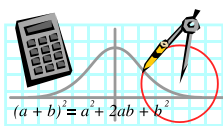# UAHuntsville

Grades 6-12 Mathematics Newsletter

1st Nine Weeks 2009-2010

I hope you have had a wonderful start to the 2009-2010 school year. As a secondary mathematics specialist at the AMSTI office at UAHuntsville, I look forward to working with each of you throughout the year. I want to provide support as you implement AMSTI units and teach inquiry based lessons using the 5E model.   Please feel free to call or email me to let me know how I can assist you.

Some of the ways in which I can support you:

- *Be an extra set of hands in the classroom.*

- *Visit during planning period and help you plan.*

- *Find or develop activities for you to incorporate in your lesson(s) when teaching certain topics.*

- *Teach your class(es) . At your request, I will develop a lesson using AMSTI materials, graphing calculators or other technology, and/or manipulatives to teach a particular concept to your class. If scheduling allows, I will be happy to teach multiple classes for you on the same day or team teach with you.*

- *Inventory your new AMSTI kits, place batteries in calculators, etc.*

- *Bring supplies needed to replenish existing AMSTI math kits which you have. Please contact me at jeanne.simpson@uah.edu with your supply requests.*

- *Analyze school wide testing data, focusing on math objectives found on the ARMT and Stanford 10 tests.*

- *Conduct math professional development sessions. Contact Carol Mueller, our AMSTI director, if you are interested in departmental or schoolwide staff development sessions.*

In an effort to ensure that the statewide AMSTI teacher database is accurate with names of teachers, email addresses, and school information, the UAHuntsville AMSTI site specialists will be visiting with each school within the first 2-3 weeks of August to update and/or verify our database.   We have divided our region so that each specialist will be responsible for several schools in the same area. Therefore, on this initial visit, you may receive a visit from a math or science specialist who will not be serving you for the remainder of the year. The purpose of this first visit will be to verify email addresses and grade levels for AMSTI trained teachers and to obtain information for those who are new to AMSTI or to a particular school. I will be serving you and your school this year and will contact and visit you periodically. My contact information is contained in this newsletter. Please feel free to call or email me whenever you need anything or would like for me to teach a lesson or assist you in your classroom. The list above is a sample of ways in which I can support you. If you have other ideas for how I might assist you with your classes, feel free to ask.

SHARING IDEAS

Please visit the AMSTI wikispace periodically to see what is new! There is much information that many people have placed on this site. The web address is **http://amsti.wikispaces.com/.** Under the navigation links to the left, click on "Specialists" and then you will be directed to a new page. Click on "Jeanne Simpson" to view my space. You first see my "welcome" page with general information. Look to the left and click on various links to access information that I have stored on this site. I will try to keep this site updated with newsletters, handouts for various math topics, and teaching ideas. Feel free to explore!

ACTM FALL FORUM   October 15-16, 2009   Auburn University at Montgomery

For details, go to http://www.alabamamath.org

GRANT OPPORTUNITIES

(from Ned Colley, Texas Instruments Tech Consultant)

September 2009
9/15: Ezra Jack Keats Foundation Mini-Grants www.ezra-jack-keats.org/programs/minigrant.html

9/30: Captain Planet Foundation Grants www.captainplanetfdn.org

October 2009
10/1: Toshiba Small Grants Program (for K–6) www.toshiba.com/tafpub/jsp/home/default.jsp

10/6: Walden University Educator for a Day Grants http://www.waldenu.edu/c/Schools/Schools_12149.htm

10/15: NEA Foundation • Student Achievement Grants* • Learning & Leadership Grants   www.nfie.org

10/17: Lowe's Toolbox for Education*   www.toolboxforeducation.com

November 2009
11/1: American Honda Foundation Grant   http://corporate.honda.com/america

11/1: International Reading Association Ronald W. Mitchell Convention Travel Grant   www.reading.org

11/28: SeaWorld/Busch Gardens Environmental Excellence Awards*   www.seaworld.org

11/30: Vernier/NSTA Technology Awards   www.nsta.org/about/awards.aspx

December 2009
12/1: Association for Library Service to Children's (ALSC) Awards • Distinguished Service Award

www.ala.org/alsc

12/31: Captain Planet Foundation Grants   www.captainplanetfdn.org

Help with your grant writing is available at http://education.ti.com/grants

1) The sum of nine consecutive integers is 123,456,789,987,654,321. What is the difference between the largest and the smallest of these numbers? (Tell students they may not use a calculator to solve this one!)

2) Three brothers—Bob, Louis, and Don—eat $\frac{2}{3}$ of a pie (all together). If Bob eats $\frac{1}{4}$ the amount eaten and Louis eats $\frac{1}{5}$ of what Don eats, what fraction of the pie does Don eat?

3) Suppose that x and y are two real numbers such that $x-y = 2$ and $x^2 + y^2 = 8$. Find $x^3 - y^3$.

4) What is the remainder when $(1! + 2! +3! +4! + \ldots + 99! + 100!)$ is divided by 18?

These problems provide good opportunities for students to reason and explain their answers. The problems were taken from various editions of THE MATHEMATICS TEACHER, an NCTM publication. Each month they have a "Calendar" section and the problems are great. Answers to these questions are found elsewhere in this newsletter.

WEBSITES

http://mathbits.com   calculator tutorials/activities for TI 83+/84+, downloadable graph paper, games & activities using powerpoint, algebra tiles activities, teaching math w/ video clips (includes worksheets for math classrooms)

http://cte.jhu.edu/techacademy/web/2000/heal/mathsites.htm a collection of math sites for Algebra, Geometry, Discrete Math, Trig, and Calculus, math puzzles, and brain teasers

www.mathplayground.com/   math site for elementary and middle school students featuring math games, math word problems, math worksheets, logic puzzles, and math videos.

http://www.mathwire.com/ back-to-school glyphs, math-literature connections, problem solving activities, morning routines, number sense activities, games

Answers to ❓ section:

*1) The difference would always be **8**.   2) $\frac{5}{12}$ 3) **20** (Hint: Factor the difference of two cubes and go from there)*

*4) **9** (Hint: each term from 6! through 99! Is divisible by 18 since, 6! is divisible by 18. Thus, look at the sum of the remaining terms to find the remainder.)*

CONTACT INFORMATION

Please feel free to contact me at any time. If I am not available to answer the phone, leave me a message.   I know how busy you are, and I want to assist you whenever I can. Please let me know how I can best serve you.

Jeanne Simpson , NBCT   email: *jeanne.simpson@uah.edu*

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