

# FALL 2011 UAB MATH TALENT SEARCH REPORT

The 10-th annual UAB MTS (Math Talent Search) Contest took place on campus on Saturday, October 29, 2011.

Students began arriving at the Campbell Hall at 8:00 a.m. There were 121 students, grades 10, 11, and 12, from 12 schools participating. With coaches and chaperons, we had a crowd of around 140 people. Students and guests were treated to cookies and cold drinks as they waited for the contest to begin.

At 9:00 a.m. students began the two hour test which was held in Business and Engineering Complex, and their teachers and chaperons enjoyed the hospitality room.

At 11:00, when the test was over, students and teachers were treated to pizza. The UAB math faculty and students began the challenging task of grading and judging the answers of the 121 students. The graders did an excellent job of determining winners. By 12:45pm the outcome of the contest was decided.

The Awards Ceremony began at 1pm with a talk by Professor D. Dolgopyat from University of Maryland sponsored by the Outreach Program of the Department of Mathematics of UAB. The talk was entitled **CONTINUED FRACTIONS** and was devoted to continued fractions  $a + (1/(b + 1/(c + 1/d + \dots)))$  which provide a fun way to represent real numbers. Professor Dolgopyat compared continued fractions and standard decimal representations of real numbers ( $x = a + b/10 + c/100 + d/1000 + \dots$ ) and explained how to find a continued fraction representation of a given number. He also discussed which numbers have finite or periodic continued fractions.

Then various prizes were presented to winners by Dr Blokh as Dr Mayer read the list of winners. Schools who won the contest received trophies while the student winners received certificates and books about mathematics.

The following individual prizes for top scores were awarded:

10th grade Individual Winners

1st place: Ash Nanda (Grissom)

2nd place: Janice Wu (Hoover)

3rd place: Animesh Mahapatra (Grissom)

4th place: Andre Galindo (Spain Park)

School Winners in the 10th grade

1st place - Grissom

2nd place - Hoover

3rd place - JCIB and Spain Park (a tie)

11th grade Individual Winners

1st place: Abdullah Tarawneh (Grissom)

2nd place: Sira Teleumalla (Hoover)  
3rd place: Camden Cartright (Spain Park)  
4th place: Garrett Higginbotham (JCIB)

School Winners in the 11th grade

1st place - Grissom  
2nd place - JCIB and Spain Park (a tie)  
3rd place - Hoover

12th grade Individual Winners

1st place: Michael Han (JCIB)  
2nd place: Stuart Lang (Grissom)  
3rd place: Wesley Chow (Hoover)  
4th place: Joshua Ng (Hoover)

School Winners in the 12th grade

1st place - Grissom  
2nd place - Hoover and Spain Park (a tie)  
3rd place - JCIB

Schools trophies were awarded based on the composite score of the three top scorers.

All in all, it was a full day of activities for student visitors and the UAB Math Department.

Our thanks to the sponsors of this event: Dean Di Lorenzo and our chairman Dr Weikard (who encouraged us and helped us all along in our efforts to run the contest).

Our thanks also to all the students, members of our Department, and members of their families, who helped this year's MTS Contest succeed.

Until UAB MTS 2012,

Best wishes,

Alexander Blokh, Outreach Director