The Math News

Volume 2, number 9 April 4, 2003

MATH DEPARTMENT WELCOMES 34 NEW MAJORS

The Math News is delighted that these members of the **Class of 2006** are now **Mathematics Majors**:

Peter D. Barkley, Mark A. Barnes, Simeon D. Barrett, Johanna D. Berger, Abby A. Brandon, Donald A. Breazeale, Timothy B. Brock, Kindle J. Clark, Gregory M. Coy, Timothy N. Davis, Gregory C. Dietzen, Laura F. Dogger, John H. Doherty, Emile H. Hawkins, Robert B. Irving, Marcus K. Keliiholokai, Matthew C. Knitt, Ivor J. Kristiansen, Michael L. Linn, Theodore S. Marley, Gordon R. McDonald, Cayanne V. McFarlane, Shannon M. Randall, Richard R. Rivas, Jason M. Robinson, John D. Rodenburg, Daniel C. Ryan, Yasmine M. Sauls, Albert R. Sharlow, Michael D. Sledge, William P. Sumption, Raphael J. Thalakottur, Alexis V. Thompson, Daniel J. Wendolowski

We're proud of these new **Quantitative Economics Majors**:

Eric R. Amat, Kelvin L. Boatner, Timothy W. Burfield, David A. Dunfee, Jenna L. Gatto, Jordan T. Gentry, Veronica A. Gomez, Leonard A. Green, Rebecca L. Greenbaum, Christopher A. Grillo, Neal T. Herman, Matthew R. Hezel, Thomas J. Irwin, Christopher J. Lawson, Robert G. Leclerc, Erin E. McCaw, Matthew O. McFarland, Douglas V. McMahon, Chika U. Onyekanne, Justin K. Ossola, Brian R. Pennington, Ryan W. Robertson, Joseph K. Robinson, Michael B. Robison, Tiffany M. Schaafsma, Joshua B. Sink, John B. Stringfellow, James F. Tripiano, Paul A. Truog

Both SMA and SQE majors begin their specialized courses with SM261, **Matrix Theory**.

APRIL IS MATHEMATICS AWARENESS MONTH — ARE YOU MATHEMATICALLY AWARE?

How much art can you find in Chauvenet Hall?

Visit the Mathematics Department web site at **http://www.usna.edu/MathDept/website/index.htm**

This issue's math problem: (An old favorite.) Suppose you have 31 1" x 2" dominoes and an 8" x 8" checkerboard. Can you place the dominoes on the board so as to cover all but two squares–diagonally opposite corners?

Problem solution: (Alice flips 9 coins, Bob 10. The winner is the one who gets the most heads; Alice wins if there's a tie. Who's more likely to win?) Alice and Bob are equally likely to win. After Bob flips his first 9 coins, he has a 50-50 chance of having more heads than Alice. If he has more, he'll win the game. If he has less, his tenth coin can give him at most a tie, so he'll lose. If he has the same number of heads as Alice, he'll lose if his tenth coin is a tail and win if it's a head.

The National Security Agency is believed to be the world's largest employer of mathematicians. (They have no comment.)