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TRIG-STAR

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What is Trig-Star?

Trig-Star is an annual high school mathematics competition based on the practical application of Trigonometry. Students that participate are not only provided with an opportunity to earn awards, but also leave with a better understanding of the technical profession of Geomatics, which includes Land Surveying and Mapping.

Professional Land Surveyors use the Trig-Star program to advance communication with the communities they serve. Local Land Surveying and Civil Engineering companies provide professionals who volunteer their time to explain how trigonometry is used to solve Land Surveying and Mapping problems.

The purpose of the Trig-Star program is:

a) To promote excellence in the mastery of mathematics in high school.
b) To honor high school students who have demonstrated their superior skill among classmates at the local, state, and national levels.
c) To acquaint the high school students with the use and practical applications of mathematics in the Geomatics professions.
d) To build awareness of Geomatics as a profession among mathematically skilled high school students, career guidance counselors, and high school math teachers.
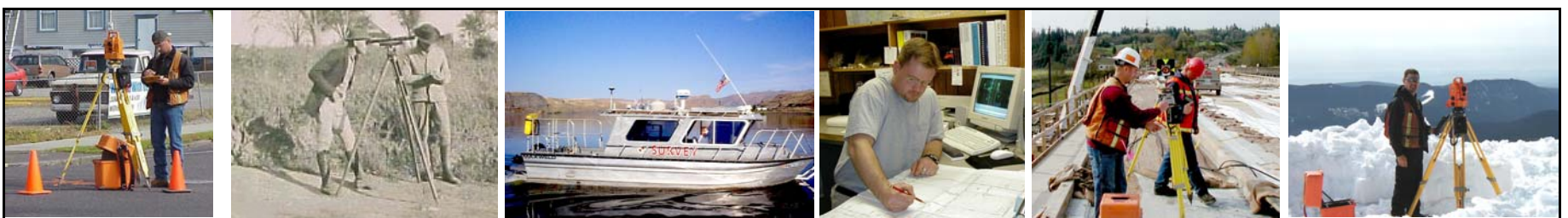
What happens during the Trig-Star Contest?

There may be a presentation by a Land Surveyor from one of the local surveying companies to help participants understand the Geomatics profession. The exam is a timed exercise of one hour, during which students must solve trigonometric problems that incorporate the use of right triangle formulas, the law of sines, and the law of cosines. Winners are determined by the most correct answers in the fastest time. The Trig-Star program, in the State of Washington, has three levels of testing and awards.

TESTING LEVELS AND AWARDS:

Sponsored by **LOCAL LAND SURVEYING COMPANY NEAR THE SCHOOL OR THE SURVEYING AND MAPPING SOCIETY OF GEORGIA**	Sponsored by **THE SURVEYING AND MAPPING SOCIETY OF GEORGIA**	Sponsored by **NATIONAL SOCIETY OF PROFESSIONAL SURVEYORS**
The first level is given at the local high schools. There is one winner at each high school. The winner's scores of each local school will be sent to the State Trig-Star coordinator and the State Winner will be determined by the highest score in the shortest amount of time. Any awards at this level are sponsored by local Land Surveying Company. The local land surveyor sponsoring the exam will usually come to the classroom and do a presentation on surveying and recognize the winner.	**The second level** is the State Winner. Each of the local high school winners may participate in the state exam. The state winner will receive a $750 cash award, a certificate, and continues on to the third level of testing. The teacher of the State Winner will also receive a $750 cash award. The state winner is also eligible for a $500 scholarship if enrolled in a four-year Geomatics program.	**The third level** is the national test. The state winner from each of the participating states will compete for the National Trig-Star title. The awards are as follows: **1st prize** – $2000 Student Award and a $1000 Teacher Excellence Award for the math teacher. **2nd prize** – $1000 Student Award and a $500 Teacher Excellence Award for the math teacher. **3rd prize** – $500 Student Award and a $250 Teacher Excellence Award for the math teacher.

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Photographs provided by Oregon Institute of Technology-Geomatics, Hagedorn Inc., Minister & Glaeser, MacKay & Sposito, Inc., R.J. Zimmer, C.E. Whitten, and the Virtual Museum of Surveying.