

THE VALLEY OF VIRGINIA COUNCIL OF TEACHERS OF MATHEMATICSVolume 46September 2015Number 1

Fall Meeting October 13 at Pence Middle

The Annual Fall V²CTM Meeting will be held on Tuesday, October 13, 2015, at Wilbur S. Pence Middle

School in Dayton. The meeting will feature a catered dinner, followed by a keynote address about student motivation in math class by Dr. Kenn Barron from the Motivation Research Institute at James Madison University. To get to Pence Middle, From I-81 take Exit 240 (Bridgewater). Proceed on Rt. 257 3.4 miles west to the Town of Bridgewater. At the stop light of Rt. 257 and Main Street (beside El Charro's) take a right turn and proceed north on Main Street (Rt. 42). Stay on Rt. 42 north to the town of Dayton (approx. 4 miles). In Dayton, turn left onto Rt. 732 (Eberly Road & Bowman's Road), turn left at the stop sign (Silver Lake Rd) and cross the creek. Next right onto Bowman Rd. WSPMS will be on the left in 1/4 mile. Register on-line http://v2ctm.org. Registrations need to be in before October 6.



registration costs are only \$5 and include a fully catered dinner provided by White Hill Catering. There will be numerous appealing door prizes! The program is below:

4:30 – 5:00 **Registration**

- 5:00 5:45 **Dinner** catered by White Hill Catering (Meat Lasagna with Homemade Marinara Sauce, Vegetable Lasagna with Homemade Alfredo Sauce, Green Salad, Garlic Bread, Dessert, Sweetened/Unsweetened Tea and Water)
- 5:45 6:00 **Business Meeting/Door Prizes:** Anne Loso, V²CTM President
- 6:00 7:30 **Keynote Address**: *Is there a "formula" to help understand and improve student motivation in my math class?* Dr. Kenn Barron, James Madison University.

JMU Psychology Professor To Present Keynote

Keynote Address

In the keynote session, we will discuss student motivation in our math classes and the common challenges that we each face when teaching our students math. Then we will be introduced to a formula to help quickly understand the major sources of student motivation and what we can do to redesign our math courses to better promote student motivation.



Kenn Barron is a Professor of Psychology at James Madison University and co-coordinator of the Motivation Research Institute. He received his PhD in social/personality psychology from the University of Wisconsin-Madison in 1999, and began working at JMU in 2000. His research focuses on motivation and achievement in academic, sport, and work settings, and has appeared in the *Journal of Personality and Social Psychology*, the *Journal of Educational Psychology*, *Contemporary Educational Psychology*, and the *Educational Psychologist*. He also regularly publishes and presents on topics related to the Scholarship of Teaching and Learning (SoTL) and research methodology.

Kenn received his college's Outstanding Junior Faculty Award in 2004, and he has been nominated multiple times for his college's Distinguished Teacher and Distinguished Researcher Awards. He also received the Provost's Award for Freshmen Advising in 2007, the National

Academic Advising Association's Outstanding Faculty Award in 2008, and JMU's All Together One Award in 2009. In 2012, he was named a fellow of the American Psychological Association, and he was named one of Princeton Review's Top 300 professors in America.

Kenn regularly teaches coursework in research methods, statistics, motivation, and social psychology. In addition, he puts his knowledge of motivation into practice by coordinating JMU's Psychology Learning Community (PLC). The PLC is an integrated academic-residential program for first year students. Students take part in a unique introduction to the field of Psychology and jump start to the major through a series of curricular and co-curricular experiences designed specifically for them, while living together in the same freshmen residence hall.

2015-2016 V²CTM Officers

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V²CTM To Sponsor Regional 24 Challenge Again

 V^2CTM is again sponsoring the Regional 24 Challenge Tournament this coming Spring at Wilson Middle School on Tuesday, April 12. John Stevens will once again serve as the MC of the event. Local elementary schools are encouraged to send representatives. Contact Laurie Biser, <u>lbiser@augusta.k12.va.us</u>, for more information.

Bridgewater College to Host Share Fair Nation October 10

Share Fair Nation – a free expo featuring hundreds of interactive educational activities for students, families and the community – will fill Bridgewater College's Funkhouser Center for Health and Fitness Saturday, Oct. 10, from 9:30 a.m. until 4 p.m.

Share Fair Nation is focused on STEAM (science, technology, engineering, arts and mathematics) activities and will feature two distinct components: Classroom Intensives, which are free professional development classes for teachers, and STEMosphere, a free, hands-on, brains-on expo for students, their families and the public. As many as 300 teachers and hundreds of their students are expected to be on hand, as well as local companies, non-profit organizations and Bridgewater College clubs – all sharing fun and highly interactive STEAM activities designed to help the community explore, invent and experiment.

Among the more than 35 STEAM-inspired activities on tap will be a real, life-like flight simulator where you can practice your flying skills, animal brains that you can learn about and hold, construction of a catapult, building and programing robots from Legos, and creation of towers, buildings, bridges and other structures with KEVA planks. BC students will also demonstrate various hands-on math activities.

"Last year's event was a huge success and reached so many teachers, students and parents," said Kristy Rhea, director of information technology at Bridgewater. "We are excited to bring Share Fair Nation back to the Valley to inspire us all to experience learning in an engaging, hands-on way. We were excited to see the connections made among so many local business and non-profit organizations to showcase the opportunities we have right here in the community. We cannot wait to share this day with our local educators and, once again, celebrate them for all they do while engaging students and parents in fun, interactive activities for all. " Simultaneously with the STEMosphere component of the event, teachers will participate in the Classroom Intensives component, learning how to best implement 21st century education methods and technologies into their classrooms. Teachers will begin the day at 9 a.m. in the Funkhouser Center and then move to the McKinney Center for Science and Mathematics until 2 p.m.

Teachers and the public can register for Classroom Intensives and STEMosphere at <u>https://www.bridgewater.edu/community-members/share-fair</u>. Share Fair began in Denver, Colo., in 2009, and was created by John and Carrie Morgridge, philanthropists leading the Morgridge Family Foundation. For further information, contact Kristy Rhea at (540) 828-5741 or <u>krhea@bridgewater.edu/</u>.

Do You Like Math Challenges?

You are given a pile of coins which may contain pennies, nickels, dimes, and quarters. If there are 128 coins worth \$5.15 and there are three times as many nickels as quarters, how many different piles of coins are possible? This was the Math Challenge of the week for the second week of September written by Dr. Verne Leininger at Bridgewater College. Every week, Dr. Leininger creates and posts great problems such as this one and the ones below for anyone in the Bridgewater College community to solve. He invites you to join his e-mail distribution list for the weekly problems. E-mail <u>mathchallenge@bridgewater.edu</u> to receive the problems. For some other examples of his problems, try these (the answers to all of these challenges are at the end of this newsletter):

- Find the next number in the sequence: 15, 20, 20, 6, 6, 19, 19, 5, 14, 20, ... This one is as easy as 1-2-3!
- A bookworm eats a hole in a set of consecutive pages of a book. The bookworm is an efficient eater but not a voracious reader and thus skips at least the first 10 pages of the book. If the sum of the page numbers which have holes in them is 630, how many sheets of paper does the bookworm eat holes in?
- There are 40 chairs in a classroom arranged in a rectangle. Each row has the same number of chairs and each column has the same number of chairs. During a class each row and column of chairs has at least one student and at most two students seated in it. If the number of students is divisible by 3, how many students are present for this class?

Upcoming Events

Share Fair Nation Bridgewater College October 10, 2015

V²CTM Board Meeting Rockingham County Public Schools Board Office December 9, 2015

NCTM 2016 Annual Meeting & Exposition

Building a Bridge to Student Success San Francisco CA April 13-16, 2016

Regional 24 Tournament

Hosted by Augusta County Schools Wilson Middle School April 12, 2016 Contact Laurie Biser (<u>lbiser@augusta.k12.va.us</u>) for more information

Answers to Problems

• There are 11 possible solutions to the coin problem:

Q	D	Ν	Р		Q	D	Ν	Р
0	43	0	85		6	19	18	85
1	39	3	85		7	15	21	85
2	35	6	85		8	11	24	85
3	31	9	85	1	9	7	27	85
4	27	12	85		10	3	30	85
5	23	15	85					

- The numbers in the sequence represent the position in the alphabet of the first letter of the words one, two, three, etc. That is, the "o" of one is the 15th letter, the "t" of two is the 20th as is the "t" of three, etc. So the next term in the sequence would be 5 since it would be for the "e" of eleven.
- The bookworm ate through six pages of the book, namely: Front 47, Back 48
 Front 49, Back 50
 Front 51, Back 52
 Front 53, Back 54
 Front 55, Back 56
 Front 57, Back 58
- There are nine students in the class.

V²CTM Fall Meeting Registration

There is no paper registration for the fall conference. To register you must access the online registration at <u>http://v2ctm.org</u>. You may pay your \$5 conference fees at the door on October 13. Please complete your registration no later than October 6 so we will have an accurate dinner count.

See you at Pence Middle School on Tuesday, October 13!

V²CTM Reflection Joe Hill, Editor 300 Flory Hall Bridgewater College Bridgewater VA 22812

PLEASE SHARE THIS NEWSLETTER WITH ALL MATHEMATICS TEACHERS, GRADES K-12