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Mathematician Atiyah
to give lecture Oct. 21
in Lincoln, NE

--copied from source, *Lincoln Journal-Star*, Oct. 13

Sir Michael Atiyah of the University of Edinburgh will give a public lecture on "The Nature of Space" at 4 p.m. Oct. 21 at Kimball Recital Hall, 11th and R Streets. The talk is free and intended for the general public.

Philosophers, mathematicians and physicists have struggled for centuries to understand the nature of space. In a lecture celebrating the 100th year since the publication of Albert Einstein's first relativity paper, Atiyah will review this history in light of Einstein's theories and of modern exotic scenarios where, for example, particles are replaced by vibrating strings in 10-dimensional space-time.

Atiyah is one of the most prominent mathematicians of the 20th and 21st centuries. He has won many awards, the most recent being the Abel Prize in 2004 (jointly with I.M. Singer) for the discovery and proof of the Index Theorem, which connects geometry and analysis in a surprising way, and for a leading role in building new bridges between mathematics and theoretical physics.

The Abel Prize is the mathematical equivalent of the Nobel Prize and includes a monetary award of nearly \$1 million.

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Editor, Connie Buller, Metropolitan CC, Omaha
To join, click on [Nebraska Mathematical Association of Two-Year Colleges](#)

Must we re-vamp our teaching methods for today's students?

---Connie Buller, Metropolitan CC, Omaha

I was preparing to teach long division of polynomials in my Intermediate Algebra class, and synthetic division in my College Algebra class, so while I was taking attendance and handing back papers, I asked my students to do a long division problem "by hand", showing the steps. Specifically, I asked them to do 2043 divided by 37.

To my surprise, about half of each class could not do this division. It was not the problem of small number errors, but the fact that these modern students actually did not know the division algorithm in the first place. One student divided 37 in once, and thought that all the rest should be the remainder. Another student, when subtracting, thought that all borrowing should be done from the first digit. Another student, who grew up in Bulgaria, tried to do it the alternate way, but had no better memory of that algorithm than did his US classmates. Saddest of all was the student who was fumbling with his calculator, trying all the multiples of 37, trying to do this problem before I gathered in the papers.

I believe that there is an unfortunate misuse of calculators in elementary schools, that is not caught in secondary schools, and yes, that makes me re-consider my teaching style. In particular, I have learned not to assume anything about arithmetic skills, even in a class that is otherwise well-prepared for the mathematics being taught. It is a shame, because if I can help students see that all they are doing is simply a new use for that which we learned before, it is much easier for the students.



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Upcoming Conferences:

AMATYC national: San Diego, CA
November 9-13, 2005

Dale Johansen (NEBMATYC Webmaster),
Darlene Hatcher, Marcia Vergo and Connie
Buller are planning to attend. If any of you
will be going, please let us know ☺

Nebraska Delegates:

- Dale Johansen (Northeast CC)
- Darlene Hatcher (Metropolitan CC)
- Connie Buller (Metropolitan CC)

Nebraska Presenters and summaries

“Great Ideas in Mathematics Placement and
Assessment” (out of 9 presentations)

Does Color Matter in Assessment of Student Performance?

After I gave a test printed on blue paper,
students who had trouble reading the white
tests came up to me thanking me for the
color. For the majority, color makes no
difference, but in each class, some students
say “Wow, thanks for the blue!” and their
test scores seem better. Connie Buller, Metropolitan
Community College

Mathematics and Performance Based Assessment in General Education

The presentation will explain how
Metropolitan Community College is
assessing mathematics (numeracy) skills
across the general education curriculum. I
will discuss the process we go through to
collect artifacts from various programs and
the rubric used to grade these artifacts. Darlene
Hatcher, Metropolitan Community College

NEBMATYC regional: North Platte
NE Friday, April 8, 2006



To cbuller@mcneb.edu

Already planned: Round Table Discussion
of College Algebra –Frank Weidenfeller,
MCC

How Can We Encourage our Math Students to Write ?

Several Intermediate Algebra
sections at Metro CC and UNO are
working jointly on assessment that
includes a writing component.
.Darlene Hatcher is heading this up.
Below is a sample assignment.

MATH 1310 – Intermediate Algebra

Portfolio Writing Assignment II
Due: Thursday, October 27, 2005 by
12:00 pm

Directions: Write a letter to Michele
O’Connor, Dean of Math, Science and
Health Careers, at Metropolitan Community
College, explaining what a complex fraction
is, and the two different methods used to
simplify a complex fraction. Explain the
math concept(s) involved and/or the steps
for each method in a way you think she will
understand. You are to write this in your
own words, do NOT just copy the directions
out of a math book. Include an example
illustrating the two methods and explain how
either method produces the same result.
Finally, include a paragraph or two of
reflection about the two methods; be sure to
discuss which method you prefer and why.

Requirements: The assignment must be typed
and follow the format of a business letter (see
attached) and sent to your instructor as an
attachment to email by the due date.

News from your college? Issues to discuss? Ideas or reflections?

Email cbuller@mcneb.edu (any e-mails
may be published ☺) or telephone Connie
Buller at 1-800-228-9553 x 1356