UNDERGRADUATE MATHEMATICS SEMINAR

The next seminar will be

DATE: THURSDAY, May 14th

Time & 3:45pm – Refreshments in the Math Common Room, Bailey 204
Location: 4:00pm – Seminar in Bailey 207

In this seminar, Union College’s Professor Christina Tonnesen-Friedman will present the following talk:

TITLE: The Isoperimetric Inequality

ABSTRACT: Among all closed non-self-intersecting planar curves of a fixed length, the circle encloses the maximum area. This statement seems rather obvious, but the proof is not quite as simple as one might think.

We will go through two proofs; a very intuitive geometric one (with a flaw) and a calculus proof. Time-permitting we may talk about what happens in higher dimensions.

Anyone who has had or is in Math 117 (or IMP 113) should be able to follow the ideas in this talk.

Brad Pitt, Kobe Bryant, and Johnny Depp Are Overweight…and Tom Cruise is Obese!

In his latest column for the MAA, “Do You Believe in Fairies, Unicorns, or the BMI?” Keith Devlin the body metric called Body Mass Index, or BMI. As a quick tease, here are a couple of sample paragraphs:

“Why do we have this annual BMI charade? Why would otherwise well-educated medical professionals ignore the evidence of their own eyes? Because the BMI is one of those all-powerful magic entities: a number. And not just any number, but one that is generated by a mathematical formula. So it has to be taken seriously, right?

“Sadly, despite that fact that completion of a calculus course is a necessary prerequisite for entry into medical school, the medical profession often seems no less susceptible than the general population to a misplaced faith in anything that looks mathematical, and at times displays unbelievable naivety when it comes to numbers.”

For the full article, visit http://www.maa.org/devlin/devlin_05_09.html.

Seniors: Job Advertisement

Recently, the Math Department received the following job announcement from Epic, a software development for healthcare systems company in Madison, WI. They extended an offer to one graduating math major this year, and still have some openings.

“As graduation approaches, are you still trying to decide what you want to do with your life? Do something Epic! My name is Stephanie Pahler and I am a recruiter at Epic, a Madison, Wisconsin-based software development company. Epic is a national leader in software development for healthcare systems. We create and implement a wide range of integrated software for many of the largest healthcare organizations in the country. Our software improves patient care, reduces costs, and saves lives. Over the last 15 years we have seen steady growth, and organizations currently using our software (continued)
Last week’s problem received a number of responses, but none were complete. A solution to the problem can be seen on the bulletin boards in Bailey Hall.

Here is this week's problem: (From the 2009 AIME, as reported by Schuyler Smith.)

Triangle ABC has AC=450 and BC=300. Points K and L are located on AC and AB respectively so that AK=CK, and CL is the angle bisector of angle C. Let P be the point of intersection of BK and CL, and let M be the point on line BK for which K is the midpoint of PM. If AM=180, find LP.

Professor Friedman will accept solutions to this problem until 12:00 noon Monday, May 18th. Email your solution to him (friedmap@union.edu) or put it in his mailbox in the Math Department’s office on the second floor of Bailey Hall.