Welcome Back!

It's finally spring term at Carleton, and we hope you're as glad as we are to be back! And it's not just the unseasonably warm weather-- there are more than a handful of fun courses to take, from Cryptography to a second course in Abstract Algebra to Stochastic Processes. Signups are out for the annual game contest, and we've got a brand-new set of problems of the fortnight (be sure to see this fortnight's at the end of this issue of the Gazette). Spring term is one it's easy to be excited about!

Putnam Results are in!

Congratulations to Devon Manber and Ben Matson, who placed among the top 400 contestants in last December's Putnam competition. An impressive ten Carleton students made a non-zero score on the exam. This year 4320 students from 577 colleges and universities took the exam. Nationally, the median was 1 (out of a possible 120) and the high score was 96. Kudos to all who took the exam!

A Faculty/Staff/Student Game Contest

Ever wonder what it would be like to sit down and play a game with your colleagues or your faculty? Find out! Sign up on the white board to play in a Blokus Tournament this spring term. Sign up by Tuesday noon; the bracket will be announced by Wednesday noon, and then let the games begin!

LaTeX Workshop: From 0 to Homework in 60 Minutes

Come learn how to get started using the math typesetting program LaTeX. This workshop will cover the basics of creating a document, organizing it, and making beautiful mathematical formulas. It will include links to templates you can use for homework and other assignments. The workshop will be Tuesday, April 7, from 3:30-4:30 pm in CMC 102.
Problem Solving

If you like solving math problems, and want to hone your skills, come to our weekly problem-solving meeting! It's every Wednesday from 4:30 to 5:30 in CMC 328. The sessions this term will be organized roughly by topic, and will include a variety of problems, from publications including Math Horizons and the American Mathematical Monthly.

Job & Summer Opportunities

Math Department Jobs (2015-2016 School Year)

Need a job for next year? Apply to work in the math department! We're looking for course graders, Mathematica or statistics lab assistants, and Math Skills Center tutors. Applications can be found at https://apps.carleton.edu/curricular/math/resources/ and are due on April 27.

InstaEDU Online Tutoring

Become an online tutor in your favorite subjects, and teach whenever you're free. As an InstaEDU tutor, you set your own schedule, make $20/hour, and work from wherever is convenient for you (dorm, apartment, library). How does it work? We'll send tutoring requests your way whenever you're online. If you're available, just accept to instantly launch into an online lesson with a student. You can also set up scheduled lessons when it's convenient for you. Signing up is easy and takes less than 10 minutes! Just visit http://instaedu.com/become-a-tutor and follow a few quick steps. If you have any questions about tutoring with InstaEDU, please email jamie@chegg.com.

Graduate School - Bard Master of the Arts in Teaching

For the Bard Master of the Arts in Teaching, we seek students who are passionate about their subject because we believe that great teachers have a solid foundation in the content they teach. We look for candidates who are majoring in mathematics or computer science or have a strong academic background in a related subject area. We’re especially interested in students who have a strong grounding in mathematical proof and problem solving, and who have first hand experience with math enrichment, such as math circles and math summer programs. For more information, contact Japheth Wood, a professor of mathematics within the program, at jwood@bard.edu.

CDK Global - Digital Marketing division - Seattle, Washington

CDK Global has an opening for a data science intern this summer. It would be appropriate for math or computer science majors, especially for those interested in statistics and machine learning. The intern must be able to provide their own housing for the summer. Apply online (the posting is at http://www.cdkjobs.com/jobs/view/81914-Data-Scientist-Intern) or contact Julie Michelman ’11 directly at julie.michelman@cdk.com.

Epic - Madison, Wisconsin
Epic is offering a software development internship for the summer of 2015. Interns will take ownership of a meaningful and challenging project that will help shape the future of healthcare. Interns run projects in their entirety - from gaining an understanding of users’ needs to handling design, development, testing and documentation. Apply through the Tunnel.

Green Tree - St. Paul, Minnesota
Green Tree is offering a paid internship within the Valuation Analytics group. The intern will gain experience working on projects to enhance servicing revenue reporting and forecasting techniques. Apply through the Tunnel.

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**Problems of the Fortnight**

Problem 1:
Find all positive integers $x$ such that $x^2 - 10x - 22$ is equal to the product of the digits of $x$.

Problem 2:
Prove that \( \binom{n}{1} - \frac{1}{2} \binom{n}{2} + \frac{1}{3} \binom{n}{3} - \frac{1}{4} \binom{n}{4} + \ldots \pm \frac{1}{n} \binom{n}{n} = 1 + \frac{1}{2} + \ldots + \frac{1}{n} \)

Solutions to problems of the week should be submitted to Tommy Occhipinti via mailbox. Problems will remain open until they are solved; once a problem has been solved, a solution is posted in the math department hallway on the second floor of the CMC.