

Present Your Work: Deadlines Approaching!

- **HRUMC XV: April 19th** The 15th annual Hudson River Undergraduate Mathematics Conference will be hosted by ST. Lawrence College on Saturday, April 19th. If you wrote or are writing your thesis this year, the HRUMC is a wonderful place to share your results with math majors from scores of other colleges. You should strongly consider presenting a 10-minute talk. HURRY! The **deadline** for submitting an abstract is **Sunday, March 2nd**.
- **Steinmetz Approachetz** As you probably know, the 18th annual Charles P. Steinmetz Symposium will be held May 3rd-4th. Traditionally, most senior math majors present a talk at this in-house conference, but certainly underclassmen are welcome to do so as well. HURRY! The **deadline** for submitting an abstract is **Thursday, March 6th**.

Fishy Math
by
**Shawn Bartok &
Richie Bonventre**



Problem of the Newsletter: February 22, 2008

Unfortunately, no one submitted a correct solution to last week's problem, although a couple people correctly mentioned that a solution to the problem (an old Putnam Exam problem) is available online. You can view last week's question with a solution on the first floor bulletin board in Bailey Hall.

This week's problem was suggested to the column by this week's seminar speaker, Professor Barbanel, who heard it while listening to "Car Talk" on NPR a few weeks ago.

Here is this week's problem: "I was driving on the highway the other day recently and I happened to notice my odometer. Like most odometers nowadays, it shows six digits, in whole miles only -- no tenths of a mile. So, if my car had 300,000 miles, for example, I'd see 3-0-0-0-0-0. And that's all. Until I drove another mile, at which point it would read 3-0-0-0-0-1.

'Now, what I saw that day was very interesting. I noticed that the last 4 digits were palindromic, that is they read the same forwards as backwards. For example, '5-4-4-5' is a palindrome. So, my odometer could have read 3-1-5-4-4-5, with those last four digits, starting with the units, then the tens, then the hundreds, and finally the thousands, being the palindrome.

'One mile later, the last 5 numbers were palindromic. For example, it could have read 3-6-5-4-5-6.

'One mile after that, the middle 4 out of 6 numbers were palindromic. So, the first and last numbers weren't involved in the palindrome, but the middle 4 were palindromic.

'And you ready for this? One mile later, all 6 were palindromic! For example, 2-1-3-3-1-2.'

Pretty good, huh? So, here again are the conditions ... 'I noticed that the last 4 digits were palindromic. I drove a mile, and the last 5 were palindromic. I drove another mile and the middle 4 were palindromic, and the ends were not involved. And then one mile later, all 6 digits were palindromic.'" **The question is**, what was the original reading on the odometer?

Email (friedmap@union.edu) or deliver a solution to Prof. Friedman in Bailey 107D, by **noon on Thursday, Feb. 28th**.