

MSCS



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Attention ALL Seniors!!!!

What will you be doing with your life after St. Olaf College? School? Work? Nothing? E-mail a short paragraph of your future plans to Kelly (dolank) or Mikayla (meyerm) by **Wednesday, May 9**. Here is an example of what you could write:

Your Name (your major): After school I will be attending (graduate school of your choice) in the great state of (state of your choice). I hope to graduate with a degree in _____ and go on to become a _____.

~or~

Your Name (your major): After my wonderful experience at St. Olaf College I decided I am ready for the "real world." I will be entering the work force as an employee for _____ in the position of _____.

~or~

Your Name (your major): I have no idea what I will be doing. I am moving _____. I'll get back to you in a year.

Mark Your Calendars!

The annual math picnic is coming up on **Sunday, May 13th, from 1 to 3 pm** at Sechler Park (the one right behind Malt-o-Meal). This year the picnic will be a BBQ, so if you want to come please **SEND YOUR CAF NUMBER** to Kelly Nail (nail@stolaf.edu) (also let her know if you are vegetarian). In addition, a sign-up will be placed in the math hallway. At the picnic, the infamous softball game against the professors will take place... so bring your glove and any bats or balls you have!

Jokes for Geeks...

Q: Do you know why there's never been beer at a math party?

A: Because you can't drink and derive..

Q: Why do Lumberjacks make good musicians?

A: Because of their natural logarithms. (dedicated to Professor Hanson who would have been a lumberjack if he hadn't become a math professor)

Problem of the Week (POW)

Two Questions. Adelaide and Bruno play the following game. Adelaide thinks of a polynomial P , of concealed degree, with non-negative integer coefficients. Bruno gives Adelaide an integer x , and Adelaide tells Bruno $P(x)$. Then Bruno gives Adelaide an integer y , and Adelaide tells Bruno $P(y)$. Bruno must then guess the polynomial P . Find a winning strategy for Bruno.

Submit all solutions before the appearance of the next problem to Josh Laison in person, by e-mail (laison@stolaf.edu), or by Starfleet communicator. The first correct solution gets a prize; all correct solutions get fame and glory.

Solution to A Weighty, Colorful Problem. Congratulations to Brendan Bailey, Reid Price, and Thomas McConville, who all solved the problem this week. Brendan won a package of "rocket balloons."

The following solution is due to Thomas McConville. Label the weights $r_1, r_2, b_1, b_2, y_1, y_2$ and assume that $A < B$.

First compare $r_1 + y_1$ to $r_2 + b_1$. -- If $r_1 + y_1 > r_2 + b_1$, then $r_1 = B$ and $r_2 = A$. Now compare $y_1 + b_1$ to $y_2 + b_2$. Since there are 2 A's and 2 B's among the four weights, if $y_1 + b_1 > y_2 + b_2$ then y_1 and b_1 are B and y_2 and b_2 are A. Similarly if $y_1 + b_1 < y_2 + b_2$. If equal, then y_1 and b_1 are opposites and the first relation could only hold if $y_1 = B$ and $b_1 = A$. The case where $r_1 + y_1 < r_2 + b_1$ is analogous.

If $r_1 + y_1 = r_2 + b_1$, then $y_1 = r_2$ and $r_1 =$

b_1 . Now compare $y_1 + b_2$ to $b_1 + y_2$. Again, there are two A's and two B's, and since y_1 and b_1 are opposites, it is impossible to achieve equality, so they are either both A's or both B's.

If you would like to submit an article or math event to be published in the Math Mess, e-mail meyerm@stolaf.edu or dolank@stolaf.edu.

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