

The Math News

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Dean Davis reports that Mathematics has the 3rd highest order of merit of any major for current seniors. Congratulations to the Class of 2002! Not coincidentally, Mathematics is one of 6 majors in which at least 90% of the seniors got their first choice of service selection. Mathematics majors study **differential equations** in the course that makes use of material from **SM222**, a version of the standard differential equations course that makes use of material from **SM261, Matrix Theory**. Mathematics electives include **SM315, Introduction to Partial Differential Equations**, and **SM426, Numerical Methods for Differential Equations**.

This issue's quotations:

These thoughts did not come in any verbal formulation. I rarely think in words at all. A thought comes, and I may try to express it in words afterward. Albert Einstein

Any fool can know. The point is to understand. Albert Einstein

Like the crest of a peacock so is mathematics at the head of all knowledge. Anonymous -- an old Indian saying

Math Majors' Ice Cream Social a Big Success!

About 15 mathematics majors hosted about 40 Midshipmen from the class of 2005 on Thursday, February 28. They talked about the mathematics major and shared some ice cream, soda, and other refreshments. Prof. Garcia organized the event, and several other Mathematics Department faculty were also present.

Quick problem: If you break a line segment into three pieces by randomly choosing two "cut points," what is the probability that the three pieces can be rearranged to form a triangle? (For purists, "randomly choosing" means making two independent selections using the uniform distribution.)

Last issue's problem: If you multiply out $(x+y-z)^{50}$ and then add up

all the coefficients of the powers of x , y , and z that appear, what sum should you get?

If you make the substitutions $x = y = z = 1$, $(x+y-z)^{50}$ becomes 1^{50} . If you make the same substitutions after expanding the expression, you get the sum of all the coefficients. So the sum is 1. (The sum of the *absolute values* of the coefficients is 3^{50} .)

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