TCU Math News Letter

Volume 5, Number 6 March 97

Failure is the line of least persistence.

- Stephanie Martinz

Parabola Meeting on Monday, March 24

The next meeting of Parabola, the TCU Undergraduate Mathematics club will be on Monday, March 24. The speaker will be Professor Rhonda Hatcher of the TCU Mathematics Department, and the title of her talk is "The Hidden Mathematics of Identification Numbers and Bar Codes." This talk should be accessible to students of all levels.

The talk will be at 3:30 p.m. in Winton Scott Hall 145, and refreshments will be served from 3:00 to 3:30 p.m. in Winton Scott Hall 171.

Calculus Bee to be held on Monday, March 31

The TCU Calculus Bee will be held on Monday, March 31 beginning at 3:30 p.m. in Winton Scott Hall 145. Refreshments for the contestants and, of course, for the faculty will be served in Winton Scott Hall 171 at 3:00 p.m.

All TCU undergraduates are eligible to compete. A prize of $75 will be awarded to the first place contestant, and prizes of $50 and $25 will go to the second and third place contestants, respectively. The Calculus Bee was first established last year when it replaced the annual Integration Bee. In the past the winners and finishers of the Bees have ranged from freshmen to seniors.

Last year, the first place contestant in the Calculus Bee was mathematics major Mitsutaka Shirasaki. The second and third place contestants were mathematics majors Diana Horst and Nicky Kitagawa.

All students interested in participating in the Calculus Bee should sign up in the Mathematics Department Office.

Three More Mathematics Majors Invited to Join Phi Beta Kappa

The Mathematics Department is proud to announce that three of our majors have recently been invited to join Phi Beta Kappa, the nation's oldest honor society. The honored students are seniors Kristi Eggleston, Matthew Ferguson, and Sarah Field. Last year mathematics majors Anna Mueller and Greg Perdue were initiated as juniors, so we have five graduating seniors who will be members of Phi Beta Kappa.

Congratulations to these excellent students!.

Annual MAA Meeting

The Texas Section of the Mathematical Association of America will hold its annual meeting at Texas Lutheran College in Seguin, Texas on April 3 - 5, 1997. This meeting will have several talks and sessions of interest to undergraduates. Any students interested in attending can get more information from Dr. Rhonda Hatcher in Winton Scott Hall 142.

Professor Hatcher Wins the Texas MAA Teaching Award

Professor Rhonda Hatcher of the TCU Mathematics Department has been named as the recipient of the 1997 Mathematical Association of America Texas Section Distinguished College or University Teaching of Mathematics Award. This annual award will be formally presented at MAA Texas Section meeting on April 4, 1997. The annual award was established in 1992, and Professor Robert Doran, the chair of the TCU Mathematics Department was the first recipient.

Solution to the February 1997 Problem of the Month

Two mathematicians each think of a number and whisper it to a mutual friend. The friend reports that each is thinking of a positive integer and that the product of the two is either 4 or 8. The first mathematician says to the second, "I don't know your number." The second mathematician replies, "I don't know your number either." The first one then asks for a hint. What was the first mathematician's number? Solution: Call the first mathematician X and the second mathematician Y. X cannot have thought of 8 or else he or she would immediately know Y's number is 1. Because Y cannot subsequently deduce X's number, Y cannot have thought of either 8 or 1. If X cannot decide whether Y thought of 2 or 4 after this, X must have thought of the number 2. (We cannot determine whether Y thought of 2 or 4.) This month's problem was correctly solved by students Eileen Kelly, Jeff Moles, Matt Pacione, and Dan Weaver.

Problem of the Month

The following was posted to the Internet newsgroup sci.math by "Chris." A goat is tied to the corner of a 10 foot square enclosure by a 30 foot rope. The goat is able to graze anywhere outside the enclosure that the 30-foot rope permits. What is the area that the goat is able to graze in square feet?

Students and others are invited to submit solutions to Dr. George Gilbert (Math Dept. Office or P.O. 298900). Correct solutions submitted by persons who are not members of the TCU math faculty will be acknowledged in the next issue of the newsletter. Note that a correct solution is an answer and a justification of its correctness. The solution to the problem will be published in the next edition of the newsletter.

The TCU Math Newsletter will be published each month during the academic year. Dr. Hatcher: Editor; Dr. Gilbert: Problem Editor; Dr. Doran: Thought of the Month Editor. Items which you would like to have included should be sent to Dr. Hatcher (Math Dept. Office or P.O. 298900).