# Math News

Vol. XXII, No. 3 Feb. 2008

## KME News

The next meeting of KME will be this Thursday, Feb. 28, at 4 p.m. in DH 202. New members will be introduced.

New member induction will be held this coming Sunday (March 2) in Room 237 of the Library at 2 p.m. The featured speaker will be Dr. Rob Forsythe who will present a talk on Three Methods of Factoring Quadratic Expressions.

## Two Puzzles

Two puzzles this month.

Puzzle 1: The faces of a solid figure are all triangles. At six of the nine vertices, four faces meet and at each of the remaining three vertices, six faces meet. How many edges does this solid figure have?

Puzzle 2: Show, in two ways, that if x, y, and z are real numbers, and $x + y + z = 1$, then $xy + xz + yz$ is less than 0.5.

## FSU Mathematics Symposium

Mark Friday, April 18, 2008 on your calendars as the date of the 37th annual Frostburg State University Mathematics Symposium, co-sponsored by the Mathematics Department and the Maryland Council of Teachers of Mathematics. Held on our campus each spring, the Symposium is designed to serve teachers of mathematics in the tri-state area from the elementary to college level. In addition, students currently enrolled in FSU mathematics courses are invited to attend free of charge. Sixteen talks on mathematics and mathematics education will be featured at this year's Symposium, including a featured address by Dr. Annalisa Crannell, Professor of Mathematics at Franklin & Marshall College.

If you're interested in mathematics, and particularly if you plan to teach mathematics, the Symposium could be a rewarding experience. More information will appear in the next issue of *Math News* as well as the Symposium 2008 link on the Frostburg State Mathematics Department home page.

The Mathematics Symposium is supported by grants from the Frostburg State University Provost's Office and the FSU Faculty Development Subcommittee.

## Scholarships Available

Scholarship Applications are available in DH 203 for the following scholarships sponsored by the Mathematics Department. Applications are due on March 1 (or the Monday following, in this case).

EXCELLENCE IN MATHEMATICS SCHOLARSHIP

For rising Senior Mathematics Major with at least 3.0 GPA overall and 3.5 GPA in MATH courses

CBIZ OUTSTANDING MATHEMATICS/CALCULUS STUDENT SCHOLARSHIP

For rising Sophomore or Junior full-time Student with at least 3.0 GPA overall

Another scholarship available to mathematics majors, et. al., is the following:

ROSCOE BARTLETT SCHOLARSHIP

For full-time student with a declared major in math/biology/chemistry/ physics or engineering and a resident of the Sixth Congressional District (Allegany, Carroll, Frederick, Garrett, Howard or Washington counties of Maryland), with at least 3.0 GPA overall and 3.5 GPA in the major.

Application forms for this scholarship are available in the Financial Aid Office. Deadline is also March 1.

## Answer to Last Issue's Puzzle

Dan needs to get exactly one quart of water using only a 7-quart jug and an 11-quart jug (and a large supply of fresh water). How does he do it?

An Answer: Let the 11-quart jug be Jug A, and the 7-quart jug be Jug B. Dan first fills Jug A, then pours 7 quarts of water from Jug A into Jug B. He then empties Jug B and pours the remaining 4 quarts of water from Jug A into Jug B. Dan fills Jug A again and pours 3 quarts of water into Jug B (enough to fill it). After emptying Jug B, Dan once again pours water – 7 quarts this time – from Jug A into Jug B. Exactly 1 quart of water will be left in Jug A.

*Math News* is published for students, faculty, staff, and administrators by the Department of Mathematics.