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KME News

The next meeting of KME will be Thursday, April 24, at 4 p.m. in DH 202. Dr. Barnet will give a talk titled, "Making Stereo Anaglyphs Using Maple 10." Simple, inexpensive, anaglyph viewing glasses (3-D glasses) will be distributed to attendees free of charge.

Tentative plans are being made for an end-of-semester picnic. Watch for posters or other announcements.

FSU Mathematics Symposium

Friday, April 18, 2008 is the date of the 37th annual Frostburg State University Mathematics Symposium, which is co-sponsored by the Mathematics Department and the Maryland Council of Teachers of Mathematics. If you are interested in mathematics, and particularly if you plan to teach mathematics, the Symposium could be a rewarding experience. Students currently enrolled in FSU mathematics courses are invited to attend free of charge.

There are five talks scheduled at each of the times 9 a.m., 10 a.m., and 11 a.m., including three talks by FSU Mathematics faculty. Dr. Wojnar will be presenting *Roadblocks to Mastery – Reflections on a Sabbatical Year (from University to Middle School*) at 9 a.m.; Dr. Forsythe will be speaking at 10 a.m. on *Three Methods of Factoring* Ax^2+Bx+C; and Dr. Revennaugh's talk, *Statistics for Elementary School***,** will be at 11 a.m. Program details can be found on the Symposium 2008 link on the Frostburg State Mathematics Department home page.

The featured address will take place at 1 p.m. in LC201. Our featured speaker is Dr. Annalisa Crannell, Professor of Mathematics at Franklin & Marshall College. Dr. Crannell's talk (*Math and Art: The Good, the Bad, and the Pretty*) will explore the mathematics behind perspective paintings.

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

Puzzle

Your only timepiece, an alarm clock, stops because you forgot to wind it. You walk to a store that has an accurate wall clock, make some purchases, walk back home and at once set your alarm clock to approximately the correct time. How can you do this if you did not take the alarm clock with you?

Graduating Seniors

There are three Mathematics majors who are graduating soon: Nicole Garber; Jason Kirby (who is also majoring in Physics); and Wayne Rice. Math News extends congratulations to these students.

Answer to Last Issue's Puzzles

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?

Answer: **21**. The number of faces meeting at a point is 6x4 added to 3x6, or 42. Since each triangle has three points, there must be 14 triangles; 14 triangles have 42 sides, but since each side is shared with another to form an edge, the number of edges is 21.

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.

Answers: (i) $(x + y + z)^2 = 1^2 = 1$. Solving this equation for $xy + xz + yz$, we get $xy + xz + yz = 0.5\,(1 - x^2 - y^2 - z^2) < 0.5$

(ii) Let a and b be positive numbers such that $x = ⅓ + a$ or $x = ⅓ - b$, and $y = ⅓ + b$ or $y = ⅓ - b$. Also, $z = 1 - x - y$. Finding $xy + xz + yz$, the product sum of the four combinations is $⅓ - a^2 - b^2 - ab$ or $⅓ - a^2 - b^2 + ab$. The latter expression equals $⅓ - (a - b)^2 - ab$.

The largest value of either expression occurs when a & b are zero, so the largest value of the product sum is ⅓ which is less than 0.5.

Mathematical Thoughts

Computers are composed of nothing more than logic gates stretched out to the horizon in a vast numerical irrigation system. -- *Stan Augarten*

All human knowledge thus begins with intuitions, proceeds thence to concepts, and ends with ideas.

-- *Emmanuel Kant*

Angling may be said to be so like mathematics that it can never be fully learned. -- *Izaak Walton*

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