Mathematics Colloquium

What can you do with a mathematics degree besides teach? One way mathematics is used in industry is to analyze medical research. In this talk, **Dr. Amy Moore**, a 2001 Alma College grad, will discuss how mathematics is used at QST Consultations, Ltd. After a brief introduction to the type of work done at QST, she will talk about risk-benefit analyses. She will discuss a method for computing the risk and benefit associated with a situation and analyzing the inputs that affect these values. She will also emphasize the importance of computer programming skills in implementing these processes. Dr. Moore is a **quality control analyst** at QST Consultations in Grand Rapids.

Mathematics in Medical Research

Presenter: **Dr. Amy Moore**

Date: **Monday, November 14th**

Time: 4:00

Place: SAC 109

Refreshments at 3:50.

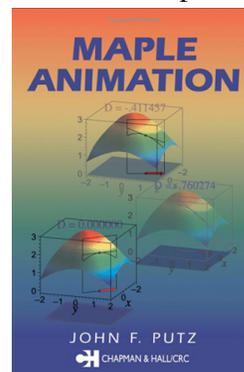## 2 Chances for 2-credit Course in Winter

If you have room in your schedule for a 2-credit course, then consider MTH 117, *Matrices and Linear Programming,* a course that deals primarily with solving systems of equations. This is a 7-weeks course, with one section offered in the first 7 weeks and another section offered in the second 7 weeks. The prerequisite is precalculus.

Focus on Faculty: Dr. John Putz

In the fall of 1981, Dr. John Putz popped in to the Alma bubble. Born and raised in St. Louis, Missouri, he graduated from Southeast Missouri State University in Cape Girardeau with a major in teaching and mathematics. After graduation, he returned to St. Louis to teach at a local high school and work on his Master's degree and Ph.D. at St. Louis University with a keen interest in Abstract Algebra (his favorite subject in math).

Dr. Putz is actually a very accomplished professor; he has been published a number of times and his biggest claim to fame is his book *Maple Animation* which, as the title implies, is all about all the intriguing things you can do with Maple. He is also very proud of his forty-one year marriage and his two sons, both of them having their doctorates as well in music and anthropology.

In his free time, Dr. Putz has an ardent passion for sailing his own sailboat, "Veritas" which is Latin for "truth." He even enjoys reading nautical themed books. Dr. Putz can actually read French fairly well and actually paid his way through college by playing the keyboard in a rock cover band! He's a man who is full of surprises and very passionate about math. Stop by his office some time and get to know him. *Jon Young*

Upper-level Courses in Winter Term

It might be helpful to know what upper-level courses are offered next term and when they'll be offered again.

	Next time offered
MTH 211 *Differential Equations*	Winter 2014
MTH 223 *Math Structures*	Winter 2013
MTH 342 *Prob & Stats 2*	Winter 2014
MTH 421 *Abstract Algebra*	Winter 2014
CSC 220 *Data Structures*	Winter 2013
CSC 240 *Algorithms & Complexity*	Winter 2014
CSC 345 *Artificial Intelligence*	Winter 2014
CSC 440 *Compiler Design*	Winter 2014

MATH Competition

On Saturday, Novem-ber 5th, 70 teams from 24 different schools participated in the *17th Annual MATH Challenge*, a competition sponsored by the Alma College Department of Mathematics & Computer Science. Alma had 4 teams in the competition. A BIG THANK YOU to all who participated:

D'Montae Jones   **Amy Baranowski**
Emma Patmore   **Chris Goepfrich**
Elizabeth Curtiss   **Matt Boucher**

Alixandrea Shea   **Jon Young**
Elizabeth Gupton   **Samantha Kellogg**
Kyle Barlas

Results won't be known for several weeks.

Solution to Previous Problem

In our previous problem you were asked to break the following code.

$$4 + 3 = 4 \qquad 12 + 8 = 23 \qquad 50 + 9 = 54$$
$$7 + 8 = 62 \qquad 0 - 9 = 1 \qquad 11 \times 1 = 55$$

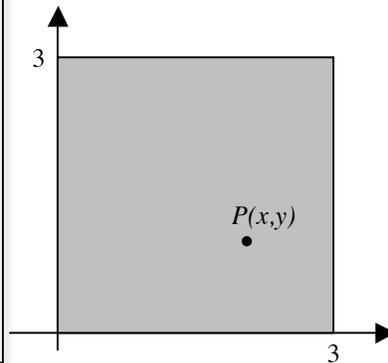Within a few hours after publishing the problem, **Alex Hegedus** submitted a correct solution and claimed his $2 prize.

$$0 = 5, \ 1 = 3, \ 2 = 4, \ 3 = 0, \ 4 = 7,$$
$$5 = 9, \ 6 = 1, \ 7 = 8, \ 8 = 6, \text{ and } 9 = 2$$

Also submitting correct solutions were: **Charlie Stack, Isaac Burrell, Elizabeth Moorman, D'Montae Jones,** and **Dr. Steuard Jensen.**

Problem of the Bi-Week

Mr. Smith asks Bob and Betty to select a point $P(x,y)$ in the Cartesian plane with the restrictions that $0 \le x \le 3$ and $0 \le y \le 3$. If Bob randomly selects the *x*-coordinate and Betty randomly selects the *y*-coordinate, what's the *probability* that their two values are within 0.5 of each other?

A prize of **$2.00** will be awarded to the FIRST student who provides a correct solution. See Prof. Sipka.

Math Help Center Hours

Monday through Thursday: 7-10 pm

SAC 216

Student assistant:	Jonathan Young
Faculty advisor:	Tim Sipka
Distribution:	Deb Smith

If you would like to submit an announcement or a short article, please send it via e-mail to Tim Sipka (sipka@alma.edu).