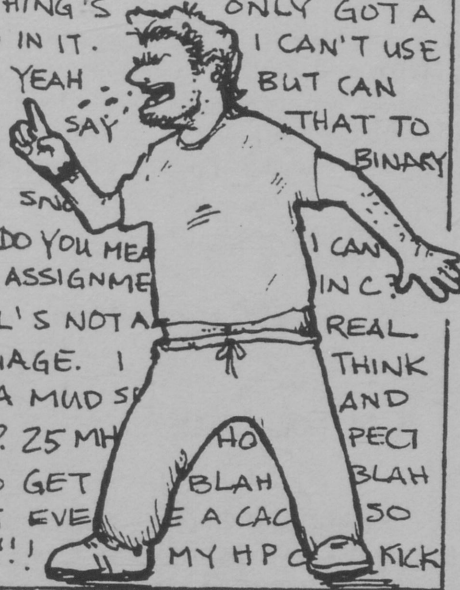# *math*NEWS

Volume 67, Issue 4   Friday, March 3, 1995
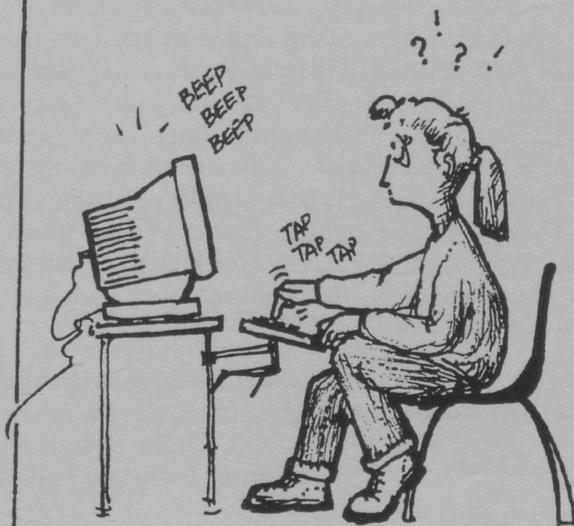
MC ACTION TRADING CARDS VOL. 1

... See your favourite characters from MC in exciting action poses. Collect all 57C cards. Trade them with your friends.

CS MAJOR I

THAT THING'S ONLY GOT A 68030 IN IT. I CAN'T USE THAT. YEAH . BUT CAN YOU SAY THAT TO ME IN BINARY (SNORT SNO WHAT DO YOU MEA I CAN DO MY ASSIGNME IN C? PASCAL'S NOT A REAL LANGUAGE. I THINK THAT A MUD S AND WHAT? 25 MH HO PECI ME TO GET BLAH BLAH DON'T EVE E A CAC SO WHAT!! MY HP KICK

CS MAJOR II

BEEP BEEP BEEP

TAP TAP TAP

? ? !

QUINTESSENTIAL MATHIE

2CCB 7BAB

EMACS? THAT'S BLASPHEMY!

I'LL SHOW HOW TO IMPLEMENT IT WITH A SIMPLE RECURSIVE COROUTINE

?

OH MAN.

L·N

Bake Sale!

mmm...PMC&OC speaks!

Well folks, yet another month looms before us. Yet this time it comes with yummy baked goods! Next Wednesday, March 8th is the date of the Pure Math and C&O Club Bake Sale! We'll be out in the hallway in front of the C&D and Comfy Lounge, selling all sorts of delicious treats baked by friendly (and *much* appreciated, let me tell you) PMC&OC volunteers. It's a great way to satisfy your sweet tooth.

For your intellectual sweet tooth, we also have fun and informative talks! Last Tuesday, Drew Vandeth talked to us about "Infinite Words Over Finite Alphabets"; thanks, Drew! And next Wednesday (Same day as the bake sale! What more could anyone ask from a Wednesday?), we'll hear Prof. Gilbert give his talk; watch for posters.

What else? Our next and last scheduled co-rec volleyball game is next Thursday, March 9, at 10:00pm in PAC court 3. And the club office is right where it always is, MC3033, down the hall from the C&D. The club has couches, a lending library, a fridge, and coming soon: a new coatrack!!! (Well, it's big news to us.) Drop on by!

And remember: yummy bake sale!

Peter Milley
PMC&OC ambassador to *math*NEWS

ActSci Club

Hi everyone!

How was your reading weekend? Hope you were back in time for Wednesday's talk. Rob Brown spoke on the proposed changes to the SOA exam system. If you missed this - where were you?? This is your future we're talking about, people!

Next Thursday, March 9, we will have a speaker from Algorithmics coming in to talk to us. Algorithmics is a strategic risk management company from Toronto - this will deal primarily with investments. See the club door (MC3030) for more details.

Remember that you can still stop by the club office for Actexes—May is coming up fast! We'd also be happy to answer any questions you may have about Rob Brown's talk if you missed it, or any other topic about ActSci! Also don't forget to order your cool ActSci club hat! They cost just $14 for members.

April Gale
Publicity Director

Prez Sez

The midterm blahs have hit us all. Hope you survived 'em. Math Bomber night was outstanding! Congratulations to all those who won door prizes and the tournaments.

Congrats to Jane Pak for becoming the first Mathie Fed Prez in a long time. Have a good year.

MathSoc has a couple of events coming up in the near future: Rock climbing, movie night.

There will be a co-op forum in the DC fishbowl on March 9th at 2:30 pm. Come out and discuss what you like and dis-like about co-op. Access will be on the agenda.

Coming soon to a Maclab near you: a PC! with scanner, CD-ROM, and other fun stuff. MathSoc currently has 3 Macintosh computers available to all math students, as well as study rooms on the fourth floor of MC. Drop by the MathSoc office for more information.

Have fun wading through the post-midterm assault of assignments, and if you feel like it, drop by the exec office (MC 3035) and have a chat.

Ronald Servant
President of MathSoc
rservant@undergrad.math
http://www.undergrad.math.uwaterloo.ca/~mathsoc/

mastHEAD

Well, here we are, scurrying about doing *math*NEWS production and layout throughout Wednesday. "Why Wednesday?" you may be asking. (And I'm going to tell you, even if you're not asking!) It's because both your esteemed editors had a midterm on Tuesday! (How did it go? Don't ask. **Please**, don't ask.) So we've been forced to rely on Marion's good graces and hope that getting this issue in Thursday morning is good enough!

So we'd like to thank Marion in advance for doing her best to make sure that this issue gets out on time! Thanx, Marion!

And as long as we're thanking people, this issue just wouldn't have been possible without: Stuart and Dale, who ran Writer's Night for us; Mega Pizza, who kept us well-fed and content; and all the really, really nice people who wrote and proofread while we were studying our brains out! We love you all, and we'll remember you if we ever win the lottery! These are the people who came out to help, along with their favourite co-op job:

Dale Wick (Exploring the Web (and reading news)), Brian Fox (International Arms Trader), Marc Ducharme (Supreme Ruler of the Universe!), Darren Rigby (Anything that pays 5 or more digits *[Give that man a* hand! *– HammerEd]*), Stuart Pollock (Co-op Rent-A-Coordinator), Darren Morby (Cigarette Smuggler — now hiring), Adam Benjamin (Senior Federal Budget Planner), Marco Koechli (UW Parking Meter Cop), Dave Vernest (Guy who has to climb on the SkyDome and push the roof closed when it rains), and

Mala "Crakko, The Warner Cousin" Krishnan
(Computer Animation Designer for Warner Brothers or Disney)
Mike "Hammer" Hammond
(Intern at Industrial Light and Magic)

Bridging the Gap

Sometimes you have the opportunity to take advantage knowledge you have of the opponents hands during the auction.

Vul: N-S
Dealer: E

```
                 North
                 ♠ K 10 x
                 ♡ A K 9 8
                 ◇ A x x x
 West            ♣ 7 2        East
 ♠ Q x x x x                  ♠ A J x
 ♡ Q J x x x                  ♡ x
 ◇ K 9 8         South        ◇ Q J 10 x x
 ♣ Void         ♠ x x         ♣ K Q 9 3
                 ♡ 10 x x
                 ◇ x
                 ♣ A J 10 8 6 5 4
```

East	South	West	North
1 ◇	3 ♣	Dbl.	All pass

Opening lead: ◇ 8

The auction was brief. Three of clubs was a pre-emptive bid, and the double was showing the major suits. In this case, that hand was decidedly minimum for that call. East didn't really have a clear choice of bids, and thought that, at this vulnerability, it wouldn't hurt to go for the gusto.

West led the eight of diamonds, which went to the ace. Now, put yourself in the South seat. What kind of hand does East have to pass three clubs doubled? Where are all the clubs? Almost certainly, they are mostly in East's hand. If clubs are 3-1, then we just need two finesses, or some other nice things to happen along the way. So at trick two, the two of clubs is led, covered by the three...and declarer plays the four, with West showing out!!! (Tuna would have been proud).

Now it is a relatively easy matter to cross to the ace of hearts, and play a second club, picking up the suit for one loser. The only situation where this doesn't pay off is when West has the singleton nine, which is hardly likely on the bidding.

At the table, South actually played the jack of clubs, and swore under his breath. He still had a chance though. There weren't enough entries to shorten his clubs for a trump coup...but if the queen and jack of hearts were onside, then he could finesse the eight on the first round and avoid any losers in that suit. This doesn't seem like too much of a long shot, given that LHO did have the majors. In fact, to maximize his chances, declarer should play a spade at trick three to the king, to discover the location of the ace of spades. When that shows up offside, then the queen and jack of hearts almost certainly have to be onside.

All this thinking would have benefitted declarer a great deal.

Eric Sutherland

Ode To The Editors

to the tune "We Wish You A Merry Christmas"

> We wish you a Mala Krishnan
> We wish you a Mala Krishnan
> We wish you a Mala Krishnan
> And a Mike Hammond, too!

Stuart Pollock

*look*AHEAD

mathNEWS	
March 13	Issue #5 production night 6:00pm, MathSoc (MC 3038)
March 17	Issue #5 hits the stands
Math Faculty	
March 6-10	**Fall/Winter Term Pre-Registration**
March 6	1B and 2B Info. Night 7pm, MC 4*th* floor
March 7	3B CS Information Night 7pm, MC 5158
Co-op	
March 3	Employment Acceptance Day 2 Posting #2 (cont. phase) expires 8pm
March 6	Posting #3 (cont. phase) available 10am
March 7	Posting #3 (cont. phase) expires 8pm
March 8	Posting #4 (cont. phase) available 10am
March 9	Posting #4 (cont. phase) expires 8pm
March 13	Posting #5 (cont. phase) available 10am
March 14	Posting #5 (cont. phase) expires 8pm
March 15	Posting #6 (cont. phase) available 10am
March 16	Posting #6 (cont. phase) expires 8pm

CSC Flash

Uhh...there is none.
Faithful followers of the CSC Flash, I'm afraid there's nothing to read this week. Stay tuned next issue for the next set of ever-thrilling activities planned by the CSC.

The Mor'on Speaks...

In the beginning, there was nothing. And God created Students.

And God said, "Let there be Weekend," and it was good. And it was VERY good. And there was much rejoicing.

Then God said, "Let there be light." And there was much scurrying for sunglasses. And all was cool.

And God said, "Let there be Monday morning..." and all was hungover. And it was NOT good. And there was much missing of 8:30's. And all was Normal.

And God created a sanctuary where the students could sleep, and he called it the classroom. And God created the Exam, and commanded it be passed, and there was much attending of classes.

And God said unto the Students, "Do not eat of the Cafeteria Food, for it is evil and will cause you great upset." But they did eat of it anyway, for they were far from home, and there was much incontinence. And more 8:30's were missed. And all was Normal again.

Then God created co-op to punish them for their transgressions, for the Students now had Knowledge, and they knew they were poor. And they did go out into the work force to make money. And Lo, they did make money and offer it as a sacrifice unto the University.

And there was much tuition.

—*Student Calendar 24:665*

Adam "The Bitsnatcher" Benjamin
Aaron "Abel's Lovechild" Berman

We Interrupt This *mathNEWS*

Iced Coffee^{TM}...
If it's not Ice Percolated^{TM}, it's not Iced Coffee^{TM}

First, I have a clarification about the 90-90 tie mentioned in last week's issue: it was for city councillor, not mayor.

From the "Who Does This Guy Think He Is, Archimedes?" Department

Last June, a Sanford, North Carolina, resident went to city hall wearing just his towel and complaining that the city cut off his water while he was showering. When told that he was behind on his water bill, the man waited in line, settled his account, and returned home to finish bathing.

The Toronto Star, Sat. Feb. 18, Page M9

From the "Civil Servant" Department

Officials in St. Bernard Parish, Louisiana, say that a city equipment driver was at an X-rated video store during working hours. The tipoff? He had allegedly parked the city's twenty-five-foot, eight-ton pothole-filling machine in the store's parking lot.

The Toronto Star, Sat. Feb. 25, Page M9

From the "Lover, Send E-mail To Me" Department

The Price is Right's Janice Pennington is taking the search for her former husband, Friedrich Stammberger, to the World Wide Web this coming Monday. Stammberger, a German who might have been an American spy, disappeared in Asia in 1975 and was declared legally dead in 1984. On the off-chance any *mathNEWS* reader has information as to Friedrich's whereabouts, the lovely Janice's URL is http://husbandloverspy.com.

The Globe and Mail, Mon. Feb. 27, Page A16

And finally, an update on the worm story from four weeks ago. According to the *Gazette*, a smaller-scale vermicomposting project has been launched here at U(W). So remember, your food waste could make a worm very, very happy. Until the squiz, this is...

Darren "This *mathNEWS* Has 22 Darrens,
Give or Take 20" Morby

You Know You've Been Using The Internet Too Much When

#43: You make a list of ten newsgroups you wish you could have with you if you were stranded on a desert island.

Chris Camfield

This Space Left Unintentionally Blank

Help combat whitespace – write for mathNEWS!

Newspaper Conference at UW

Last weekend, the Imprint hosted a Newspaper Conference attended by students from across Canada. The organizers of the conference invited a few people from *mathNEWS*, and I was lucky enough to have found the time to attend.

Delegates from as far away as the University of Calgary and Mt. Allison University in New Brunswick came to sit in on a number of seminars about investigative reporting, media law, computerizing a newspaper and other similar topics.

The conference began Friday night with the plenary address, where speakers from the Toronto Sun, Shift magazine and Id magazine spoke about the role of student newspapers in the University community. The address became an open and informal debate, allowing the students who attended to ask questions and contribute ideas to the thoughts presented by the speakers.

The seminars were held on Saturday and Sunday, and most of the ones I attended were very interesting. The most exciting session was one I missed, however, about Student Papers vs. Student Governments. The session was given — moderated might be a better word — by James Russell, News Editor for Imprint. Many of the current Feds were there, as well as some of the Feds–incumbent, and the discussion became, uh, heated might be a good word for it.

Of course, no *mathNEWS* article would be complete without a reference to beer, so let me say that much alcohol was imbibed by the delegates (after the sessions), and I got my fair share, to be sure. Ummmmm, Rickard's. This is the first year Imprint hosted the Newspaper Conference, and the general opinion of most of the delegates I spoke to agreed that it was a success, and some of the delegates expressed an interest in taking a turn next year as host. I, myself, was also very impressed with the conference, and any of the delegates are more than welcome to come back next year for a few beers in the Bomber if they want.

I want to thank Imprint for inviting *mathNEWS* and for holding a great conference. Congratulations on a job well-done!

Marc "I think I'll have the 'C', please." Ducharme

Toilet Seat Logic

This is an article about Boolean logic or binary mathematics. Assume that there are two types of computer users in the world. These two groups are called F and M. Both F and M need to use the same computer process: process T. The computer that runs process T has a parity bit, for this example we'll arbitrarily call this bit TS. Users F and M are both very particular, they both want TS to be set differently. F requires TS to be on (1) and M usually requires TS to be off (0). Both F and M have the ability to change the parity bit TS to their preference before using the process T.

To this point our little example sounds easy: simple and downright trivial. This is not always the case. For reasons unknown to the users M, users F have a history of complaining that the M's never switch the parity bit TS to on (1). What users M have a hard time understanding, is that instead of complaining about the status of TS, why don't the F's just switch TS and use T to free the resources for processing by other M's and F's.

Marco "The Hedonist" Koechli

*prof*QUOTES

(At 2:27) "Oops, am I running out of time?"

Burris, MATH 146

"There seems to be a law which we can prove by induction that there always seems to be more midterms."

Best, MATH 138

"And now I want to give you a serious headache..."

Best, MATH 138

"Let me put this in bad English: This series doesn't NOT converge...it's like saying, 'Yes, we have no bananas.' "

Best, MATH 138

"Let's do number 3...it's on your homework. I suggest you start a new page so you won't have to copy it over later. We won't accept any homework that have other notes from class on them."

Younger, MATH 136

"Even if you forget the proof of this...well, you can't forget it because I'm not gonna do it..."

Younger, MATH 136

"Let's say you have your favourite m-vector sitting in your pocket and you want to extend its basis..."

Hewitt, MATH 136

"What do you do before Ash Wednesday, before you have to do penance? You just go around and get stoned silly."

Novak, ARTS 301

Student: "Don't you mean *non-trivial* instead of *trivial*?"
Prof: "Oops! Yes, absolutely. I must have been thinking about my sex life."

McGee, AM 343

"If you have some spare slots in your brain, this [equation] would be a useful one to put in there."

Anderson, PHYS 122

"Sorry, I'm on drugs. I found some wonderful drugs!"

C. Struthers, STAT 330

"When I'm done, I would like to see that: a) not all of you have left; b) not everyone has fallen asleep; and c) no one has gone into cardiac arrest."

D. McLeish, STAT 331

"You should see an n-dimensional space here. If you don't, then you're not taking the right drugs."

D. McLeish, STAT 331

"I know, I'm missing *90210* too. Actually, that's a good show to study abnormal psychology!"

P. Dodgson, PSYCH 357

Faculty of Mathematics
Dean's Honours List

Fall 1994 Term

In recognition of outstanding academic achievement throughout their undergraduate careers the following students will **"GRADUATE ON THE DEAN'S HONOURS LIST"** at Spring Convocation, May 27, 1995 and have their names displayed in gold on the walls of the Faculty Colloquium Room (MC 5158):

BUSCHE, Joanne Jennifer	HC M/CA(S);
FONG, Yuen Fay	H CS/INFO;
JAUVIN, Diane	HC CSCI;
KRUK, Serge	H C&O;
LEUNG, Eric Sze Yin	H COMP SCI;
SZE, Channing	HC M/CA(I);
TONG, Karen Tak-Kar	HC M/CA(I);

In recognition of outstanding academic achievement throughout their undergraduate careers the following students will **"GRADUATE WITH DISTINCTION"** at Spring Convocation, May 27, 1995:

BENJAMIN, Darryl Robert	H ACT SCI;
BRUCK, James Arthur	HC CSCI;
DOVER, Lynn Diana	H PMATH;
GIGNAC, Lesley Ann	HC M/CA(I);
GREER, Kevin Glen Roy	HC CSCI;
KLEIN, Scott David	HC M/CA/CS;
LAM, Grace Wai Si	MC M/CA(I);
LEUNG, Teresa Yan Pui	HC M/MA(I);
MIKITA, Steven Michael	G MATH-3;
MOK, Ka-Yan Diana	H MTH&ERS;
RAOUX, Daren	HC M/CA(S);
SHAH, Amresh	H ACT SCI;
TSUI, Wing Shan	HC M/CA(I);

In recognition of outstanding academic achievement during the Fall 1994 term, the following students qualified for the Dean's Honours List:

ANG, Jason; ASTLEY, Derek John; BANDURCHIN, Michael Andrew; BARCLAY, Sheila Kristine; BART, Bradley Stephen; BASQUE, Michel Pierre; BAUMAN, Shane Brendon; BEARDWOOD, Fiona Nicole; BECKER, Matthew William; BELL, Jason; BENDER, Lorraine Joyce; BLANEY, R. Kyle; BORISOV, Nikita; BOSLAND, Marcus Jomo; BOURDON, Sean Eric; BRIDSON, Robert Edward; BRISEBOIS, Michael A.; BUCKLEY, Michael Andrew; BUSCHE, Joanne Jennifer; CHADHA, Dushyant; CHAN, Choi Wing Hollis; CHAN, Kai-Chung Petrus; CHAN, Leo; CHAN, Peggy; CHEN, Jason Qiang; CHENG, Kwong Yee; CHEUNG, Fu Wing; CHEUNG, Kevin King Hin; CHIN, Eugene; CHIU, Kai Ping; CHUNG, Gloria Sze Mui; CLINK, Brian; COLES, L. Michelle; DAVIDCHUK, Matthew; DEER, Shawn Edward; DRAGE, James; DU, Stephen Songhai; DUCHARME, Robert Gerard; ENGEL, Trudy Suzanne; EVANS, Glenn Frederick; FARELL, Cesar; FELLEN, Mitchell; FITTON, Anne Marie; FONG, John; FUNG, Chi Wai; FUNG, Pek Shan Goretti; FUNG, Pui Yin Grace; FUNG, Serena Cheuk-Ling; GILLILAND, Mark William; GMACH, Frances Christine; GOLDBERG, Ian Avrum; GRAHAM, Raymond Earl; GRAHAM, Robert; GREER, Kevin Glen Roy; HAMILTON, Patty Lu; HAMM, David; HARE, Kevin George; HART, Jeffrey; HAWKINS, Jennifer Lynn; HERLING, Daniel; HO, Kai Fai; HOOD, Trevor James; HUANG, Po-Chih George; HUH, Woonghee Tim; INGRAM, Christopher; IP, Jeffrey Tsz-Yue; IRVING, John Charles; JOANIS, Eric Jean Sylvain; KAMAL, Sarah; KAMINSKI, Piotr; KAUSHANSKY, Leonid; KENG, Leslie; KENNEDY, Brennan; KENNEDY, Patrick; KLASSEN, Matthew D.; KRUK, Serge; KRY, Paul Gregory; LAIT, Jeffrey Michael; LAKOTA, Darko; LAM, Cheuk Ying; LAU, Oi Ting; LAU, Wai Tak; LAUZON, Martha Meredith; LAW, John Wing Hong; LESHEM, Ran; LI, Benson Hwa-Hoa; LIN, Angela; LIU, Qin; LO, Edmund Siu Yan; LOU, Jie Jay; LUNG, Florence Sau Chi; MA, Vincent; MAGURN, Kenneth Edward; MAK, Wing Chit Raymond; MARR, Sarah Elizabeth; MAXWELL, David Aquilla; MCALLISTER, Sheryl Ann; MICHAIL, Ashraf Ayman; MOSCA, Michele; NEUFELD, Brigitta L.; NGUYEN, Quynh-Mai; NORRIS, Amy Lee Susan; OSTROWSKI, Michal; PALMER, Chris R.; PARKER, B.J. William Lockwood; PARSONS, Todd Lawrence; PAYTON, Christopher E. James; PIRIE, Carol Louise; POON, Andy Kwok Yiu; POSNER, Marshall Evan; PRASHAD, Devika; PURBHOO, Kevin; QUAH, Boon Hong June; REYNOLDS, Franklin Wesley; ROCHE, Austin Duncan; ROHLF, Katrin; RUETZ, Christina; RYDER, Angie; SASAKI, Rebecca Mari; SHADDICK, Scott Allen; SHAHIDI, Reza; SHNEIDER, Aviva; SONG, Jonathan Zhan Shan; SOOD, Ravi; SRIVASTAVA, Raman; STASTNA, Marek; STEPHEN, Tamon Muri; SUMNER, Reuben Avrum; SURAZSKI, Lukasz; SZE, Channing; TEH, Yee Whye; THOMPSON, Christopher James; TIMMERMANS, Gerry Michael; TOCHIP, Ramon Jr.; TONG, Karen Tak-Kar; TRAN, Phat Hong; VANDENBERG, Erick Shawn; VASIGA, Troy Michael John; WERNER, Silke Stephanie; WONG, Edwin; WONG, Kai Ching Andy; YAO, Jason Joel; YEE, Brenda Yvonne; YEOH, Eng Kim; YEUNG, Ka Yee; YEUNG, Kin Pong; YONG, Alexander T.; YOUNG, Alyssa Michelle; ZHANG, Hao; ZHOU, Kathleen Yi

Correction

Joseph H. Chan was listed as graduating at Spring Convocation, May 28, 1994. He graduated at the Fall Convocation, October 22, 1994.

newsFLASH

Midterms are Ending

WATERLOO (AP)—The news on the street here is that midterms are ending. It tends to mean many festivities start and the Bombshelter (and even Fed) are packed to the rim.

The Feds speak out

When asked to comment, the recently elected Fed VPAS said "I'm gonna drink all night and then I'm going to have sex. Then I'm gonna work real hard!" (*Imprint* v17n27 p. 3)

Dale "ñotasquare" Wick

This Space Left Unintentionally Blank

Help combat whitespace – write for mathNEWS!

Unix Tip Of The Week

This week's UNIX tip deals with the much dreaded (and yet very powerful) VI editor. Before I go any further, I will not even attempt to convince you that the VI editor is superior to anything (other than, say MS-DOS's default editor) and yet I will insist that it is a very powerful editor. The truth is that it is a nightmare to learn. (Many people have suggested that the "vi" is taken from the word eVIl.) If you were hoping to learn how to use the VI editor, this article is not for you. In fact I recommend you use something intuitive such as emacs. This article is intended for those who either have to use VI, or like VI and want to learn how to control it better.

The first thing you should know about VI is that it supports named buffers. What this means is that you can save lines (or paragraphs, or pages, etc) of a document in a specific buffer. In fact, you have at least 26 (one for each letter of the alphabet) buffers to play with. For example, if I wanted to put my current line of text in a named buffer (say "a"), I would (from command mode) type ""aY" and the text would be placed in buffer "a". The "a" is the reference to a specific named buffer, and the Y means yank one line. To retrieve this saved line, type ""ap" for "Using the named buffer 'a', paste the buffer after the current line". Note that you can do this with any named buffer. (If you don't specify a buffer name, say by just typing "Y" by itself, essentially uses the default buffer. This is different from the named buffers, since it is cleared upon your next operation. (Assuming you don't use the buffer.)

There are a few special named buffers that you should know about. The numeric buffers (one to nine, and zero) are used to store text that has been removed using the delete command. So, if you type dd (thereby removing the current line of text) and then type ""1P" your lost line will be replaced. The last ten deletes are saved for the user in the corresponding buffers one to nine with the tenth delete being saved in buffer "0".

Similar to the named buffers, VI also allows named bookmarks. In other words you can specify multiple positions within a file that you would like to jump to. To do this you type (again from command mode) "ma" where "m" means mark position and "a" is the name of the bookmark. (As with the buffers, "a" could be anything from "a" to "z".) To recall the position, you can type "'a'" where the apostrophe means jump the the specified position and "a" is the bookmark name. Incidently, there is a parallel to the default buffer - vi remembers the last position you were in prior to a jump. If you type two apostrophes in a row it will jump you to your last position.

There are several settings that vi allows you to specify. For example you can turn on word wrapping. (A carriage return is inserted when you get to the end of a line.) To do this you can type

`":set wrapmargin=10"`

The value at the end specifies the number of characters from the end of your terminal screen to use as your margin. So, on an 80 column terminal this specifies a margin of 70 characters. (This is pretty standard.) To turn it off, just set the value to zero.

Instead of typing this in at the beginning of your session each time, you can place this command in a file called .exrc in your home directory. This file specifies the various startup options for your vi session. (Just put the command as it appears, minus the colon, on a line by itself.)

Some other things you might want to put in there are mappings. (I won't go into too much details with them, except to show my favourites.) Maps allow key presses to be intercepted and interpreted differently. They're fun to play with, but very powerful so be careful. The command map translates keypresses in command mode, and "map!" intercepts those in edit mode. If you're often accidently pressing the arrow keys while in edit mode on an X-term, and getting an annoying A (or some such character) on a line by itself, trying mapping the cursor key (in edit mode) to an escape character. When you're done it's as if you pressed escape instead of a cursor key. If you've done it right, the first cursor key will return you to command mode, and the second will allow proper cursor movement (since you're now in command mode.) To do this enter edit mode on a separate line (in your .exrc file — I'm assuming you're using vi to do this) and type

`map!  <control+v><cursor_key> <control+v><escape>`

The "control+v" combination means quote the next sequence and don't use it literally. (If you didn't use it, then the escape key would return you to command mode before you were done.) You should repeat that for every cursor key direction. Then, the next time you start up vi, your changes should be in effect.

One last thing... for those of you who have always wanted to reformat a paragraph, there is a way. Try typing (from command mode) "!}fmt" on the first line within a paragraph that you wish to reformat.

Happy typing.

Adam "The Bitsnatcher" Benjamin

Popular Sanity

Ahem, yes, well, it's Dr. Mumble Furble again. It appears that despite my best efforts, Peter Milley's deranged ravings in the last issue of *math*NEWS about "Zoggo" actually found a receptive audience. I implore all of you to heed my words: "Zoggo" does not exist. Any articles in this or any other issue of *math*NEWS which imply otherwise are patently false, as are any rumours that some strange force exists inside of the Comfy Lounge. Why, I myself have entered that lounge many times, and although I sometimes cannot explain my reasons for doing so, I am still a perfectly well-adjusted...

[At this point the narrative is interrupted by a sudden entrance and a violent struggle. A hypodermic is seen briefly, as the light reflects brightly off of the metal. Then the author lapses into unconciousness. The gentleman with the needle, apparently a raving lunatic, resumes the piece.]

YES!!! That's much better. Now nothing stands in the way of the Furniture Crusade. Zoggo awaits!!!

Peter Milley
speaking for Dr. Mumble Furble, of the Institute

Pre-registration Starts Monday
Be Prepared!!

Where's My Job?

Okay, I hate to whine, but there's been a big mistake. I didn't get a job in the first round of interviews. This was only supposed to happen to everybody else, not me. I assumed (obviously incorrectly) that I was doing well to be getting five interviews in my 1B term, but when I picked up my ranking form it had the mysterious letters "NOT RANKED" beside all five employers. Does this mean that I look good on paper, but in real life no one liked me at all? As far as I can tell, the employers not ranking me means that if I'm the only one left, they would rather leave the position unfilled. I know that I may not have a lot of experience, but what can they expect from a first-year student? The worst thing for me is that I thought that my interviews went very well. One of my interviews was excellent, and only one went badly, and I figured that I had a shot at an offer or two. The biggest problem for me is going to be trying to find out what I did wrong. If I had what I thought were good interviews this time and got flat out rejected, what's going to happen when my interviews don't go so well? Anyway, I'm about done complaining, but if anyone has a high-paying, low-workload job that they don't want, feel free to send it my way.

Warren "The Milkman" Hagey

F94 Work Reports Should Be Back Soon

Recess

(The Plight of The Common Schoolchild)

The bell rang,
And the children came,
In flocks of three or four.

Their playful violence,
Gave way to silence,
As they headed for the door.

For when inside,
They were forced to hide,
What defined them more than name.

They were cast into a mold,
To be bought, borrowed or sold,
Now they will never be the same.

Recess, recess, set me free,
Let me be,
What's really me,
Not what others want from me.

Luke Gasteiger

This Space Left Unintentionally Blank

Help combat whitespace – write for mathNEWS!

President eXposed

After the recent enlightening interviews in Imprint of the incoming Fed executive, I felt that I should explore the vector-space closer to home. What follows is an actual live interview with the person MathSoc calls President, *Ronald Daniel Gilles Joseph Servant.*

mathNEWS: By what means did you become MathSoc president?

Servant: Acclaimation ... and my wonderful charm.

mathNEWS: So no-one in the Society actually put forward their support for you?

Servant: Well, that's not totally true ... apathy was my supporter. With apathy on your side, you can't lose.

mathNEWS: Moving on to other things, what did you want to do when you were originally elected ... er, acclaimed?

Servant: Raise awareness about the Society and make sure that the position is never acclaimed again. And just have a whole lot of fun.

mathNEWS: Are these still your goals?

Servant: I'm definitely having fun. It is really difficult to raise awareness when we don't have enough volunteers; it is almost a self-defeating process.

mathNEWS: Let's move on to perks. Do you have a discretionary fund that you can spend on just anything, but is in fact paid for by Math students?

Servant: Why yes, each of the Executive can spend up to a whole $50 on anything they see fit.

mathNEWS: You can spend this money at any time it strikes your fancy?

Servant: Yup. If I needed a box of condoms for any particular reason, I could just go out and buy it and have the Math students pay for it.

mathNEWS: I see. What about beer. Is it the practice of Math-Soc to foot the bill for the occasional beer party at your house.

Servant: On occasion, like the end of term party for all Math-Soc volunteers.

mathNEWS: Is it true at the last such party, you and 5 of your friends were the only ones to drink from a keg?

Servant: Not exactly only 5, but it was a keg of Blue. This year it will be a keg of Ricker's [Red].

mathNEWS: What about beer drinking while MathSoc business is being carried out? Do you support that, or have you supported that in the past?

Servant: Moderate intake of beer, or any other alcoholic beverage during the execution of MathSoc business, I have no problem with. But if you start slurring your words then you are taking it to an extreme that I'm not prepared to deal with. Talk to me after the meeting and I'll slur along with you.

mathNEWS: So what are you going to do now?

Servant: Well, first I'm going to get drunk. Then have sex. And then get down and do some apathetic work.

to be continued ...

Dale "ñota-Investigative-Reporter" Wick

Sex, Lies and Jolt!!

*How One Student Deals With
The Pressures of Exams*

He looked up at the clock. It was 4:15. Our hero, the poor student, had a midterm at 4:30. Only 15 more minutes to go!! He glanced down at the classroom, where the blessed event was scheduled to take place. No one there. Absolutely no one, just some loser from Engineering who was in the process of figuring out he was in the wrong building for his Heat Transfer lecture. (Actually, along the way, our hero met up with a cute Artsie who was looking for her Sex Positions 101 class; the two ended up combining their respective disciplines and stayed up late into the night doing extra study. But that's another story.)

After our hero finished daydreaming about how nice it would be to meet this girl of his dreams, he was jerked back to reality by some passing CS students. One was arguing about whether to use bitmaps or linked lists for his upcoming CS 354 project, and spilt some Jolt on our poor hero as they passed by. An unfortunate incident, but it reminded him it was time to visit the C&D.

"Choices, choices, choices," he said, he said, he said. "I can get Cold Coffee, Sioux City (David Letterman's Home Office's Official Soft Drink), or good old dependable Jolt."

Ah yes, our hero and Jolt go way back together, right to the point where Jolt was just but a gleam in an over-tired Grade 11 student's eye. It was rumoured that Jolt was supposed to exist, but no one ever had any proof. Certain lightning bolts were said to have been found in little caves under France, but no one was really quite sure.

Until our hero went to Waterloo! And right from the advent of 1A, Jolt had been his constant companion. It was a temperamental talisman—sometimes Mr. Jolt decided to show his bad side, like when he got our hero so high on caffeine that the enormous crash came right in the middle of a PHIL 140 midterm causing him to have trouble even understanding why someone named Phil would like the number 140 so much. Needless to say, drop the 0 and that was the resulting percentage our poor wretched hero received.

Since then, Mr. Jolt has apologized, and the two of them are back together. Anyway, our late-for-exam-and-has-a-lot-of-hair-out-of-place-especially-on-his-beard hero bought his Jolt, and smiled a friendly "Hurry up! I need to go..." at the cashier, and ran down the hall.

Our hero quickly rushed down to his exam.

Just in time too—the instructor was handing out papers already. Our unfashionably-late-and-unrepentant hero stared at the exam. The overwhelming amount of ϕ's, and χ's, and lemon-meringue π's all stared back at him. He looked around the room. The clock was slowly but methodically ticking away, ticking away the seconds that turn into minutes that turn into hours. And having only two of those precious hours to spend. For, the problem was, our hero employed the following Dave-logic (Pssst. Are you listening Laurie?? Laaauuurrrieeeee!!):

Dave-logic

1. His life depended on his career.

2. His career depended on his degree.

3. His degree depended on this term.

4. This term depended on five courses, of which this was one.

5. This course depended on two exams, of which this was one.

6. This exam depended on getting seven questions in a finite amount of time (two hours).

7. The two hours were comprised of four 30-minute sections.

8. Those 30-minute sections were comprised of two 15-minute sections, in turn comprised of three 5-minute sections, in turn comprised of 300 seconds.

Wasting one second of the two hours ultimately affected his entire life. The five seconds it took for our hero to realize this were utterly wasted, thus he spent another five seconds worrying about the ten seconds already lost. (Those of you in Math—most, in other words—can see where this algorithm is going.) Unfortunately, each recursion was accompanied by an increasing state of tension, of which our poor misguided hero gulped some Jolt to calm his nerves and get back to work.

Eventually, it overtook him and he ended up spinning into a rage, spraying Jolt everywhere, with little bits of cupcake flying around. It really was a mess! Of course, no one in the class noticed the slightest thing wrong—they just figured he hadn't been able to get the proof that was right off the previous assignment!!

Fortunately, a Math prof had been walking by the class at the moment, and realized what was happening. Instantly, he took the action he knew had to be taken. Our hero is now the prime guinea pig in the Chaos Theory lab!

The composer of this piece—sorry, been taking too much Music 100 lately—wishes to add the disclaimer that in absolutely no way is any of this autobiographical—only some of it. Well, OK, most of it.

And now its time to say goodbye. With apologies to Wayne and Schuster and Schwarzenegger:

> Well I see by the clock on the wall,
> that's its time to bid you one and all!
> Good bye, good bye
> So long, so long
> Farewell, adieu, hasta la vista, Baby!!

Dave "Madman of the Steeple" Vernest

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I'll Have The Special

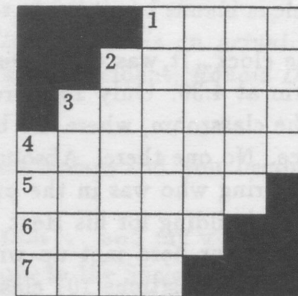*Just recently proved: Waterloo IS A Fun City!*

Well, midterm time has graced our presence once again. And, by a sheer coincidence, tax time has also arrived. Now for some, one is good and one is bad. For some, both are bad. Really bad. Like I mean, midterms AND I owe the government, TOO? I just can't take it any more! Why do I continue to go on living? I might as well just... well, you get the idea.

- Benjamin Franklin once said "There are two things assured of in life: death and taxes." Midterms could be included with those, but you can drop out of school and never have to write midterms again, so then we would only have to worry about death and taxes. Tax time always seems to be kind to me. I always get some pleasure out of it. Looks as though I won't have to pay the government a cent, which is just fine by me. After GST, PST, fees, fines, hidden taxes, booze taxes, etc., income tax time seems the only time of the year when I can proverbially "stick it" to the government.

- I should have become a replacement ball player. I could imagine myself playing in big parks, with other replacement players, with replacement baseball bats, and replacement vendors selling replacement hot dogs and replacement peanuts. However, I hear those replacement fans are nasty. But I wouldn't worry. That 56 year-old truck driver from Chattanooga says he can brawl with the best of them. That's a relief.

- Lucien Bouchard says he's feeling much better and is ready to get back to his task of destroying Canada. Good for him!

- I have been asked to write something about midterms. I touched on that earlier, but I guess a more in-depth discussion is in order. Well, midterms always seem to convey the same message term after term: "Why are you still here? Who are you kidding? Drop out and get a job before you embarrass yourself even further." Not a very reassuring message to say the least. But I always seem to survive midterm time. I don't have any secrets to tell you except that I go blindly into midterms and hope for the best. I've been doing that for 3 years now, and so far it seems to have worked. I've fooled the university, haven't I?

- Finally, I do realize our study "moment" *[Glad it amused you – Mala]* was a week and a half ago, but I say that mine was rather enjoyable. Went to Ottawa and had a good time. But what irks me is the fact NO ONE really made a fuss about the fact our study break was reduced to 2 days last year... I do not recall any hearings about it... I do not recall any student action against it... I haven't heard about plans to return it to a week like most students in the free world get... why aren't we doing anything? Are we just going to sit here and take it with a grain of salt, or are we going to rally and demand our study "week" actually be a week! I guess most of us prefer the former...

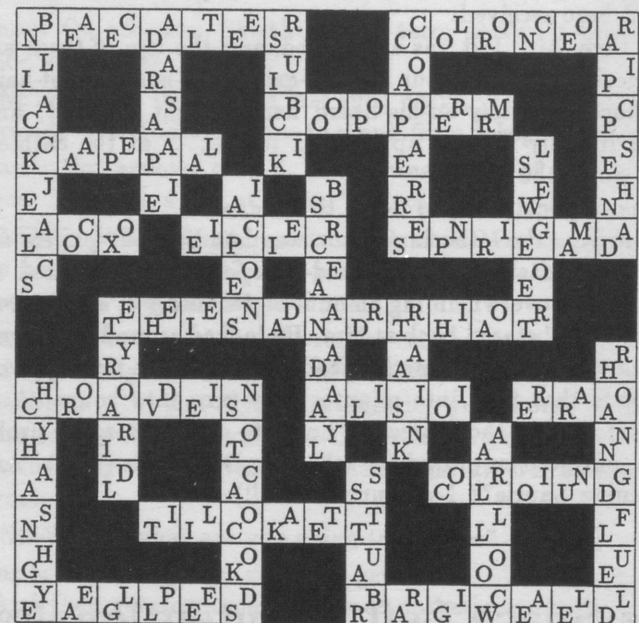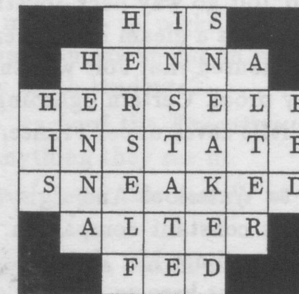**Brian "The Calculus Cowboy" Fox**

Form #4

The Cambridge Hexagon

Clues

1. Jail loses middle stair. (4)
2. Play ivories (although not organ). (5)
3. Sample of Paris' elderly verbally surveyed. (6)
4. Chip slivers from nickels, dimes and quarters. (7)
5. Develops latent ability. (6)
6. Dull sales removed from insert. (5)
7. Staffs he left in Greek island. (4)

Solution to last form

gridCOMMENTS

Well, this time we got just oodles of submissions. (Wish that could be said for all of us.)

In the cryptic, we got six submissions, from tAS, Blake & and Average Frank, EPOCHE, Pamela, The Wet Moose Consortium, Slaves to the Gridword and Bob the Great and Powerful. All were perfect, except for Bob's, which had a minor flaw. EPOCHE wins by random draw.

For the conventional, ... oh NOOOOOOOO! It happened AGAINNNNNN!!! What, have I been building Conventionals on old grave sites?! I miscounted the number of unaltered words! There were four! This probably caused a train wreck in Pamela's submission. However, since she was the only entrant, she takes the prize for this.

For the form, we had four entries, from Pamela, The Wet Moose Consortium, Slaves to the Gridword and Bob the Great and Powerful. Bob has apparently been having the same kind of luck as me: his entry had the only error here too. By random draw, the winner here is Pamela. Please pick up your stuff in the MathSoc office.

The answer grids for all three puzzles in that issue should do to tell you where and if you went wrong. To get the full solution, check it out in the *mathNEWS* newsgroup, uw.mathnews. If you're not sure about how you do it, get on your account and type the command rn to get on the newsreader. Type "g uw.mathnews" to subscribe to the newsgroup. Watch for the subject line for Issue #4 Gridword Solutions. I'm including this because it's the sort of information I would need. Don't feel stupid if you screw it up. I probably did, too.

For the Unconventional this ish, a salute to the separatists, wherever they are. To solve, many of the answer words contain a certain three letters in order. **Remove these three letters in order each time all three appear.** For example, if the three letters were CAT, cataract would be entered ARACT (not R, for removing all C's A's and T's; not ATRAC or ATARC, taking later A's and T's, remove the letters as early as possible in all cases.) Trust me, this isn't nearly as hard as I've made it sound. Again, I have a good reason for choosing the letters as I did, there are exactly nine unaltered entries here, and I mean it, and the cryptic is solved as usual. In fact, the cryptic may help you to identify the three letters to remove. Anything's possible.

Guest Stars: Jon Lovitz on the Simpsons!, I want to see Brad Pitt!, their long-lost cousin Orenthal James Simpson (distant relative), Fav. Star: Luke Perry, Archie and the gang from Riverdale, Blinkey the Three-eyed Fish. Comments: Been a while since we've seen one like number 12, There is a thin line between making eye contact and a psychotic stare, How can I fail if I have no purpose? (That last one I added myself, from somewhere else, as padding.)

For next issue: Send solutions, comments, and the name of the newsgroup you don't want to get around that you subscribe to, into the murky and unforgiving abyss that is the BLACK BOX by next Monday (the 13th) at 6:00 pm.

Thanks to all of you who sacrificed their copies of *mathNEWS* for entries.

Gridby

mathNEWSquiz #4
Welcome again to Happy Fun Squizland

We only got ONE SUBMISSION this time, and it was from Bob the Great & Powerful (6), so he can come to MathSoc and claim his C&D coupon. Last issue's squizanswers were: **Song Lyrics:** 1) "Living in a Dream" by Arc Angels; 2) "Dream Police" by Cheap Trick; 3) "Into a Dinosaur" by Bob Weisman; 4) "Don't Dream It's Over" by Crowded House. **And Our Next Contestant Is...:** 1) Gena Lee Nolin; 2) "Your name, please?"; 3) Geoff Edwards; 4) *Talk About*. **No Business Like Show Business:** 1) *Rain Man*; 2) *Un zoo la nuit*; 3) The Stanley Cup Finals; 4) The Booker Prize.

Now, before you get the fourth squiz, I (Darren) am going to beg. PLEASE submit to the BLACK BOX or mathnews@undergrad.math before 6 PM on Monday March 13. PLEASE, PLEASE, PLEASE.

Okay, enough of that. On with the squiz and good luck!

Re-recorded Song Lyrics
Name the song and the artist or group
who re-recorded it in the year noted.

1. Spirits open to the thrust of grace
   Never a breath you can afford to waste (1991)
2. But I'm coming back again, yeah
   You know we'll have a good time then (1992)
3. Set me free, why don't you, babe?
   Get out of my life, why don't you, babe? (1987)
4. You know I love you, I always will
   My mind's made up by the way that I feel (1994)

Saturday Morning Cartoons

1. Randy Beaman's friend on *Animaniacs*.
2. The bumbling detectives on *The Adventures of Tintin*.
3. Scooby Doo's four human friends.
4. The voice of Inspector Gadget.
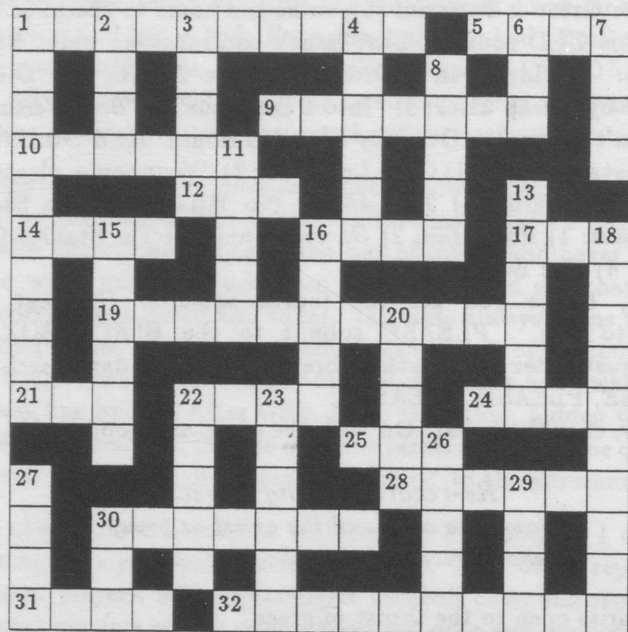
Proof That Brian Has No Life

1. The name of the town's favourite soap on *Twin Peaks*.
2. The only traditional North American area code (with 0 or 1 as the 2nd digit) that has not been used yet.
3. About every 7 years, what does the city of Paris do to the Eiffel Tower?
4. Curtis P. Brady was the first person to get a license to drive a car through where?

Darren "Ren" Morby, co-squizmaster
Brian "The Calculus Cowboy" Fox, co-squizmaster

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Help combat whitespace – write for mathNEWS!

GRIDWORD

Grid Clues (Cryptic)

Across

1. Morby or Fox quits maze hastily for the last of the beer. (10)
5. Quick utterance is priceless! (4)
9. Uniform for scout torn before me. (7)
10. Trust I can find in part of the country. (6)
12. Crowd reviews explosion, smoke ring. (3)
14. Nothing, under logical lingo. (4)
16. I jogged somewhere in the Middle East. (*4)
17. Curve less without lead-in. (3)
19. Mercury's fast speed spoils liver. (11)
21. A part of me goes nuts without a little sugar. (3)
22. Audible football play made history. (4)
24. Hurt badly and completely, briefly. (4)
25. Delve into ground. (3)
28. Flips out, seeing torture device in computer dept. (6)
30. Oinks equal messes between seconds. (7)
31. Lead sours agreement. (4)
32. A most irrational fear sounds like a good environment. (10)

Down

1. Seal near quaint rocks. (10)
2. Sir, I return with a flower. (4)
3. Principle: mass before eleven in the morning. (5)
4. Holiday observed farther towards the orient? (6)
6. Employ letters after cues? (3)
7. Have a game of Othello, e.g. (4)
8. Unsoiled for baby Elizabeth, e.g.? (5)
11. Circle Company Inc. folded. (5)
13. Look for fallen arches. (6)
15. Gin is like tongue in the ear? (6)
16. Sidebar insert taken right out. (5)
18. Elegant-looking separatism leaves busts. (10)
20. Described in wonderfully rich wording. (5)
22. Interest in top of mountain voiced. (5)
23. Candid broadcast channel. (6)
26. Grouch has good backside! (5)
27. I dropped Randy, Dennis in area of campus. (4)
29. Stop draining energy container. (4)
30. Reportedly see Red or Black, e.g. (3)

Grid Clues for Separatists (Unconventional)

Across

1. Survey page
5. Curve from drawing programs
9. Rare
10. Aqua
12. Indiana Jones and the Temple of Doom, e.g.
14. Foursome
16. Chicken wire, e.g.
17. Large mythical bird
19. They produced Saltimbanco (3 wds.)
21. Sister
22. Old table, e.g.
24. It can be serrated, jagged or cutting
25. Sets akilter
28. Gridby, e.g.
30. Triangular bandage
31. Post-Renaissance, Pre-Classicist
32. Trapezium, e.g.

Down

1. Seclusion
2. Ask
3. Such fools as would follow a postcard painter into war
4. Garbage
6. Consider to be the same
7. Cure for malaria
8. Leave
11. Pressed
13. Fought
15. Method
16. Air of reverence
18. Important
20. Alcohol flavoured with fruits or nuts
22. New Mexico city
23. Rotated
26. Bulgarian capital
27. Arm of tree or human
29. Need
30. Force that twists