 10. Something else I can't remember.
- 11. Some sweet green shot.
- 12. Some sour red shot.
- 13. A light beer.
- 14. Another light beer.
- 15. A body shot of tequila.
- 16. Some other drink at the strip club.
- 17. Some beer at some other bar away from the strip club.
- 18. Some other drink at the same bar.
- 19. Triple Sec and Sprite as it was the first thing in the cupboard.

monkeyspoon5 Doesn't know whether or not he had fun that night.



Across

- 4. Clark Kent's girlfriend's last name
- 6. Sentient spunk blob
- 8. Super horse
- 9. Cannonball's alias
- 11. Dinah Lance: Black
- 16. Wonder Woman substitute
- 19. Elastic Man, Flamebird
- 20. Site for Cyanide and Happiness
- 22. Inventor in Duckburg
- 23. Starfire
- 24. Whore wielding many appendages
- 25. Superheroine prostitute, not prostitute on heroin
- 26. Unpronouncable

Down

- 1. This group gave gory comics to kids
- 2. *math***NEWS** writer
- 3. Kitty's last name
- 5. The Submariner
- 7. Gender changing insectoid Avenger
- 9. Martian Manhunter's last name
- 10. X-witch
- 12. Army of One
- 13. 10 Down's X-husband
- 14. Green Lantern's original source of power
- 15. Hawk Man's home planet
- 17. Premature sidekick
- 18. Fifth Brainiac
- 21. Martian Manhunter's first name

Interesting Title!

Here at *math***NEWS** we like to reward those writers who don't secretly mock our silly hats and occasionally write good articles. So without any further delay, here are the top prize winners of volume 110 (winners can email us to pick up thier prize):

- Issue 1: Angelo for his polygamous shanty
- Issue $2: o_o$ for her awesome comics
- Issue 3: inXSE for making people cry
- Issue 4: 42 for showing us how messed up the internet is
- Issue 5: cache-22 for "F"-ing Mr. Christie's cookies
- Issue 6: Nadz for reminding us why we left highschool

The Editors

Tbor's Comic Gridword!

Once again, I bring a horrible gridword. And I mean horrible. Because you guys have forever to complete this gridword, I decided to go in the darkest corner of nerd-dom: Comics. Because I know very little of said corner, I hired a crack team of professionals/chimpanzees to research the most obscure super heros ever.

I loved writing this gridword so much, I'm never going to be nerdy about anything else. Last week's gridword brought another slough of entries, so it was once again a major contest. This paragraph is my mastHEAD answer, as I obviously got this in on time.

Actually, we did get one response, from Leah H and Dan P, who almost aced it. You guys can contact the *math***NEWS** editors at mathnews@gmail.com. Their question to the ninja was: "What is the airspeed velocity of an unladen swallow?" The ninja promptly killed them, as Monty Python is so 90's, so the editors will probably not be getting their email.

