



TEXAS TECH UNIVERSITY  
Campus Access & Engagement

University Interscholastic League™

STUDENTS & TEACHERS—JOIN US

# “WHAT’S YOUR 13TH PROBLEM?”

**MATH, NUMBER SENSE,  
CALCULATOR, SCIENCE  
SUMMER CAMP—JULY 8-12**

Study UIL mathematics, number sense, science, and calculator applications with award winning coaches and teachers



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# SUMMER MATH, NUMBER SENSE, CALCULATOR & SCIENCE CAMP

JULY 8-12

## What's Your 13th Problem?

Check one box per session

Tuesday, July 8, 2024		
4:30 – 6:00 pm	Registration in dorm.	
7:00 – 8:00 pm	Counselors escort all campers to 1st meeting.	
8:00 – 10:00 pm	Counselors will meet with their campers	
10:00 – 10:30 pm	Students should be in dorm rooms.	
11:00 pm	Lights out in dorm rooms.	

Wednesday, July 9, 2024		
7:30 - 8:30 am	Breakfast in the dorm.	
8:45 – 9:40 am	Number Sense: beginning number sense #1	
	Calculator: how to crunch a test using rpn (reverse polish notation)	
	Math: coordinate geometry – perimeter, area, etc.	
	Science-Chemistry: (novice) stoichiometry	
9:45 – 10:40 am	Number Sense: conversion problems Memorization	
	Calculator: related rates	
	Math: work stated problems	
	Science-Biology: Hardy Weinberg equation	

Wednesday, July 9, 2024 (continued)



10:45 – 11:40 am	Number Sense: estimations – <b>bring a calculator</b>	
	Number Sense: (novice) multiplication shortcuts	
	Calculator: slopes, max/min problems	
	Math: introductory stats (mean, median, mode, quartiles, etc.)	
	Science-Physics: fluids	
	Science: Chemistry: (advanced) chemical kinetics	
11:45 – 1:00 pm	Lunch in the dorm	
1:10 – 2:00 pm	Number Sense: beginning number sense #2	
	Calculator: #40 law of sines/cosines	
	Math: circle problems (arcs, power of a point, more)	
	Science-Chemistry: (novice) gases	
2:10 – 3:00 pm	Number Sense: (advanced) bases-fractions/decimals/sq. roots	
	Calculator: #59 solids of a revolution and area under a curve	
	Math: motion stated problems	
	Science-Biology: The central dogma. Genes to proteins.	
3:10 – 4:00 pm	Number Sense: GCD, LCM, and number theory problems	
	Calculator: #49/50 harder 3D geometry problems	
	Math: complex numbers	
	Science-Physics: two dimensional	
	Science: Biology: photosynthesis and cellular respiration	





**Wednesday, July 9, 2024 (continued)**

<b>4:10 – 4:45 pm</b>	General assembly in room 281	
<b>5:30 – 6:30 pm</b>	Dinner in the dorm	
<b>6:45 – 10:00 pm</b>	Leisure time	
<b>10:00 – 10:30 pm</b>	Students report to dorm rooms	
<b>11:00 pm</b>	Lights out in dorm rooms	


**Thursday, July 10, 2024**

<b>7:30 -8:30 am</b>	Breakfast in the dorm	
<b>8:45 – 9:40 am</b>	Number Sense: sequences, fibs, Lucas, made-up	
	Number Sense: (novice) all things fractions	
	Calculator: the calculator test in a nutshell	
	Math: algebra problems on the math test	
	Science-Chemistry: (advanced) thermodynamics	
<b>9:45 – 10:40 am</b>	Number Sense: base x to base 10; and base 10 to base x	
	Number Sense: (advanced) polygonal numbers	
	Calculator: acceleration & trajectory problems	
	Math: mixture word problems	
	Science-Physics: Newton’s Laws, force, and work	
	Science: Chemistry: (novice) acids and bases	

Thursday, July 10, 2024		
<b>10:45 – 11:40 am</b>	Number Sense: base system conversion and base operations	
	Number Sense: (novice) first page multiplication tricks	
	Calculator: sig fig problems on the calculator test	
	Math: geometry problems	
	Science-Biology: Introduction to genetics	
<b>11:45 – 1:00 pm</b>	Lunch in the dorm	
<b>1:10 – 2:00 pm</b>	Number Sense: beginning number sense #3	
	Calculator: #58 matrices and #62 overflow	
	Math: using roots with 2nd, 3rd, & 4th degree equations	
	Science-Chemistry: (novice) physical equilibria	
	Science-Physics: conservation of energy	
<b>2:10 – 3:00 pm</b>	Number Sense: # 41 – 60 on the sequence chart	
	Number Sense: (novice) estimation strategies	
	Calculator: Dr. Bourell's questions from the archives	
	Math: precalculus problems from session #1	
	Science-Chemistry: (advanced) chemical equilibria	

Thursday, July 10, 2024 (continued)		
3:10 – 4:00 pm	Number Sense: square roots/cube roots problems	
	Calculator: Dr. Bourell's picks of interesting questions	
	Math: precalculus problems from session #2	
	Science-Physics: simple harmonic motion	
	Science: Biology: advanced genetics	
4:10 – 4:45 pm	Camp Meeting in room 281	
5:30 – 6:30 pm	Dinner in the dorm	
6:45 – 9:00 pm	Leisure pool or recreation center	
7:00 – 8:00 pm	Teacher Questions and Answers	
10:00 – 10:30 pm	Students in dorm rooms	
11:00 pm	Lights out in dorm rooms	

Friday, July 11, 2024		
7:30 – 8:30 am	Breakfast in the dorm	
8:45 – 9:40 am	Number Sense: multiplication of 3 digits and square roots	
	Calculator: #46 scaling questions	
	Math: calculus problems on test #1	
	Science-Biology: cells and cell membranes	
9:45 - 10:40 am	Number Sense: repeating decimals to fractions	
	Calculator: concentration / dilution	
	Math: calculus problems from test #2	
	Science-Physics: Ohm's Law, current and resistance	

Friday, July 11, 2024		
10:45 – 11:40 am	Number Sense: direct and inverse variations	
	Calculator: plane geometry - #60, 64, 65	
	Math: normal distribution	
	Science-Physics: Coulomb's Law	
11:45 – 1:00 pm	Lunch in the dorm	
1:45 – 2:00 pm	<b>Number Sense Test</b>	
2:10 – 2:45 pm	<b>Calculator Test</b>	
2:50 – 3:40 pm	<b>Math Test</b>	
3:45 – 4:50 pm	<b>Science Test</b>	
5:15 – 6:30 pm	Dinner in the dorm	
7:00 – 8:00 pm	Awards assembly in room 281	
8:15 – 10:45 pm	Leisure time	
10:35 – 11:00 pm	Students in dorm rooms	
11:30 pm	Lights out in the dorm rooms	
Saturday, July 12, 2024		
7:00 – 8:00 am	<p>Breakfast in the dorm – campers should have dorm rooms cleaned; clothes packed</p> <p><b>Check out by giving your room key to your counselor.</b> The counselors will be by the office. They will check you out unless you have a fine. For our adult campers, you must return your key to the office</p> <p><b>***ALL CAMPERS MUST BE CHECKED OUT NO LATER THAN 9:00 am</b></p>	