

# **ACTM State High School Mathematics Contest Guidelines and Procedures**

## **State Director**

It is the responsibility of the State Director to coordinate the Regional Contests and the State Contest. This responsibility includes the following:

1. Procure Regional Test Directors
2. Set the dates for the Regional Contests and the State Contest and get them placed on the Arkansas Activities Association calendar (Regional Contests will be scheduled in March and the State Contest scheduled in April)
3. Procure test writers for both the Regional Tests and the State Tests
4. Review Regional Tests and State Tests for accuracy and clarity
5. Produce a clean copy of all tests
6. Provide the Regional Directors with all the necessary materials to administer the Regional Contests
7. Invite participants to the State Contest and post the invitation list of the ACTM Web Site
8. Prepare all regional and state contest tests and keys and arrange for posting of those documents on the ACTM Web Site within one week after the contest date.
9. Prepare score distributions from the State Contests and post those distributions on the ACTM Web Site and post top ten places from each contest
10. Administer the State Contest
11. Prepare a list of the winners of the State Contest to be sent to the Editor of the ACTM Newsletter and state media
12. Prepare a final report including a list of winners and a financial statement to be sent to the President and Treasurer of ACTM

## **Regional Directors**

It is the responsibility of the Regional Directors to administer the Regional Contests. This includes:

1. Notification of teachers in the region of the date and the location of the Regional Contests
2. Send a sample of the student registration form to teachers in their region
3. Collect student registration fees
4. Prepare copies of each test based on pre-registration of students
5. Provide proctors and graders for each test
6. Inform teachers that all tests and keys will be posted on ACTM Web Site within one week following the exam
7. Send the results, including score distributions, to the State Director on provided forms
8. Send a financial report, on provided form, along with collected registration fees to the State Director

### **Area Tests and Eligibility**

1. Competitions will be in six areas: Algebra I, Geometry, Algebra II, Trigonometry/Pre-Calculus, Calculus and statistics.
2. To be eligible to participate in any competition, a student must be enrolled in a course or have completed a course during the current school year, described by the title of the area test.
3. Under no circumstance will a student be eligible to take any area test if that student placed 1<sup>st</sup>, 2<sup>nd</sup>, or 3<sup>rd</sup> in either the Regional or State contest for that subject test.
4. Students who are designated as 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> place winners at the Regional Contest will be invited to compete in the State Contest during that academic year. Others may be invited at the discretion of the State Contest Director.

### **Test Construction**

1. All tests will be multiple choice format with the exception of tie-breaker items.
2. Each test will consist of no fewer than 20 and no more than 25 question and three additional constructed response items.
3. Tests will reflect the vision set forth by the NCTM Principles and Standards for School Mathematics and the Arkansas Department of Education adopted frameworks and should reflect problem solving and conceptual understanding rather than routine manipulation.

### **Technology**

Use of calculators that do not contain a subset of a computer algebra system (CAS) will be permissible. (Note: TI-83, TI-84 TI-Inspire series are permissible, TI-89 and TI-92 and TI-Inspire Cas are NOT allowed.)

### **Test Administration**

1. The Regional Director(s) will be the final authority in settling any disputes concerning the Regional Contest.
2. The State Director will be the final authority in settling any disputes concerning the State Contest.
3. The length of each test will be one hour.
4. Students are required to stay in the room in which they are taking the test for the entire hour.
5. Copies of the Tests and Keys (Regional and State) Will be posted on the ACTM Web Site no later than one week following the administration of the tests.
6. Tie-breaker questions will be graded only in the event of ties for the top three positions. The tie-breaker questions will be graded sequentially until ties are broken. Every effort will be made to break ties.

### **Awards**

1. In the Regional Contests 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> place winners of all area tests will be awarded trophies. Honorable mention certificates will be awarded to participants eliminated from the top three places by the tie-breaker questions. Regional Directors may present certificates of participation at their discretion. Other special prizes or awards are not permitted.
2. In the State Contest 1<sup>st</sup>, 2<sup>nd</sup> or 3<sup>rd</sup> place winners of all areas will be awarded trophies. First place winners in Algebra I and Geometry will be awarded graphing calculators. First, second and third

place winners in Algebra II, Trig/Pre-Calculus, Calculus and Statistics will be awarded scholarships in the amount of \$500, \$300, and \$200 respectively. Honorable mention certificates will be awarded to participants eliminated from the top three positions by tie-breaker items.

3. To receive scholarship awards, winners must submit the proper form to the Treasurer of ACTM. Upon receiving the completed form, the Treasurer will mail a check to the appropriate college official where the student is enrolled.
4. The State Director is responsible for purchasing and distributing all trophies for the Regional and State Contests.
5. The State Director is responsible for providing Honorable Mention Certificates for the Regional and State Contests.

#### **Available Materials**

1. Complete sets of all area tests and keys will be posted on the ACTM Web Site and made accessible to teachers, students and mentors. No paper copies of exams or other test documents will be provided.
2. Score distribution on the State Contest will be posted on the ACTM Web Site
3. Individual participants will not be notified of their scores.