



TCU Math Newsletter

*There was a frustrated mathematician named Denny---
His limericks weren't worth a penny.
In technique they were sound,
Yet somehow he found
Whenever he tried to write any,
That he always wrote one line too many!
- Unknown*

Talk for Math Majors on Preparing Resumes on September 4

The first talk in the TCU actuarial talk series, scheduled on September 4, may be of interest to all mathematics majors. Shannon Merchant of TCU Career Services will offer guidance on preparing resumes. This talk, titled "Actuarial Resumes," will be held at 3:30 pm in TUC 352 with refreshments at 3:00 pm in TUC 300. Those attending the talk will also learn more about the Mathematics Department's online resume book.

All mathematics majors are welcome to submit a resume for inclusion in the departmental online resume book. TCU Career Services and Dr. Sue Staples, Director of the Actuarial Program, are coordinating the production of this book. Submissions must first be reviewed and approved before they are added to the resume book. For further information, contact Dr. Staples at s.staples@tcu.edu.

Attendees at the September 4 talk may learn timely ideas and strategies in order to prepare for the upcoming TCU Career and Intern Expo Fair on September 11. Please see the website <https://careers.tcu.edu/student-events.html> to learn more about this event.

Approximately once or twice a month, the TCU Mathematics Department will host talks such as these of interest to students in the actuarial program. Many of the talks will be useful in general for careers in industry or finance.

Second September Actuarial Talk

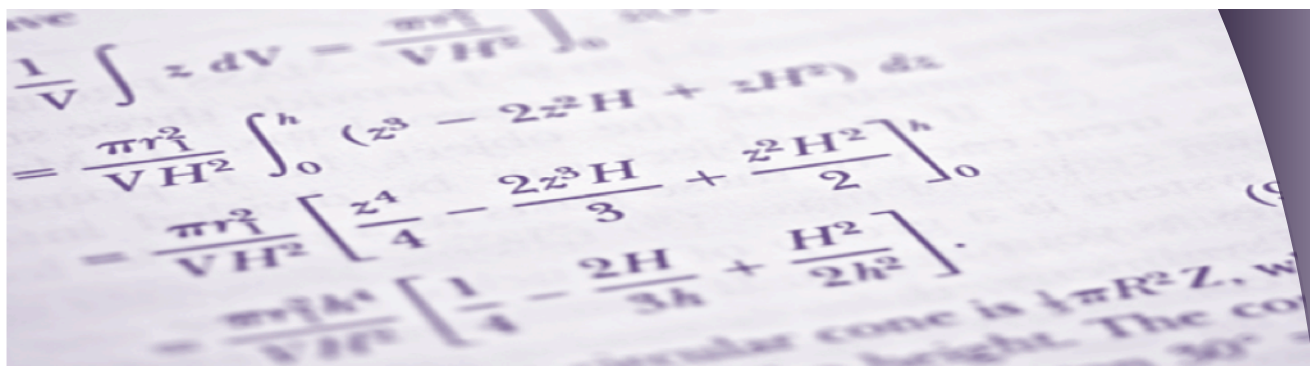
Speakers from Wellington Insurance will present an actuarial talk on September 25 at 3:30 pm in TUC 352 with refreshments at 3:00 pm in TUC 300. Watch the TCU Mathematics Department web page for details.

Frank Stones Colloquium Talk

The first talk in the Frank Stones Colloquium series will be presented on Friday, September 13 by Dr. Susan Morey of Texas State University. The second talk in the series will be on Tuesday, September 24 and presented by Dr. Sinan Ariturk of Rice University. The talks will be presented at 3:30 pm with refreshments at 3:00 pm in TUC 300. Watch the Mathematics Department web page for the room locations and titles for the talks.

National Science Foundation Grant

Dr. Greg Friedman of the TCU Mathematics Department was recently awarded with a research grant from the National Science Foundation. The grant was from the NSF Division of Mathematical Sciences grant through the Topology Program.



Solution to the April 2013 Problem of the Month

Problem: Let S be a nonempty set of integers such that if one of the integers n , $2n + 9$, and $2n + 25$ is in S , then all three are in S . Must S be the set of all integers?

Solution: Yes; it is enough to show that n is in S if and only if $n + 1$ is in S . First n is in S if and only if $2n + 9$ is in S if and only if $2(2n + 9) + 9 = 4n + 27$ is in S if and only if $2(4n + 27) + 9 = 8n + 63$ is in S . Similarly, $n + 1$ is in S if and only if $2(n + 1) + 9 = 2n + 11$ is in S if and only if $2(2n + 11) + 9 = 4n + 31$ is in S if and only if $2(4n + 31) + 9 = 8n + 71$ is in S . However, $8n + 63$ is in S if and only if $2(8n + 63) + 25 = 2(8n + 71) + 9$ is in S if and only if $8n + 71$ is in S .

The April Problem of the Month was solved by Brad Beadle ('96).

September 2013 Problem of the Month

This month's problem comes from the 2012 Michigan MATH Challenge. You are sitting at a table, blindfolded. You have been told that scattered about on the table, there are 52 playing cards, and exactly 31 of them are face-up. Your goal is to form two piles of cards, both of which have the same number of face-down cards. How do you do this, without taking off the blindfold?

Students and others are invited to submit solutions to Dr. George Gilbert by e-mail (g.gilbert@tcu.edu) or hard copy (Math Dept. Office or TCU Box 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.

Editor: Rhonda Hatcher
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