Math Colloquium

Mathematics has many applications to various scientific fields, including the study of human movement (Kinesiology). Mathematical principles apply in many contexts, including calibration of lab equipment, statistical analysis of data, understanding the physics and biomechanics of movement, predicting energy cost of various activities, optimizing mechanical efficiency, monitoring human movement, and many others. **Alex Montoye**, a 2010 Alma grad and currently a Ph.D. student in Kinesiology at M.S.U., will discuss some of the specific ways he uses mathematics in his everyday work and how majoring in math has given him an advantage over others who work in the field of Kinesiology.

"Using Math in the Real World: Applications of Mathematics to Kinesiology"

Presenter: **Alex Montoye**
Date: **Monday, October 8th**
Time: 4:00
Place: SAC 109

Refreshments at 3:50

News From The Math Club

The Math Club is sponsoring the following events:

Movie Night: Thursday, October 11th, 8:30 p.m.
Room TBA

Study Night: Monday, October 15th, 8-10 p.m.
Smith Room in the Library

The Math Club meets **EVERY THURSDAY at 10 pm** in the Wright Hall lobby.

What Can I Do With My Math Major?

When I was a freshman, I was an ambitious little math nerd ready to take on Alma College, graduate with a degree in mathematics, and get a "big boy" job. Now, three years later, I'm still the same nerd, graduating in the spring with a math degree, but have no clue what my "big boy" job is going to be. It's nerve-wracking, but nothing for you to worry about; I'm going to help you figure out what you can do with your math major so you're not stuck in my boat when graduation comes. So, besides teaching, ***actuarial science*** is the first career that we're going to explore.

Actuaries, using mathematics, statistics, and financial theory, assess the risk that an event will happen and then advise businesses and clients to develop policies to minimize the cost of the risk. According to Careercast.com, being an actuary is the second best job in America with a 0% unemployment rate; this means that if you pass the exams (there are eight, but you only need to pass one to start working) you'll never be out of a job! The median wage in 2010 for an actuary was $87,650, with the higher end (those who pass all eight exams) making up to $250,000! For more information, check out the Careercast.com website!
Jon Young

Important Meeting For Seniors

All senior mathematics and computer science majors are required to attend a meeting on **Tuesday, October 23rd** at 4:00 in SAC 216. At this meeting we'll provide details about the written and oral components of the senior presentations. Please put this important meeting on your calendar.

NSA Summer Programs

The Office of Mathematics Research at the National Security Agency (NSA) offers two exciting summer programs for mathematics, computer science, and physics students. The Director's Summer Program (DSP) is a highly competitive program for undergraduates, and the Graduate Mathematics Program (GMP) is a program for recent graduates with degrees in mathematics. The application deadline for both programs is **October 15th**. For more information, visit the NSA website, www.nsa.gov/career, and check out the student programs.

MATH Competition on November 3rd

You are invited to participate in the 18th annual MATH Challenge, held on **Saturday, November 3rd**. The MATH Challenge is a *team-oriented*, 3-hour exam consisting of ten interesting problems dealing with topics found in the undergraduate math curriculum. Teams consist of 2 or 3 students, and you'll take the exam on campus from 9:30 am to 12:30. You may form your own team or you can simply be placed on a team. Before the exam, you'll be provided with a "hearty breakfast" of waffles, bagels, donuts, and juice. If you're interested, please contact Professor Sipka.

Need Help?

Tutors are available to help you for the following courses at the times listed. *Please come!*

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MTH 101	Monday & Wednesday 8:00 – 10:00 pm in SAC 214
MTH 112 MTH 121 MTH 122	Monday - Thursday 7:00 – 10:00 pm in SAC 215
MTH 116	Tuesday & Thursday 8:00 – 10:00 pm in SAC 214

Math Club Officers

Pres: **Caitlin Closs**   VP: **Phil Ryskamp**
Treas: **LeeAnne Carr**   Sec: **Katie Dwenger**

Solution to Previous Problem

Ben Brow and **Alex Hegedus** submitted correct solutions almost simultaneously. To find x, Ben introduced y, and created the equations $\frac{8}{12} = \frac{x}{29+y}$ and $\frac{10}{8} = \frac{x}{8+y}$, finding $x = 30$.
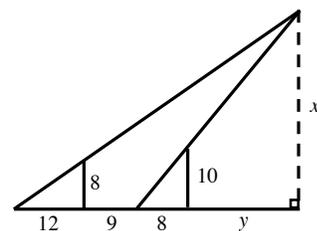
Puzzle of the Bi-week

One day Robin said, "I have been alive during all or part of five decades." Rounded to the nearest year, what is the *youngest* Robin could have been?

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