

MATHEMATICS (updated 11/12/09)

Larry White - Mathematics Contest Director - texasmath@centex.net

UIL Test Comments — 2009-10

***** NOTE:** See Off on a Tangent for information workshops and Student Activity Conferences *******

SAC - - - > No errors or corrections reported

> NOTE: If you were unable to attend one of the Student Activity Conferences this past Fall, you will want to read the SPECIAL SAC NOTE in the Off on a Tangent section.

A - - - >

B - - - >

District 1 - - - >

District 2 - - - >

Regional - - - >

State - - - >

TMSCA Test Comments — 2009-10 (tests I write for TMSCA)

6 - - - >

13 - - - >

State - - - >

Off on a Tangent

Workshops and/or Presentations I will be doing this summer: (for more information contact me)

1. Capitol Conference in Austin on July 10 & 11 --- see UIL webpage for topics and schedule
2. NS-Calc-Math Workshop at North Central Texas College in Gainesville on July 16 --- students/coaches
3. NS-Calc-Math Workshop at Texas Tech University on Aug. 22 --- coaches only
4. Student Activity Conferences:
 - A. University of North Texas, Denton on Sept. 19
 - B. Texas Tech, Lubbock on Oct. 3
 - C. University of Texas, Austin on Oct. 17
 - D. Sam Houston State University, Huntsville on Oct. 31

Special Student Activity Conference (SAC) information →

Number Sense Session:

There will be a short summary of the contest followed by a Q&A period for any questions students or coaches might have about the contest. (A handout with information, resources, and helpful hints will

be available for those beginning coaches who need this information.) After the Q&A, the students will take the 10 minute 2009 SAC test then grade it. The remainder of the time will be spent going over the test and discussing new problems and/or approaches to old problems for the upcoming season.

Mathematics Session:

There will be a short summary of the contest followed by a Q&A period for any questions students or coaches might have about the contest. (A handout with information, resources, and helpful hints will be available for those beginning coaches who need this information.) After the Q&A, the students will take the 20 minute 2009 SAC test then grade it. The remainder of the time will be spent going over the test and discussing new problems and/or approaches to old problems for the upcoming season.

Special Session:

You bring questions and we will find answers. Questions could include number sense shortcuts, math problem solutions, practice and test taking strategies, etc.

A Blast from the Past – If time permits we will look back at some very old number sense tests.

Student Activity Conference Notes

Tests I am writing this year are: UIL SAC, TMSCA # 6, #12, & TMSCA State, UIL A, B, District 1, District 2, Regional, and State.

Mathematicians – no new names will be added this year. 21 mathematicians from the past years are:

Theano, Alicia Stott, Karen E. Smith, Freda Porter, Emmy Noether, Grace Alele Williams, Agnesi, Archimedes, George Boole, Ada Byron, Rene Descartes, Diophantus, Erastosthenes, Euclid, Leonard Euler, Sophie Germain, Hypatia, Sonya Kovalevsky, John Napier, Claudius Ptolemy, and John Venn.

Quadratic Equation problems: $Ax^2 + Bxy + Cy^2 + Dx + Ey + F = 0$. We will continue to:

identify graphs from equation, find the angle of rotation, and rotate points (about the origin).

NOTE: Will no longer try to find the quadratic equation in standard form with no “xy” term.

Set notation: The use of proper set notation will be used.

$$\{x \mid -1 < x < 3, \text{ where } x \in \{\text{Reals}\}\}$$

Good Luck! Work Hard! Play Fair! I am off on another tangent ...