



# UTAH TRIG – STAR CONTEST

Prepared by the Utah Council of Land Surveyors (UCLS)  
2012-2013



**"It has been a pleasure working with you on behalf of our students. I look forward to work with you next year. I hope to increase the number of students that get involved with TRIGSTAR."  
"Thank you again,"**

**Jamie Bateman  
Mathematics Dept. Chair  
Syracuse High School**

*Contact the State UCLS Coordinator Brad  
Mortensen At [bmort@utah.gov](mailto:bmort@utah.gov)*

## ***Introduction:***

Trig Star is an annual competition that recognizes the best students of trigonometry from high schools throughout Utah. The goals of Trig Star are:

- To promote excellence in the mastery of trigonometry in high school.
- To honor high school students who have demonstrated their superior skill among classmates at the local and statewide level.
- To acquaint high school students with the use and practical applications of trigonometry in the surveying profession.
- To build an awareness of surveying as a profession among mathematically skilled high school students, career guidance counselors, and high school math teachers.

Trig Star is an extra-curricular activity held each year in high schools across the state of Utah. The competition is a timed exercise in solving trigonometry problems that incorporate the use of right triangle formulas, the laws of sines and cosines. Contestants have up to one hour to complete the exam, and the student who achieves the highest score in the shortest amount of time wins. The first, second, and third place winners receive cash prizes of \$200, \$100, and \$50 respectively along with award certificates.

From the winners at each high school, state level winners are determined. The first, second, and third place winners in Utah receive cash prizes of \$300, \$200, and \$100 respectively along with award certificates. The Utah winner will compete against other states' winners by taking the national exam. The teacher sponsoring the state winner will receive a cash prize of \$300, also.

Trig Star is co-sponsored by the National Society of Professional Surveyors (NSPS) and the Utah Council of Land Surveyors (UCLS).



**"Thank you so much for all of your help with this competition. The kids were really excited about their prize money and to also be recognized was a cool thing for them. I look forward to working with you again."**

**"Thanks so much!"**

**Ashley Martin  
Math Department  
CHS ROCKS!!!!**

### ***Suggested Schedule / Checklist:***

(Timing will vary depending on each school's schedule)

- November Contact the High School Math Department regarding the Trig Star Program.  
Arrange for a meeting with the teachers to review the details of the program.  
Encourage them to start a Trig Star Program at their school.
- December If possible, find an additional sponsor to cover expenses and prize money.  
(Local prizes and the prize amounts are optional)  
Send in the sponsorship application (page 5) form to NSPS and send a copy to  
The State Coordinator.  
Maintain contact with the school to answer questions and keep their interest.
- January Make arrangements with the math department for the classroom presentation.  
Send a flyer to the school announcing the Trig Star Program, location and date.  
Gather materials and ideas for the presentation.  
Compile, organize and rehearse your presentation.
- Feb-Mar Give the classroom presentation to all interested students.  
Tell them about the upcoming Trig Star exam.  
Make arrangements with the math department for the date and time of the exam.  
Contact the local newspaper.
- Mar-Apr Administer the Trig Star Exam  
Announce the winner(s).  
Schedule a time to return to the school to formally present the plaque and award money.  
Arrange for a representative from the local newspaper to be there to take pictures.  
Give the newspaper a written explanation of the program.  
Give the teacher a copy of the Teacher Evaluation Form.
- April Submit copies of the first, second and third place winners' exams along with copies of each  
student's test cover sheet, the contest report (page 13) and teacher evaluation form (page 14) to  
the UCLS Trig Star Coordinator, before the first day of May.