

NUMBER SENSE (updated 5/8/19)

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UIL Test Comments — 2018-19

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

*** NOTE: See "Off on a Tangent: Test Discussion" below about, regional, and state tests ***

SAC - - - > No errors, corrections, or comments reported at this time. (Release dates: 9/8/18-10/27/18)
*** Note see comment below about the SAC number sense presentation's opening problem ***

A - - - > No errors, corrections, or comments reported at this time. (Release dates: 1/11/19 - 2/9/19)

B - - - > #71 has a typo ... should have been $g(x)$ not $h(x)$ (Release dates: 2/15/19 - 3/16/19)

District - - - > No errors, corrections, or comments reported at this time. (Release dates: 3/25/19 - 3/30/19)

Regional - - - > *** See Regional discussion below. *** (Release dates: 4/12/19 - 4/13/19)

State - - - > No errors, corrections, or comments reported at this time. (Release date: 5/2/19 - 5/4/19)

TMSCA Test Comments — 2018-19 (tests I write for TMSCA)

6 - - - > No errors, corrections, or comments reported at this time. (Release date: 12/01/18)

13 - - - > No errors, corrections, or comments reported at this time. (Release date: 3/02/19)

State - - - > #47 ... The next to the last number in the sequence shown should have been 1399 ... all terms should be congruent 6 mod (7) (Release date: 3/16/19)

District Warm-Up - - - > No errors, corrections, or comments reported at this time.
(Release date: to be determined by TMSCA)

Off on a Tangent

Workshops and/or Presentations I will be doing:

1. UIL Capitol Conference, Austin - June 25-26, 2019.
2. *What's Your 9th Problem* - Math Camp at Texas Tech University, Lubbock on July 10-14, 2018.
For more information contact Jack Barton at jack.barton@ttu.edu or 806-742-2350.
NOTE: *What's Your 10th Problem* - Math Camp at Texas Tech University, Lubbock is scheduled for July 9-13, 2019 ... contact Jack.
3. Student Activity Conferences:
 - A. Sept. 7, 2019 - Tyler Junior College, Tyler
 - B. Sept. 21, 2019 - Texas A & M University - Corpus Christi
 - C. Oct. 26, 2019 - University of Texas at Austin
 - D. Nov. 2, 2019 - Texas Tech University, Lubbock

*** Note: 2019 sessions TBA at a later time***

2018 Student Activity Conference (SAC) information: (Time Schedule is tentative)

- 9:00-10:30 a.m. ---- Number Sense contest: guidelines, rules, resources, practice materials, etc.
---- SAC 2018 Number Sense Test (take/grade) NEW 10 min-80 question test
---- Q&A - discuss/answer questions from the test
- 10:45–noon ---- Mathematics contest: guidelines, rules, resources, practice materials, etc.
---- SAC 2018 Mathematics Test (take/grade) New 20 min-30 question test
---- Q&A - discuss/answer questions from the test
- 12:15-1:30 p.m. ---- Number Sense Contest and Mathematics Contest Jam Session:
---- Rules: discussion, clarifications, changes, additions, etc.
---- Previous year's problems: bring your problems and we will try to solve them
(time permitting) ---- Unique Fibonacci Sequence problems - Unusual Primes and Special numbers

NOTE: For those of you not able to attend one of the SACs, all presentations, tests, keys, etc. should be posted on the UIL Academic website following the Austin SAC.
<http://www.uiltexas.org/academics/student-activities/university-texas-2018>

Resources Update

I recently received an update on "the little red book" -- Mental Mathematics for Number Sense by Frances Walzel -- is available again. The new contact email for this book is mentalmathbook@gmail.com.

Test Discussions

Note: I have been writing 12 number sense practice tests for HEXCO each of the past five years and will be writing them again this year. Contact Linda at HEXCO.com if you are interested in ordering some of these tests.

NOTE: The district, regional, and state tests will be created based on the problems from these 6 practice tests: SAC, TMSCA 6, UIL A, UIL B, TMSCA 13, & TMSCA STATE.

SAC: The opening slide on the number sense presentation presented this problem:

3, 4, 7, 10, 16, 21, k, 40 with the answer $k = 30$. Multiple methods for finding k were investigated throughout the SACs. There are multiple strategies that can be used, one of which is to look at known sets of numbers used to create other sets. In this particular case this set of numbers was generated by adding the terms from the set of Fibonacci numbers {1, 1, 2, 3, 5, 8, 13, 21, ...} to the corresponding terms of the set of prime numbers {2, 3, 5, 7, 11, 13, 17, 19, ...}.

Regional: No matter how many times we go over the tests and proof them, sometimes issues still get by.

Fortunately, I was contacted by the Angelo State University regional number sense contest director, Dr. David Huckaby, on Wednesday informing me of three issues he came across as he examined the test prior to the regional meet. Because he contacted me when he did, I was able to have UIL notify all regional directors of the issues prior to the regional meet.

Regional directors were given the instructions on how to address the issues. It is always better to catch these prior to the test than after the test. Here are the three issues:

#59 needs a negative sign in front of 24;

#64 needs closing parenthesis ")" at the end;

#71 needs an open parenthesis "(" between the "f" and the "x", and a closing parenthesis ")" at the end of the second sentence.

STATE MEET PROOFERS AND GRADERS

Coaches of the regional team champions and the coaches of the regional wild card teams will be needed to proof the state test (while the contestants are testing) and grade the tests.

Note:

You must be a full time employee of the school district.

You must be listed as the team's coach.

You must be willing to stay in the proofing/grading room until **all** proofing **and** grading is complete.

(Please do not agree to proof and grade if you are not going to be in the room at the designated time.)

If you are one of the 24 regional team championship coaches or one of the 6 regional wild card team coaches, you need to email me no later than April 29 with the following information:

Number Sense Contest Regional Team Champion _____ Wild Card Team _____

Name _____ School & District _____

Classification _____ Region # _____ District # _____

I will _____ will not _____ be able to help proof and grade the test.

I will send you a reply confirming that I received your email. If you do not receive an email back from me then I did not receive your email. Hence, I will begin a search for a replacement for you beginning April 30. Email me at [**texasmath@centex.net**](mailto:texasmath@centex.net).

Good Luck! Work Hard! Play Fair!

I am off on another tangent ...