MANUAL OF RULES AND PROCEDURES FOR REGIONAL AND STATE MATHEMATICS COMPETITIONS

Prepared by the
Illinois Council of Teachers of Mathematics
State Math Contest Committee

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GENERAL CONTEST INFORMATION

PURPOSE

The purpose of the ICTM State Math Contest is to recognize outstanding mathematical achievement, encourage independent study, stimulate interest in mathematics, and provide a wholesome meeting ground for students and teachers of mathematics through academic competition.

COMPETITON DIVISIONS/ELIGIBILITY

When registering, schools must give their exact September 30 school enrollment. The Regional and State competitions are divided into the following four divisions, based on September 30 school enrollment figures:

- 1. Division 1A consists of all schools with an enrollment of 399 or less in grades 9 through 12.
- 2. Division 2A consists of all schools with an enrollment between 400 and 1099 in grades 9 through 12.
- 3. Division 3AA consists of all schools with an enrollment between 1100 and 1999 in grades 9 through 12.
- 4. Division 4AA consists of all schools with an enrollment of 2000 or more in grades 9 through 12.
- 5. Any school may choose to participate in a higher division at the time of registration.
- 6. Only students from grades 9 through 12 may compete in the High School Contest. No student from Grade 8 or below is allowed to enter any of the competitions.
- 7. Participating schools are **required** to provide one proctor (Div 1A and 2A) and two proctors (Div 3AA and 4AA) at the regional contest and the state contest if participating.

EVENTS/SCORING

A student is permitted to enter at most three areas of competition. In events where calculators are permitted, each student is allowed to use any number of calculators that are self-contained and battery operated; however, each student may use at most one desk. No computers, tablets or phones are allowed in the competitions. Removable or interchangeable parts are permitted. Electrical outlets in the room may not be used.

No manuals or other reference materials may be available to the students in the competition rooms, except for the Oral Competition, where reference material may be used in the Preparation Room.

In all events except the Calculator Team event, **exact answers** should be given unless otherwise specified.

Answers must be **legibly** written on the official answer sheet and must be **simplified** unless otherwise specified in the problem.

Any team or individual that writes an answer after the signal to stop may have its paper disqualified.

If a student is given a test that is illegible, the student should request a new copy of the test.

Coaches are responsible for making sure their students know what division they are in and what test they should be taking. If a student receives an incorrect test, including the wrong division or wrong round for a relay, the student must request the correct version. Student papers that are not the correct test or for the correct division may be disqualified.

Acceptable Forms For Answers:

- 1. All fractional answers must be reduced to lowest terms. Improper fractions that have been reduced are acceptable.
- 2. Radicals and radical expression must be simplified. Radicals are not to be left in the denominator of a fraction.
- 3. In all events except the Calculator Team event, <u>exact</u> answers should be given unless otherwise specified in the problem.
- 4. When an approximation is called for, answers should be rounded to four significant digits unless otherwise specified in the problem.

Use the following convention for rounding to four significant digits: if the fifth significant digit is 5 through 9, round to the higher digit; if it is 0 through 4, truncate.

Examples:

Positive real numbers: 3.4567 would be rounded to 3.457

107.349 would be rounded to 107.3

Negative real numbers: -5.0685 would be rounded to -5.069

-.028672 would be rounded to -.02867

Integers: 513,469 would be rounded to 513,500

Trailing zeroes are necessary when **ROUNDING** if the trailing zero is significant. For example, 56.8035 **MUST** be written as 56.80 when rounded to 4 significant digits in decimal form, and **MUST** be written as 5.680 X 10 or 5.680 X 10 when written in scientific notation form because the trailing zero is significant for a rounded number.

- 4. Units of measurement are not required in the answer and **should not be given**.
- 5. Any given data are to be regarded as exact.
- 6. Use of horizontal fraction bars instead of slash marks is encouraged, but not required. Ambiguous answers involving slash marks will be marked wrong.

Examples:

$$\frac{5}{x+y} = 5 / (x+y) \neq 5 / x + y$$

5/2x is ambiguous and should not be used.

7. In the event a correct answer involves an approximation, all relevant rounding should be made **only at the end** of the problem.

8. Examples of acceptable and not acceptable answers:

Express answer as a **decimal** or **in decimal form**. a.

Acceptable:

2.1

 $8.645 \quad .23 \quad 0.25 \quad -6.71$

Not acceptable:

 $3.245 \times 10^3 = \frac{1}{10}$ 4.60 (use 4.6 instead)

b. Express answer as a **common fraction** (must be reduced to lowest terms).

Acceptable:

$$\frac{5}{8}$$
 $-\frac{7}{12}$

Not acceptable:

.625 $\frac{9}{24}$ 0.43

Express answer as an **improper fraction** (must be reduced to lowest terms). c.

Acceptable:

$$\frac{24}{5}$$
 $-\frac{103}{15}$

Not acceptable:

$$4\frac{4}{5}$$
 4.8 $\frac{48}{10}$ $-2\frac{2}{3}$

Express answer as a **mixed number** (must be reduced to lowest terms). d.

Acceptable:

$$2\frac{3}{8}$$
 $-7\frac{3}{40}$

Not acceptable:

- If an answer is exact, trailing zeroes should be left off. If an answer is rounded, e. trailing zeroes are significant and must be included.
- 9. Specific instructions stated in a given problem take precedence over any of the above instructions.

WRITTEN COMPETITIONS - EVENT SUMMARY

Algebra I

Team Make-up: maximum 6 students; freshmen or students enrolled in Algebra I

Questions: 20 Time: 50 minutes

Format: Individual competition

All battery operated calculators permitted, including CAS-type

Answers must be legible

Answers must be **exact** unless otherwise indicated in the question

Scoring: Correct answers worth 2 points each; 40 points possible per team member

Team Score: The top 4 scores count toward the team score; 5th and 6th scores are used for tie-breaking Maximum 160 points per team

Geometry

Team Make-up: maximum 6 students; sophomores or freshmen, or students enrolled in Geometry

Questions: 20 Time: 50 minutes

Format: Individual competition

All battery operated calculators permitted, including CAS-type

Answers must be legible

Answers must be exact unless otherwise indicated in the question

Scoring: Correct answers worth 2 points each; 40 points possible per team member

Team Score: The top 4 scores count toward the team score; 5th and 6th scores are used for tie-breaking Maximum 160 points per team

Algebra II

Team Make-up: maximum 6 students; juniors, sophomores or freshmen, or students enrolled in Algebra II

Questions: 20 Time: 50 minutes

Format: Individual competition

All battery operated calculators permitted, including CAS-type

Answers must be legible

Answers must be **exact** unless otherwise indicated in the question

Scoring: Correct answers worth 2 points each; 40 points possible per team member

Team Score: The top 4 scores count toward the team score; 5th and 6th scores are used for tie-breaking Maximum 160 points per team

Pre-Calculus

Team Make-up: maximum 6 students; any grade level

Questions: 20 Time: 50 minutes

Format: Individual competition

All battery operated calculators permitted, including CAS-type

Answers must be legible

Answers must be **exact** unless otherwise indicated in the question

Scoring: Correct answers worth 2 points each; 40 points possible per team member

Team Score: The top 4 scores count toward the team score; 5th and 6th scores are used for tie-breaking Maximum 160 points per team

WRITTEN COMPETITIONS - SPECIFICS

Contest problems may include, but are not limited to, the following topics:

Algebra I

equations inequalities absolute value simple matrices

slope

equations for lines

y-intercept x-intercept linear functions intersection union

quadratic functions

vertex
applications
geometry formulas
literal equations
functions
relations

function notation integer exponents simplifying radicals radical equations Pythagorean theorem operations on polynomials

factoring proportions

rational expressions mean, median, mode reading graphs

Geometry

logic

supplements complements congruency probability statistics midpoints

properties of parallel lines properties of perpendicular lines properties of quadrilaterals

similarity

distance formula midpoint formula Pythagorean theorem formulas involving circles

tangents secants chords arc length

angle-arc theorems inscribed polygons circumscribed polygons

power theorems area formulas surface area volume formulas coordinate geometry Hero's formula inequalities locus incenter

incenter orthocenter centroid

Ptolemy's theorem

mass points inradius circumradius

Algebra II

solving equations inequalities matrices probability graphs of lines direct variation inverse variation fitting a line to data frequency polygon least squares

measures of central tendency

percentiles absolute value systems conics phase shift reflections symmetry logarithms relations functions

inverse functions

combinatorics roots of polynomials graphing rational functions

asymptotes matrices

rational exponents radical equations complex numbers remainder theorem factor theorem synthetic division rational-zeros theorem

relation of coefficients to roots

binomial theorem

operations of rational expressions

complex fractions

domain range

exponential functions

sequences series applications

Pre-Calculus

absolute value rational exponents

factoring roots of n^{th} degree polynomials

coordinate geometry complex numbers

functions

inverse functions max and min problems exponential functions logarithmic functions

applications trig functions solving equations -rational

-trig

-logarithmic -complex number law of cosines law of sines

double angle formulas angle addition formulas

vectors

DeMoivre's theorem Gaussian elimination

matrices determinants systems conics

rotation of axes polar coordinates remainder theorem factor theorem

relation of coefficients to roots

conjugate roots induction binomial theorem

sequences

series

combinatorics

Descartes' rule of signs

normal curves least squares line probability

parametric equations density functions

limits

8-PERSON TEAM COMPETITIONS - EVENT SUMMARY

Freshman-Sophomore 8 Person Team

Team Make-up: maximum 8 students, freshmen and sophomores only, no more than 4 may be sophomores

Questions: 20 Time: 20 minutes

Format: Team members work together and submit one answer sheet

NO Calculators permitted Answers must be legible

Answers must be **exact** unless otherwise indicated in the question

Scoring: Correct answers are worth 5 points each; Maximum 100 points possible per team

Junior-Senior 8 Person Team

Team Make-up: maximum 8 students, no more than 4 may be seniors

Questions: 20 Time: 20 minutes

Format: Team members work together and submit one answer sheet

NO Calculators permitted Answers must be legible

Answers must be exact unless otherwise indicated in the question

Scoring: Correct answers are worth 5 points each; Maximum 100 points possible per team

CALCULATOR TEAM - EVENT SUMMARY

Team Make-up: maximum 5 students;

1 freshman; 1 freshman or sophomore; 1 freshman, sophomore, or junior; 2 students from any grade

Questions: 20 Time: 20 minutes

Format: Team members work together and submit one answer sheet

All battery operated calculators permitted, including CAS-type; students may use more than one calculator

Answers must be legible

Answers must be **rounded to 4 significant digits** unless otherwise indicated in the question. Answers must be simplified and in the **specific form if so stated**. **Except where noted, angles are in radians**.

Answers must be in standard notation. **Do not use scientific notation unless specified in the question**

Scoring: Correct answers are worth 5 points each; Maximum 100 points possible per team

2-PERSON TEAM COMPETITIONS - EVENT SUMMARY

Freshman-Sophomore 2 Person Team

Team Make-up: maximum 2 students, freshmen and sophomores only in any combination

Questions: 10 (initial competition)

For regionals: additional questions are available for use in case of procedural issues with any of the initial questions

For state finals: additional questions are available for tie-breakers, to replace questions with upheld appeals or for use in case of procedural issues with any of the initial questions

Time: 3 minutes per question

Format: Team members work together and submit one answer sheet

Questions 1-5: NO Calculators permitted

Questions 6-10: All battery operated calculators permitted, including CAS-type

Questions 11-15 (if needed): All battery operated calculators permitted, including CAS-type

Answers must be legible

Answers must be **exact** unless otherwise indicated in the question

Scoring: Correct answers submitted in the 1st minute are worth 6 points; correct answers submitted in the 2nd minute are worth 4 points; correct answers submitted in the 3rd minute are worth 3 points; the first team with the correct answer to each question earns a 2 point bonus.

Junior-Senior 2 Person Team

Team Make-up: maximum 2 students, any grade levels

Questions: 10 (initial competition)

For regionals: additional questions are available for use in case of procedural issues with any of the initial questions

For state finals: ties are broken, if possible, by the number of "first correct" answers. If there are still ties, additional questions are available for tie-breakers, to replace questions with upheld appeals or for use in case of procedural issues with any of the initial questions

Time: 3 minutes per question

Format: Team members work together and submit one answer sheet

Questions 1-5: NO Calculators permitted

Questions 6-10: All battery operated calculators permitted, including CAS-type

Questions 11-15 (if needed): All battery operated calculators permitted, including CAS-type

Answers must be legible

Answers must be **exact** unless otherwise indicated in the question

Scoring: Correct answers submitted in the 1st minute are worth 6 points; correct answers submitted in the 2nd minute are worth 4 points; correct answers submitted in the 3rd minute are worth 3 points; the first team with the correct answer to each question earns a 2 point bonus.

RELAY COMPETITION - EVENT SUMMARY

Freshman-Sophomore Relay Team

Team Make-up: maximum 4 students, freshmen and sophomores only, maximum of 2 sophomores Substitutions for team members, keeping the same team make-up restriction, may be made between rounds Questions: 3 rounds; 1 question per team member per round

Note: additional rounds are available to replace rounds with upheld appeals

Time: 7 minutes per round

Format: Team members each do a problem, passing back an answer sheet with their answer and any previous answers, which will be used by the following team member to complete their problem.

Students may pass back multiple answer sheets until the last student in the row has submitted the team answer. Each student may do only one problem.

Only the last team member may stand and submit an answer. The last team member <u>may stand</u> and submit an answer sheet at either of the first two commands (3 minutes and 5 minutes) and <u>must stand</u> and submit an answer sheet at the final command (7 minutes) if an answer sheet has not already been submitted.

All battery operated calculators permitted, including CAS-type

Answers must be legible; answer sheet must not have any stray marks or symbols, only student answers. No codes may be used in recording answers.

Answers must be **exact** unless otherwise indicated in the question

Scoring: Correct answers are worth 2 points each. Bonus points are given if all four answers are correct and the answer sheet is submitted at the 3 minute mark (First Command – 5 bonus points), or at the 5 minute mark (Second Command – 3 bonus points).

Maximum score per round is 13 points; total of 39 points per team for all rounds.

Junior-Senior Relay Team

Team Make-up: maximum 4 students, maximum of 2 seniors

Substitutions for team members, keeping the same team make-up restriction, may be made between rounds Questions: 3 rounds; 1 question per team member per round

Note: additional rounds are available to replace rounds with upheld appeals

Time: 7 minutes per round

Format: Team members each do a problem, passing back an answer sheet with their answer and any previous answers, which will be used by the following team member to complete their problem. Students may pass back multiple answer sheets until the last student in the row has submitted the team answer. Each student may do only one problem.

Only the last team member may stand and submit an answer. The last team member <u>may stand</u> and submit an answer sheet at either of the first two commands (3 minutes and 5 minutes) and <u>must stand</u> and submit an answer sheet at the final command (7 minutes) if an answer sheet has not already been submitted.

All battery operated calculators permitted, including CAS-type

Answers must be legible; answer sheet must not have any stray marks or symbols, only student answers. No codes may be used in recording answers.

Answers must be exact unless otherwise indicated in the question

Scoring: Correct answers are worth 2 points each. Bonus points are given if all four answers are correct and the answer sheet is submitted at the 3 minute mark (First Command – 5 bonus points), or at the 5 minute mark (Second Command – 3 bonus points).

Maximum score per round is 13 points; total of 39 points per team for all rounds.

Note: The Relay Competition is held only at the State Finals. Only those schools that have qualified as entire teams for the State Finals may enter the relay competition.

RELAY COMPETITION - SPECIFICS

Each school may enter two teams at each level.

Each team sits in a row. There are three rounds of questions at each level. At the Freshman-Sophomore level any geometry questions are restricted to Team Members 3 and 4; at the Junior-Senior level any trigonometry questions are restricted to Team Members 3 and 4. Teams are permitted to change the order of seating or to make substitutions between rounds.

Prior to each round, proctors will distribute a supply of Official Answer Sheets to each team member. The Official Answer Sheets have answer blanks for all four answers in that Round. The proctors will then distribute, face down, the appropriate question to each person. At the signal to begin each person turns over his/her question. When the first person gets an answer to his/her question, he/she writes the answer (known as ANS) in the proper blank on an Official Answer Sheet and passes it back to the second person, who uses ANS to complete the answer to his/her question. The second person then writes the answer to his/her question (known as ANS) in the proper blank on the Official Answer Sheet and passes it back to the third person who uses ANS to complete the answer to his/her question. (Note: The Official Answer Sheet now contains the answer to the first two questions.) In the same manner, the third person enters his/her answer on the Official Answer Sheet and passes it back to the fourth person who uses ANS to complete the answer to the final problem. The fourth person then enters his/her answer on the Official Answer Sheet and awaits a command to stand. (Note: At this point the Official Answer Sheet must contain the answers to all four problems.) Contestants may pass back more than one Official Answer Sheet to correct a mistake; however, each Official Answer Sheet must contain the current answers to all previous questions. Students in the second, third, fourth positions should record on their question sheet the most current set of answers that have been passed back to them. If a student finds he/she has made a mistake, he/she must take a blank copy of the Official Answer Sheet, write his/her corrected answer in the appropriate blank and also write in the answers to the preceding questions. He/she must then pass this Official Answer Sheet back to the next student, etc. Contestants may not pass back anything except an Official Answer Sheet, which must not have any stray marks or symbols, only student answers. No codes may be used in recording answers. Nothing may be passed forward, and no other communication of any type will be permitted during a Round.

In the event that a team consists of less than 4 members, each member may complete only one question. The answer sheet may be submitted by the last person on the team.

The Head Proctor will issue three commands to stand during each Round: at 3 minutes (First Command), at 5 minutes (Second Command) and at 7 minutes (Final Command) with a warning given 15 seconds before each command to stand. The maximum time for each round is 7 minutes.

Answers may <u>only</u> be submitted at one of these three times.

<u>Note</u>: When the person in the last seat stands, he/she must submit one Official Answer Sheet immediately to the proctor, and no additional answer sheets may be submitted during that Round. Answer Sheets are graded at the end of each Round, when the Head Proctor announces the correct answers to that Round.

At the end of the each round of questions, the Head Proctor will ask for any appeals. A team member should then present any appeals. The Appeals Judge(s) and any other person(s) he/she chooses to consult will act on the appeal immediately. If an appeal is upheld, the round will be thrown out and an additional round will be conducted.

ORAL COMPETITION - EVENT SUMMARY

Team Make-up: maximum 2 students, any grade level

Time: Preparation: 10 minutes (students may work together during this time and use any resource materials)
Presentation: 7 minutes for the initial presentation; 3 minutes for the extemporaneous questions.

Format: Presentation: During the first 7 minutes, students will present the solutions to the judges, using only the notes prepared in the preparation room. At the end of the 7 minutes, the students will be handed a copy of the extemporaneous questions.

During this event, either or both students may participate in the presentation. It is up to the students to determine if, or how, they will collaborate on the presentation and/or extemporaneous questions.

All battery operated calculators permitted, including CAS-type in the preparation room only

Scoring: Students will be judged on knowledge, presentation and extemporaneous questions;

Each judge will award up to 25 points per team: Knowledge is worth 0-13 points;

Presentation is worth 0-8 points; Extemporaneous questions are worth 0-4 points.

Scores from the two judges will be added for a maximum of 50 points per team.

ORAL COMPETITION - SPECIFICS

The Oral team consists of at most two students. Either or both students may present the solutions to the judges. The students may collaborate on their answers and the presentation.

NOTE: Coaches and/or students from the presenters' school may observe the presentation, space permitting. No communication of any type is allowed between observers and the students in the competition.

Oral Preparation Room Instructions:

Only the oral contestants may enter the oral preparation room.

Contestants may bring reference materials (including rulers, compasses, protractors, calculating devices and written materials or texts) into the oral preparation room.

Contestants should write their names and school on two copies of the judge's rating sheets.

Contestants will be given the question(s) in time to allow for 10 minutes of preparation prior to the presentation.

Contestants must remain in the oral preparation room after receiving the question(s).

Contestants may prepare notes in the oral preparation room only on the colored paper provided by the oral preparation room proctor.

While giving the presentation, the presenter(s) may use only the notes on the provided colored paper that were prepared in the oral preparation room. No calculators may be used during the presentation, but they may be used in preparing answers to the extemporaneous questions.

Oral Presentation Room Information:

Either or both students may present the solutions to the judges. The students may collaborate on their answers and the presentation.

A chalkboard, chalk and erasers and/or a whiteboard and markers will be provided in the presentation room.

Upon entering the presentation room, one student should hand the rating sheets to the judges.

The initial presentation has a maximum of 7 minutes of uninterrupted presentation time. At the end of 6 minutes, a cue will be given by the timer indicating that 1 minute remains to complete the presentation.

The presentation is to stop immediately at the end of 7 minutes.

After the presentation stops, teams will be handed a copy of the extemporaneous questions. The teams then have exactly 3 minutes to prepare and present their solutions to the extemporaneous questions. Either the presenter or the assistant may answer the extemporaneous question(s). The students may collaborate on their answers to these questions.

There are two judges and a timer in each presentation room. A judge may act as a timer if personnel is limited.

The judges rate the contestants according to the following scale, using the questions below as suggested guidelines:

Knowledge (0-13 points)

Is an appropriate approach to the problem used?

Is the solution accurate and complete?

Are the facts correct?

Is the logic correct?

Is the use of vocabulary and notation correct?

Are relevant theorems, axioms, etc. used and mentioned when they

contribute to a desired result?

Are important ideas emphasized/outlined/summarized?

Presentation (0-8 points)

Is time used effectively?

Are ideas explained in a logical manner?

Is the presentation clear and well-organized?

Is sufficient detail used?

Are oral, visual and verbal techniques used effectively?

Responses to extemporaneous questions (0-4 points)

Are the extemporaneous questions answered correctly and adequately?

Judges should not give or deduct points based on appearances and/or whether one or two students participated in the presentations.

Regional Competition Schedule

Though different regional sites may have to adjust a schedule due to room and/or proctor availability, eligibility for competitions must remain consistent throughout the state. Each student may participate in a maximum of one area of competition from each of the following groups:

Competition A Algebra I, Geometry, Algebra II, Pre-Calculus

Competition B Freshman-Sophomore Two Person Team

Junior-Senior Eight Person Team

Competition C Calculator Team

Freshman-Sophomore Eight Person Team

Junior-Senior Two Person Team

The Oral Competition is held continuously while other competitions are taking place.

Both the Oral Presenter and the Oral Assistant must be available to register for the Oral Competition during the same time (Competition A, Competition B or Competition C), regardless of the actual presentation time.

Students may compete in a maximum of three events.

The suggested schedule for these competitions at the Regional level is as follows, although sites may adjust the schedule to meet their needs. The schedule is designed to maximize space and personnel needs at regional sites hosting schools from both Divisions.

Multiple events within a time period are to be run simultaneously.

Division A (1A/2A)

Competition A
Competition B

Competition C

Division AA

(3AA/4AA)

Competition A

Competition C

Competition B

The Oral Competition is held continuously while other events are taking place.

State Finals Competition Schedule

Multiple events within a time period are to be run simultaneously.

Competition A Algebra I, Geometry, Algebra II, Pre-Calculus

Competition B Freshman-Sophomore Eight Person Team

Junior-Senior Eight Person Team

Calculator Team

Competition C Freshman-Sophomore Two Person Team

Junior-Senior Two Person Team Freshman-Sophomore Relay Team

Junior-Senior Relay Team

The Oral Competition is held continuously while other events are taking place.

Both the Oral Presenter and the Oral Assistant must be available to register for the Oral Competition during the same time (Competition A, Competition B or Competition C), regardless of the actual presentation time.

Students may compete in a maximum of three events.

GENERAL POLICIES

REGISTRATION

Schools must complete the online registration form and submit registration forms with payment by the posted deadlines.

For each competition, the names of participating students and their competitions must be entered on the contest website by the posted deadline. Minimal changes will be allowed on the day of the contest, but should be limited in number. The scores of students not listed on the school's roster for any given event will not be counted. Students should be informed that they must use the school name as it appears on the school's account (no abbreviations) on their answer sheets. All rosters will be considered final once the first competition begins.

By entering the contest, schools agree to provide one proctor (Div 1A and 2A) and two proctors (Div 3AA and 4AA) at each of the competitions in which the school is participating.

PUBLICATIONS

The ICTM State Math Contest Committee will publish statistical information, including names and scores. This information will be posted on the school login portion of the website so as to be available to participating schools. General information, including school names, scores of group competitions, and individual results by initials only, will be published on the ICTM Contest Web Site. Individual competition results may be published in ICTM publications such as the Contest Program and the ICTM Bulletin. By entering the contest, consent to publish such information is implied by both schools and contestants.

SPECIAL NEEDS

The ICTM State Math Contest Committee reserves the right to make special provisions in exceptional cases or to comply with laws pertaining to students with special needs.

If a student wishes to use a foreign language dictionary during the contest, requests must be made in writing to the Regional host for Regional competitions and the State Contest Chair for the state competition by the posted deadline. Proctors may inspect dictionaries prior to the start of the event. Electronic translators are allowed only in events where calculators are permitted; in non-calculator events, only paper dictionaries are permitted.

If a student requests special provisions because of special needs, the following applies:

The coach must notify the State Math Contest Chair in writing by the posted deadlines.

The student's school district must provide to the State Math Contest Chair a written, official certification of the disability.

The coach must specify and justify the special provisions requested.

The participating school will be responsible for any and all additional costs incurred by the committee in meeting the special needs of the student.

GENERAL RULES FOR COMPETITIONS

GENERAL RULES FOR CONTESTANTS IN NON-ORAL COMPETITIONS

- 1. All contestants are to be seated before the competition begins.
- 2. Students must legibly print their name (written competition only) and full school name on the answer sheet. Answer sheets with abbreviations for school names will not be counted.
- 3. All cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones must be turned off and put away prior to the start of each competition.
- 4. The only aids that are permitted are pencils, pens, erasers, rulers, protractors, compasses and self-contained and battery operated calculators, including CAS-type calculators, in events which allow calculators. Scratch paper may also be used, but all scratch paper is to be provided by the proctors. Students may **not** go into bags/pockets/purses/etc without prior permission from proctors.
- 5. Students are permitted to work together in the Two-Person Team Competitions, the Calculator Team Competition and the Eight-Person Team Competitions. In the Written Competitions, students may not work or sit together.
- 6. Students must remain seated until proctors direct otherwise.
- 7. Before each competition begins, the head proctor will read a brief prepared statement about the competition, but is to answer no questions about the rules of the competition or the interpretation of the rules or questions. If a student has an illegible copy of a test, or if they receive an incorrect test, they should inform the proctor and request a new, correct copy. Participating students are responsible for being familiar with the rules for the competition as presented in this manual.
- 8. Students are to stop writing and hold answer sheets up immediately when told to stop. Once a paper is raised, it is not to be taken down.
- 9. Any difficulty in the correctness of an answer or in student conduct should be brought to the attention of the Site Chair as quickly as possible.
- 10. At the State Contest, any appeals must be registered with the Appeals Committee by the posted deadline. No appeals will be accepted on the interpretation of questions at the Regional Competition.
- 11. All answers must be written neatly and legibly in the answer blanks.
- 12. Scores are based on exact, complete, simplified answers only. If the question specifies a form for the answer, correct answers will only be accepted in the form specified by the question. This takes precedence over any general statement regarding acceptable forms for answers. Calculator Team Competition answers should be written in standard notation unless specified in the question. No partial credit is given.

EXPECTATIONS OF CONDUCT DURING COMPETITIONS

General Assemblies

- 1. Expectations: The coach is responsible for the conduct of his/her team and is expected to remain with the team as much as possible. Coaches with broad contest responsibilities should provide a colleague as an assistant for this purpose.
- 2. Actions: A committee composed of the site chair and two other impartial persons is responsible for determining when behavior falls below expected standards. Such behavior may result in withholding of any awards pending notification and response from the offending school's chief administrator and in possible exclusion from the current and following year's award ceremonies.
- 3. Such action may be appealed in writing within 10 days of the contest to the Chair of the State Contest Committee. The Executive Committee is responsible for the final determination of the matter. A written response will be made to the appealing school within 10 days of receipt of the appeal.
- 4. These guidelines are not intended to dampen the natural enthusiasm of student involved in competition; they refer instead to behaviors that go beyond the bounds of courtesy and good sportsmanship as determined by the persons in charge.

Events

- 1. Expectations: Students are expected to behave with integrity and true team spirit. Lapses from ethical conduct are not to be tolerated. Coaches are expected to hold the highest standards of professional ethics. Willful commission of an ethical infraction by a coach or official school representative may result in disqualification of the school from the contest for that year, with future probationary action or disqualification also possible.
- 2. Actions: The proctor in charge will make the initial ruling and report it to the site chair. A committee composed of the site chair and two other impartial persons is responsible for determining when behavior falls below expected standards. Penalties will also be enforced for violation of the rules regarding the number of students on a team or grade level restrictions. The site chair must report any action to the Chair of the State Math Contest Committee in writing as soon as possible, and within 10 days of the contest.

- 3. Written Competitions (Algebra I, Geometry, Algebra II, Pre-Calculus)

 The offending student receives a score of zero. The score of zero will be one of the scores that count toward the total team score.
- 4. Eight-Person, Calculating, and Two-Person Team Competitions
 Violation by any member of the team will result in a score of zero for the team in that event.
- 5. Oral Competition

Violation will result in a score of zero for this event.

6. Relay Competition (State Finals only)

Teams I and II from a given school are to be treated separately. That is, a violation involving only Team I will not result in a penalty to Team II. Violation by any member of a team will result in a score of zero for that team for all three rounds.

Any further consequences of a violation of rules or procedures will be the responsibility of the team coach.

For Proctors: If there is an issue (cheating, cell phone use, etc) where a paper or papers should be disqualified, the proctor should make a note of the reason and the time the incident occurred, as well as informing all students involved of the decision. If another proctor is in the room, verify the situation with the other proctor. The proctor's name, school and cell phone number should be written on the top of the paper(s) involved and those papers should be returned separately to contest headquarters. Please be sure of the behavior leading to a disqualification before making this decision.

GENERAL PROCTOR INSTRUCTIONS

The proctors are responsible for knowing all rules for their competition.

Proctors must be alert to the entire room. Proctors must not:

leave the room unless relieved,

discuss answers with each other,

distract any student unnecessarily, including watching a particular student working out the problem.

If there is an issue (cheating, cell phone use, etc) where a paper or papers should be disqualified, the proctor should make a note of the reason and the time the incident occurred, as well as informing all students involved of the decision. If another proctor is in the room, verify the situation with the other proctor. The proctor's name, school and cell phone number should be written on the top of the paper(s) involved and those papers should be returned separately to contest headquarters. Please be sure of the behavior leading to a disqualification before making this decision.

SPECIFIC RULES FOR WRITTEN COMPETITIONS

Algebra I, Geometry, Algebra II, Pre-Calculus

Proctors will read the prepared statement.

Proctors will pass out scratch paper and answer sheets. Students must be quiet from this point on.

Students will print their name and school on the answer sheet.

Proctors will pass out the questions face down.

When all is ready, the head proctor will tell students to begin and start timing.

Proctors may not answer questions regarding interpretation of questions. If a student has an illegible copy of a test, the proctor may provide a new, clear copy.

The head proctor will announce when 3 minutes remain, when 1 minute remains, and when 15 seconds remain.

When the head proctor announces "Stop" students must stop writing and immediately hold their answer sheets high in the air. Any student who writes an answer after the command to stop may have his/her paper disqualified.

When proctors have collected all answer sheets, the head proctor will distribute the correct answers and dismiss the students. Students should leave the room immediately.

Proctors will take student answer sheets to the Grading Room.

SPECIFIC RULES FOR 8-PERSON TEAM COMPETITIONS

Proctors will read the prepared statement.

Proctors will pass out scratch paper and one answer sheet to each team. Students must be quiet from this point on.

Students will print their school name on the answer sheet.

Proctors will pass out the questions (one set to each student) face down.

When all is ready, the head proctor will tell students to begin and start timing.

Proctors should be alert and watch that no calculators are used during this competition.

Proctors may not answer questions regarding interpretation of questions. If a student has an illegible copy of a test, the proctor may provide a new, clear copy.

The head proctor will announce when 3 minutes remain, when 1 minute remains, and when 15 seconds remain.

When the head proctor announces "Stop" students must stop writing and immediately hold the team answer sheet high in the air. Any student who writes an answer after the command to stop may have his/her team's paper disqualified.

When proctors have collected all answer sheets, the head proctor will distribute the correct answers and dismiss the students. Students should leave the room immediately.

Proctors will take student answer sheets to the Grading Room.

SPECIFIC RULES FOR CALCULATOR TEAM COMPETITION

Proctors will read the prepared statement.

Proctors will pass out scratch paper and one answer sheet to each team. Students must be quiet from this point on.

Students will print their school name on the answer sheet.

Proctors will pass out the questions (one set to each student) face down.

When all is ready, the head proctor will tell students to begin and start timing.

Proctors may not answer questions regarding interpretation of questions. If a student has an illegible copy of a test, the proctor may provide a new, clear copy.

The head proctor will announce when 3 minutes remain, when 1 minute remains, and when 15 seconds remain.

When the head proctor announces "Stop" students must stop writing and immediately hold the team answer sheet high in the air. Any student who writes an answer after the command to stop may have his/her team's paper disqualified.

When proctors have collected all answer sheets, the head proctor will distribute the correct answers and dismiss the students. Students should leave the room immediately.

Proctors will take student answer sheets to the Grading Room.

SPECIFIC RULES FOR 2-PERSON TEAM COMPETITIONS

Proctors will read the prepared statement.

Proctors will pass out scratch paper and answer sheets. Students must be quiet from this point on.

Students will print their names and school on the answer sheet.

At the beginning of the competition, the head proctor should make sure that all teams and proctors are aware of the method of determining if an answer has been submitted in a given minute, as described in the prepared statement. Please note that **if a team begins to raise their answer sheet as you begin to announce the time, the answer should be considered as submitted in the earlier minute.** The paper should be up when the head proctor finishes announcing the time.

Proctors may not answer questions regarding interpretation of questions.

When all is ready, the head proctor will project the first question, tell students to begin, and start timing. Proctors should be aware of the order in which students raise their papers, as the first team with a correct answer for each question will receive bonus points.

For each question, the head proctor will announce the time at 1 minute, at 2 minutes, and when 15 seconds remain.

Proctors will grade each paper after each question as the teams submit their answer. When the first correct answer on each question has been given, announce "FIRST". Give points according to the scale given on the answer sheet.

When the head proctor announces "Stop" students must stop writing and those teams who have not already submitted an answer must immediately hold their answer sheets high in the air. Any student who writes an answer after the command to stop may have his/her paper disqualified.

AT THE REGIONAL COMPETITION, only 10 questions will normally be used. There are no tie-breakers used at the regional competition. There will be several extra questions that can be used in case one of the other questions needs to be thrown out due to procedural issues (timing errors, projection issues, etc.).

INSTRUCTIONS FOR THE STATE COMPETITION ONLY:

At the end of the regular competition (questions 1-10), ask if any teams wish to file an appeal. **Do not dismiss students or pass out question and answer sets at this time.** If any teams are filing an appeal, have them bring their appeal to the appeals judge, who will then rule on the appeal. This should be done before any teams are dismissed. If an appeal is upheld in any room, all teams will compete using a replacement question. (Note: The appeals judge will have transparencies and answer sheets for the additional questions and will distribute them as needed.) Scores on the question(s) for which an appeal is upheld should be eliminated from all team scores and the score on any replacement question(s) should be included in the team score.

After all appeals have been ruled on, all answer sheets should be collected and a final score for each team should be determined. Bring all graded papers with their final score to the appeals judge for your division.

Do not dismiss teams until after the appeals judge has determined which, if any, teams should remain for tie-breakers. At this time, question and answer sets (containing only questions 1-10) should be distributed to all teams. After tied teams have been determined and moved to a single room, other teams may be dismissed.

The number of "first correct answers" will be used as an initial tie-breaker. If ties still remain, teams involved will use the additional questions.

One set of proctors should remain to run the tie-breaking rounds. Use the same answer sheets as the team used before, but do not include points earned in the tie-breaker rounds in the team total. The appeals judge will determine which teams should compete against each other and will have the transparencies for the tie-breaker questions.

At the end of the tie-breakers, please return all answer sheets to the appeals judge, who will arrange for them to be delivered to the data entry room.

<u>REMINDER:</u> At both levels, the top 4 teams at both the Fr/So level and the Jr/Sr level will be involved in a playoff competition to determine the 1st through 4th place finishes. Proctors should announce to their room the competing teams, the time and location of the playoffs, and that all students are welcome (and encouraged) to be a part of the audience for this competition. The top 4 teams should go directly to the playoff room.

SPECIFIC RULES FOR ORAL COMPETITION

There will be one proctor in the preparation room and two judges and a timer in each presentation room.

Proctors will read the prepared statement.

In the preparation room, students will be given three sheets of colored paper to use for their solutions and which they will be able to use during the presentation. Additional colored paper should be available if requested by students.

Proctors will pass out the questions face down. When all is ready, the head proctor will tell students to begin and start timing.

Proctors may not answer questions regarding interpretation of questions. If a student has an illegible copy of a test, the proctor may provide a new, clear copy.

The head proctor will announce when 1 minute remains, and when 15 seconds remain. When time is up, the proctor will direct students to the appropriate presentation room.

Prior to the competition, the judges should meet together and agree on standards of evaluation for the particular oral topic. If there is more than one presentation room for a given division, halfway through the judging for that division, one of the judges from each room should switch rooms.

Criticism and comments by the judges are important to the students. The judges should include appropriate comments with their ratings on the judges rating sheets.

The judges rate the contestants according to the following scale, using the questions below as suggested guidelines.

Knowledge (0-13 points)

- Is an appropriate approach to the problem used?
- Are the facts correct?
- Is the logic correct?
- Is the use of vocabulary and notation correct?
- Are relevant theorems, axioms, etc. used and mentioned when they contribute to a desired result?

Presentation (0-8 points)

- Is time used effectively?
- Are important ideas emphasized/outlined/summarized?
- Are ideas explained in a logical manner?
- Is sufficient detail used?
- Are oral and visual techniques used effectively?

Extemporaneous questions (0-4 points)

• Are the questions answered correctly and adequately?

Each of the two judges may award a maximum of 25 points to the contestant, for a total of 50 possible points.

After all contestants in a Division have completed their presentations, judges should review their ratings and may adjust their scores in light of the overall quality of the presentations.

Judges will then take their rating sheets to the Grading Room.

The opinions of the judges are uncontestable.

SPECIFIC RULES FOR RELAY TEAM COMPETITIONS

(THIS EVENT IS HELD AT THE STATE FINALS ONLY)

Proctors will read the prepared statement. Students must be quiet from this point on.

At the beginning of the competition, the head proctor should make sure that all teams and proctors are aware of the method of determining if an answer has been submitted in a given minute, as described in the prepared statement. Please note that if the 4th person on a team begins to stand with their answer sheet held up as you begin to announce the time, the answer should be considered as submitted in the earlier minute. The paper should be up when the head proctor finishes announcing the time.

Proctors will give three answer sheets to each relay team member at the beginning of each round. Each round is a different color. Each team member must print their school name on each copy of the answer sheet (team members may pass back more than one answer sheet during a round, so they should have additional copies ready for use). Team members must also indicate Team I or Team II in the appropriate spot on the answer sheet, as well as the level (Fr/So or Jr/Sr). It may be helpful to be ask students to be sure they know which team they are before beginning.

Proctors shall distribute, face down, questions for Round 1. Questions should be organized so that Question 1 is given to each Team Member 1, Question 2 to Team Member 2, Question 3 to Team Member 3, and Question 4 to Team Member 4. The back of each question sheet has a large Q1, Q2, Q3, or Q4 written on it; **be careful since an error in distribution can invalidate an entire round**. The team members are seated from front to back, with Team Member 2 behind Team Member 1, etc. The color of the question sheets should match the color of the answer sheets.

Proctors may not answer questions regarding interpretation of questions. If a student has an illegible copy of a test, the proctor may provide a new, clear copy.

When all is ready, the head proctor will tell students to begin and start timing. For each question, the head proctor will announce the time at 3 minutes (First Command), at 5 minutes (Second Command), and at 7 minutes (Third Command), as well as 15 second warnings before each of these. Student answer sheets may only be submitted at these three times.

Proctors will collect each paper after each round as the teams submit their answer. Mark an "X" in the appropriate place on the answer sheet to indicate the time at which the answer sheet was submitted. The proctor does not grade the answers. When the proctor has collected answer sheets from all teams in their assigned area, the answer sheets should be taken to the graders. When the head proctor announces "Third Command - STOP" students must stop writing and those teams who have not already submitted an answer must immediately hold their answer sheets high in the air. Any student who writes an answer on the final answer sheet that is submitted after the command to stop may have their team paper disqualified for that round.

After each question, the head proctor will ask if any teams wish to file an appeal. If any teams are filing an appeal, have them bring their appeal to the appeals judge, who will then rule on the appeal. The following round may continue while the appeals judge is ruling. If there is more than one room for the event in a given division, and if an appeal is upheld in any room, all teams will compete using an alternate round as a replacement round.

Substitutions for team members, keeping the same team make-up restrictions, may be made between rounds.

At the end of each round, the head proctor and appeals judges will arrange for student papers and scoresheets to be delivered to the data entry room.

GRADING ROOM INSTRUCTIONS

Grading Room Supervisor

Orient the graders as to grading procedures described below.

Papers from the same school should be paper-clipped together.

As testing envelopes are delivered, check them off on the roster to be sure that all student papers have been received.

Make sure that all student papers are removed from the testing envelope.

As papers are completed, take school sets to the data entry room.

Grading teams may change somewhat throughout the day. As new graders arrive, orient them as to the procedures.

FOR STATE COMPETITION ONLY: If any appeals are upheld, the appeals chair will notify you of any changed answers or alternate answers that will be accepted. Note that appeals are not allowed at the regional competitions.

Graders:

Graders will work in teams of two. Each paper should be graded twice.

The <u>first grader</u> should grade by marking **only the incorrect answers** on the left side of the answer blank.

The <u>first grader</u> should mark the number **correct** in the blank at the top of the page.

The <u>second grader</u> should **fold the key and cover the first graders marks** and then grade by marking **only the incorrect answers** on the right side of the answer blank.

The <u>second grader</u> should check to see if there are any discrepancies between the first and second grader and resolve those as needed in consultation with the first grader. The second grader should verify the number correct and put the total score in the blank at the top of the page.

Answers must match the answer keys exactly.

PREPARED STATEMENT FOR <u>WRITTEN</u> COMPETITIONS - REGIONALS (Algebra I, Geometry, Algebra II, Pre-Calculus)

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but they must turn in their answer sheets at the signal for everyone to stop.

This is the Written Competition in (Algebra I, Geometry, Algebra II, Pre-Calculus). You should have nothing on your desk except pens, pencils, erasers, rulers, protractors, compasses and calculators. Please clear your desk of all other items. The time limit for this event is 50 minutes. I will give warnings at 3 minutes, at 1 minute and at 15 seconds. Do not begin until I give the signal. When I say "STOP" put down your pencil or pen and immediately hold your answer sheet high in the air.

If you want a record of your answers, you may write them on your question sheet. You will receive a copy of the correct answers when you leave this room.

All answers must be written legibly in the correct place on the answer sheet and must be in simplified form as specified in the contest manual.

I am not permitted to answer questions about interpretation of the questions. You should ask for a new copy of a test if the copy you have is not legible or is the incorrect test.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now.

(Allow students time to be sure that these items are turned off and put away.)

We will now distribute scratch paper and answer sheets. Please print your name and school on the answer sheet. Please be sure to use your full school name – papers with only school abbreviations will be disqualified.

We will now distribute copies of the questions. Keep the question sheets face down until you are told to begin.

(After students have written their names on their answer sheets, announce "You have 50 minutes. BEGIN" and start timing the event)

(After 47 minutes (when 3 minutes are remaining) announce "3 minutes."

After 49 minutes (when 1 minute is remaining) announce "1 minute."

After 49 minutes, 45 seconds (when 15 seconds are remaining) announce "15 seconds."

After 50 minutes, announce "STOP. Put all pens and pencils down and hold your answer sheet high in the air." Proctors should then collect the answer sheets.)

PREPARED STATEMENT FOR EIGHT PERSON TEAM COMPETITIONS - REGIONALS

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but each team must turn in their answer sheets at the signal for everyone to stop.

This is the Eight Person team competition. You should have nothing on your desk except pens, pencils, erasers, rulers, protractors and compasses. No calculators are allowed in this event. Please clear your desk of all other items. The time limit for this event is 20 minutes. I will give warnings at 3 minutes, at 1 minute and at 15 seconds. Do not begin until I give the signal. When I say "STOP" put down your pencil or pen and immediately hold your answer sheet high in the air.

If you want a record of your answers, you may write them on your question sheet. You will receive a copy of the correct answers when you leave this room.

All answers must be written legibly in the correct place on the answer sheet and must be in simplified form as specified in the contest manual.

I am not permitted to answer questions about interpretation of the questions. You should ask for a new copy of a test if the copy you have is not legible or is the incorrect test.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now. Also turn off and put away all calculators, as they are not permitted in this event. (Allow students time to be sure that these items are turned off and put away. Proctors should check that no calculators are available for student use during the event.)

You may talk with your own team members, but do not try to eavesdrop on other teams.

We will now distribute scratch paper and one answer sheet to each team. Please print your school name on the answer sheet. Please be sure to use your full school name – papers with only school abbreviations will be disqualified.

We will now distribute copies of the questions. Keep the question sheets face down until you are told to begin. (Distribute one copy of the questions to each team member.)

(After students have written their names on their answer sheets, announce "You have 20 minutes. BEGIN" and start timing the event)

(After 17 minutes (when 3 minutes are remaining) announce "3 minutes."

After 19 minutes (when 1 minute is remaining) announce "1 minute."

After 19 minutes, 45 seconds (when 15 seconds are remaining) announce "15 seconds."

After 20 minutes, announce "STOP. Put all pens and pencils down and hold your answer sheet high in the air." Proctors should then collect the answer sheets.)

PREPARED STATEMENT FOR CALCULATOR TEAM COMPETITION - REGIONALS

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but each team must turn in their answer sheets at the signal for everyone to stop.

This is the Calculator Team competition. You should have nothing on your desk except pens, pencils, erasers, rulers, protractors, compasses and calculators. Please clear your desk of all other items. The time limit for this event is 20 minutes. I will give warnings at 3 minutes, at 1 minute and at 15 seconds. Do not begin until I give the signal. When I say "STOP" put down your pencil or pen and immediately hold your answer sheet high in the air.

If you want a record of your answers, you may write them on your question sheet. You will receive a copy of the correct answers when you leave this room.

All answers must be written legibly in the correct place on the answer sheet. Unless otherwise specified in the problem, give all answers correct to four significant digits. Do not give your answer in scientific notation unless specified in the problem.

I am not permitted to answer questions about interpretation of the questions. You should ask for a new copy of a test if the copy you have is not legible or is the incorrect test.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now.

(Allow students time to be sure that these items are turned off and put away.)

You may talk with your own team members, but do not try to eavesdrop on other teams.

We will now distribute scratch paper and one answer sheet to each team. Please print your school name on the answer sheet. Please be sure to use your full school name – papers with only school abbreviations will be disqualified.

We will now distribute copies of the questions. Keep the question sheets face down until you are told to begin. (Distribute one copy of the questions to each team member.)

(After students have written their names on their answer sheets, announce "You have 20 minutes. BEGIN" and start timing the event)

(After 17 minutes (when 3 minutes are remaining) announce "3 minutes."

After 19 minutes (when 1 minute is remaining) announce "1 minute."

After 19 minutes, 45 seconds (when 15 seconds are remaining) announce "15 seconds."

After 20 minutes, announce "STOP. Put all pens and pencils down and hold your answer sheet high in the air." Proctors should then collect the answer sheets.)

PREPARED STATEMENT FOR TWO PERSON TEAM COMPETITIONS - REGIONALS

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but each team must turn in their answer sheets at the signal for everyone to stop.

This is the Two Person team competition. You should have nothing on your desk except pens, pencils, erasers, rulers, protractors and compasses. Please clear your desk of all other items. No calculators may be used for the first 5 questions in this competition.

I am not permitted to answer questions about interpretation of the questions. You may talk with your own team member, but do not try to eavesdrop on other teams.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now. (Allow students time to be sure that these items are turned off and put away.)

Ten questions will be shown on the screen, one at a time, with a limit of three minutes for each question. Team members may work together on the questions. When your team has an answer, write it legibly in the correct blank on the answer sheet, making sure it is in simplified form as specified in the Contest Manual. Fold your answer sheet and hold it high in the air so that a proctor can pick it up. The first correct answer will be signaled by announcing "FIRST." Each team has only one chance to answer for each question.

The time limit for each question is 3 minutes. I will give warnings at the end of each minute and at 15 seconds before time is up. Proctors will collect all answer sheets at the end of each round, score the sheets, and return them to the teams for the next round.

We will now distribute scratch paper and one answer sheet to each team. Please print your school name and team members' names on the answer sheet. Please be sure to use your full school name – papers with only school abbreviations will be disqualified.

(After students have written their school name and team members' names on their answer sheet, uncover the first problem, announce "BEGIN" and start timing the first question. Be careful to note the <u>order</u> in which answer sheets are raised to determine first place for that question.)

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When the first correct answer is received, announce "First."

After 1 minute, announce "1 minute."

After 2 minutes, announce "2 minutes."

After 2 minutes, 45 seconds (when 15 seconds are remaining), announce "15 seconds."

After 3 minutes, announce "STOP."
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(If a team begins to raise their paper immediately as you call the time, they should be considered to have answered in that time period. At the end of each round, collect all unscored answer sheets and score them. You may then announce the correct answer for that round. Return answer sheets to the team for the next round.)

After the 5^{th} round (before the 6^{th} question), announce: If you wish to use calculators for the remaining questions, please take them out now.

Continue for the remaining rounds. At the end of the tenth round, collect and total the answer sheets and take them to the grading room.

Sets of questions and answers may be distributed to the students and the students may be dismissed.

PREPARED STATEMENT FOR THE <u>ORAL</u> COMPETITION - PREPARATION ROOM REGIONALS

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but each team must stop at the end of preparation room time.

(There may be one student or two students in the room. They are allowed to have and use any materials in the room that they want to use, including notes and textbooks, but are not allowed to use cell phones, computers, or any other device with communication capabilities.)

(Give each team 3 pieces of colored paper. They may ask for additional pages if they need it during their preparation. They may also use other scratch paper for their preliminary work.)

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now. (Allow students time to be sure that these items are turned off and put away.)

You will have ten minutes to prepare your responses to the questions that I will give you. Any notes that you want to use in the Presentation Room must be made on either the question sheet or on the colored paper that I give you. These are the only papers you will be able to refer to during your presentation. If you need additional colored paper as you prepare your solutions, please let me know. You may use other paper for any preliminary work you wish to do. I will give you a one minute warning and a fifteen second warning. At the end of the ten minutes, I will say, "STOP" and you will need to stop working.

Do you have any questions?

(Hand each team a sheet with the questions on it.)

You have 10 minutes to work on the oral competition questions. BEGIN (start timing the event)

(After 9 minutes (when 1 minute is remaining) announce "1 minute.")

(After 9 minutes, 45 seconds (when 15 seconds are remaining) announce "15 seconds.")

After 10 minutes, announce "STOP. Put all pens and pencils down."

Proctors should then direct students to the presentation room.

PREPARED STATEMENT FOR THE <u>ORAL</u> COMPETITION – PRESENTATION ROOM REGIONALS

The timer or a judge should read this statement when the contestants enter the room.

Please listen carefully. I am not permitted to answer any questions about the rules of this competition or about the interpretation of the questions.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now. (Allow students time to be sure that these items are turned off and put away.)

If you have filled out two copies of the judges' rating sheets, please give them to us. If not, please write your names and your school on the board.

(Judges: if necessary, write the information on blank rating sheets).

You will have a maximum of 7 minutes to answer the questions you received in the preparation room, using only the question sheet and the sheets of colored paper prepared in the preparation room. You may not use reference material or calculators during your presentation. You will get a warning at 6 minutes. If you finish your presentation in less than 7 minutes, say "I am finished with my presentation." Either student may present your solutions to these problems, or you may work on them together. You will then have a maximum TOTAL of 3 minutes to both answer and present your solutions to some extemporaneous questions. You may use a calculator during this time. Either of you may answer these extemporaneous questions, or you may work on them together. At the end of 3 minutes, I will say "STOP." You are then to stop and leave the room. Your question sheet and any notes will be collected and returned to your coach with the judges' rating sheets at the end of the contest.

You may begin your presentation now. (Begin timing)

After 6 minutes, the timer should announce: "1 minute"

After 7 minutes, the timer should announce: "STOP"

Hand the sheet with the extemporaneous questions to the presenter and assistant.

You will have a maximum of 3 minutes total to work on and present your solutions to the extemporaneous questions. A warning will be given at 2 minutes. You may begin now.

(Begin timing)

After 2 minutes, the timer should announce: "1 minute"

After 3 minutes, the timer should announce: "STOP"

Collect all notes and papers used during the presentation.

PREPARED STATEMENT FOR <u>WRITTEN</u> COMPETITIONS - STATE (Algebra I, Geometry, Algebra II, Pre-Calculus)

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but they must turn in their answer sheets at the signal for everyone to stop.

This is the Written Competition in (Algebra I, Geometry, Algebra II, Pre-Calculus). You should have nothing on your desk except pens, pencils, erasers, rulers, protractors, compasses and calculators. Please clear your desk of all other items. The time limit for this event is 50 minutes. I will give warnings at 3 minutes, at 1 minute and at 15 seconds. Do not begin until I give the signal. When I say "STOP" put down your pencil or pen and immediately hold your answer sheet high in the air.

If you want a record of your answers, you may write them on your question sheet. You will receive a copy of the correct answers when you leave this room.

All answers must be written legibly in the correct place on the answer sheet and must be in simplified form as specified in the contest manual.

I am not permitted to answer questions about interpretation of the questions. You should ask for a new copy of a test if the copy you have is not legible or is the incorrect test.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now.

(Allow students time to be sure that these items are turned off and put away.)

We will now distribute scratch paper and answer sheets. Please print your name and school on the answer sheet. Please be sure to use your full school name – papers with only school abbreviations will be disqualified.

We will now distribute copies of the questions. Keep the question sheets face down until you are told to begin.

(After students have written their names on their answer sheets, announce "You have 50 minutes. BEGIN" and start timing the event)

(After 47 minutes (when 3 minutes are remaining) announce "3 minutes."

After 49 minutes (when 1 minute is remaining) announce "1 minute."

After 49 minutes, 45 seconds (when 15 seconds are remaining) announce "15 seconds."

After 50 minutes, announce "STOP. Put all pens and pencils down and hold your answer sheet

high in the air." *Proctors should then collect the answer sheets.*)

PREPARED STATEMENT FOR EIGHT PERSON TEAM COMPETITIONS - STATE

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but each team must turn in their answer sheets at the signal for everyone to stop.

This is the Eight Person team competition. You should have nothing on your desk except pens, pencils, erasers, rulers, protractors and compasses. No calculators are allowed in this event. Please clear your desk of all other items. The time limit for this event is 20 minutes. I will give warnings at 3 minutes, at 1 minute and at 15 seconds. Do not begin until I give the signal. When I say "STOP" put down your pencil or pen and immediately hold your answer sheet high in the air.

If you want a record of your answers, you may write them on your question sheet. You will receive a copy of the correct answers when you leave this room.

All answers must be written legibly in the correct place on the answer sheet and must be in simplified form as specified in the contest manual.

I am not permitted to answer questions about interpretation of the questions. You should ask for a new copy of a test if the copy you have is not legible or is the incorrect test.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now. Also turn off and put away all calculators, as they are not permitted in this event.

(Allow students time to be sure that these items are turned off and put away. Proctors should check that no calculators are available for student use during the event.)

You may talk with your own team members, but do not try to eavesdrop on other teams.

We will now distribute scratch paper and one answer sheet to each team. Please print your school name on the answer sheet. Please be sure to use your full school name – papers with only school abbreviations will be disqualified.

We will now distribute copies of the questions. Keep the question sheets face down until you are told to begin. (Distribute one copy of the questions to each team member.)

(After students have written their names on their answer sheets, announce "You have 20 minutes. BEGIN" and start timing the event)

(After 17 minutes (when 3 minutes are remaining) announce "3 minutes."

After 19 minutes (when 1 minute is remaining) announce "1 minute."

After 19 minutes, 45 seconds (when 15 seconds are remaining) announce "15 seconds."

After 20 minutes, announce "STOP. Put all pens and pencils down and hold your answer sheet high in the air." Proctors should then collect the answer sheets.)

PREPARED STATEMENT FOR CALCULATOR TEAM COMPETITION - STATE

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but each team must turn in their answer sheets at the signal for everyone to stop.

This is the Calculator Team competition. You should have nothing on your desk except pens, pencils, erasers, rulers, protractors, compasses and calculators. Please clear your desk of all other items. The time limit for this event is 20 minutes. I will give warnings at 3 minutes, at 1 minute and at 15 seconds. Do not begin until I give the signal. When I say "STOP" put down your pencil or pen and immediately hold your answer sheet high in the air.

If you want a record of your answers, you may write them on your question sheet. You will receive a copy of the correct answers when you leave this room.

All answers must be written legibly in the correct place on the answer sheet. Unless otherwise specified in the problem, give all answers correct to four significant digits. Do not give your answer in scientific notation unless specified in the problem.

I am not permitted to answer questions about interpretation of the questions. You should ask for a new copy of a test if the copy you have is not legible or is the incorrect test.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now.

(Allow students time to be sure that these items are turned off and put away.)

You may talk with your own team members, but do not try to eavesdrop on other teams.

We will now distribute scratch paper and one answer sheet to each team. Please print your school name on the answer sheet. Please be sure to use your full school name – papers with only school abbreviations will be disqualified.

We will now distribute copies of the questions. Keep the question sheets face down until you are told to begin. (Distribute one copy of the questions to each team member.)

(After students have written their names on their answer sheets, announce "You have 20 minutes. BEGIN" and start timing the event)

(After 17 minutes (when 3 minutes are remaining) announce "3 minutes."

After 19 minutes (when 1 minute is remaining) announce "1 minute."

After 19 minutes, 45 seconds (when 15 seconds are remaining) announce "15 seconds."

After 20 minutes, announce "STOP. Put all pens and pencils down and hold your answer sheet high in the air." Proctors should then collect the answer sheets.)

PREPARED STATEMENT FOR TWO PERSON TEAM COMPETITIONS (pg 1) - STATE

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but each team must turn in their answer sheets at the signal for everyone to stop.

This is the Two Person team competition. You should have nothing on your desk except pens, pencils, erasers, rulers, protractors and compasses. Please clear your desk of all other items. No calculators may be used for the first 5 questions in this competition.

I am not permitted to answer questions about interpretation of the questions. You may talk with your own team member, but do not try to eavesdrop on other teams.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now. (Allow students time to be sure that these items are turned off and put away.)

Ten questions will be shown on the screen, one at a time, with a limit of three minutes for each question. Team members may work together on the questions. When your team has an answer, write it legibly in the correct blank on the answer sheet, making sure it is in simplified form as specified in the Contest Manual. Fold your answer sheet and hold it high in the air so that a proctor can pick it up. The first correct answer will be signaled by announcing "FIRST." Each team has only one chance to answer for each question.

The time limit for each question is 3 minutes. I will give warnings at the end of each minute and at 15 seconds before time is up. Proctors will collect all answer sheets at the end of each round, score the sheets, and return them to the teams for the next round.

We will now distribute scratch paper and one answer sheet to each team. Please print your school name and team members' names on the answer sheet. Please be sure to use your full school name – papers with only school abbreviations will be disqualified.

(After students have written their school name and team members' names on their answer sheet, uncover the first problem, announce "BEGIN" and start timing the first question. Be careful to note the <u>order</u> in which answer sheets are raised to determine first place for that question.)

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When the first correct answer is received, announce "First."

After 1 minute, announce "1 minute."

After 2 minutes, announce "2 minutes."

After 2 minutes, 45 seconds (when 15 seconds are remaining), announce "15 seconds."

After 3 minutes, announce "STOP."
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(If a team begins to raise their paper immediately as you call the time, they should be considered to have answered in that time period. At the end of each round, collect all unscored answer sheets and score them. You may then announce the correct answer for that round. Return answer sheets to the team for the next round.)

After the 5^{th} round (before the 6^{th} question), announce: If you wish to use calculators for the remaining questions, please take them out now.

Continue for the remaining rounds. At the end of the tenth round, collect and total the answer sheets. **DO NOT dismiss students until the appeals judge releases them.**

PREPARED STATEMENT FOR TWO PERSON TEAM COMPETITIONS (pg 2) - STATE

At the end of the first 10 questions, ask "Are there any appeals?" If there are, direct the student(s) to the appeals judge to explain their appeal(s). If an appeal is upheld in any room, all teams will compete using a replacement question. The appeals judge will give you the transparencies and answers necessary for this.

Scores for the question(s) for which an appeal is upheld should be eliminated from all team scores and the score on any replacement question(s) should be included in the team score.

Give all graded student papers to the appeals judge to determine any ties that need to be broken. If there are ties, the appeals judge will let you know which teams should report to the tie-breaker room as well as which teams will be involved in the playoffs.

Announce: "Teams from (schools in top four places) will be involved in the playoff. Those teams should report to the playoff room" Give the location of the correct playoff room for your division:

Division 1A/2A Playoff: 100 Gregory Division 3AA/4AA Playoff: 112 Gregory

Once all tie-breaker teams and top teams have been informed, questions may be distributed to the teams and the remaining teams may be dismissed. The appeals judge will arrange for all answer sheets to be delivered to the data entry room.

PREPARED STATEMENT FOR THE RELAY COMPETITION (pg 1) - STATE

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but each team must turn in their answer sheets at the signal for everyone to stop.

This is the Relay Team Competition. You should have nothing on your desk except pens, pencils, erasers, rulers, protractors, compasses and calculators. Please clear your desk of all other items.

If any students are here as substitutes for later rounds, please remain quietly (give location here) until you are instructed to switch with a student currently competing.

If, during a round, you want to change the answer to your question, you should take a new answer sheet and write your current answer along with any preceding answers on it. In order to do this, you will want to keep a record of the most current set of answers that have been passed back to you. Only answer sheets may be passed back, and nothing may be passed forward. The answer sheet cannot contain symbols, stray marks, or anything else except answers. No codes may be used in recording answers. No other communication of any type is permitted.

I am not permitted to answer questions about interpretation of the questions. You should ask for a new copy of a test if the copy you have is not legible or is the incorrect round or question.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now. (Allow students time to be sure that these items are turned off.)

The time limit for each question is 7 minutes. I will give commands to stand at 3 minutes, 5 minutes and 7 minutes. I will also announce 15 seconds before each command to stand. At each command to stand, the last person on each team may submit an answer sheet. Answer sheets may only be submitted at these three times. Only one answer sheet will be accepted per team per round. Proctors will collect all answer sheets from the last team member after the command to stand or at the end of each round. Substitutions for team members may be made between rounds.

At the end of each round of the competition, there will be a period of time during which appeals may be submitted. Do not leave the room prior to the announcement of appeals, as an additional round may be needed if an appeal is accepted. If you have an appeal, you need to come forward and file an appeal at that time.

We will now distribute answer sheets to each team member. Please print your full school name on each answer sheet. Also be sure to indicate your team level (Freshman-Sophomore or Junior-Senior) and whether you are Team I or Team II. Answer sheets without this complete information will be disqualified.

(After students have written their information on their answer sheets, pass out the question sheets. Be careful to note that team member 1 receives question 1, team member 2 receives question 2, etc.)

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(After 2 minutes, 45 seconds announce "15 seconds"
After 3 minutes, announce "First Command to Stand"
After 4 minutes, 45 seconds, announce "15 seconds."
After 5 minutes, announce "Second Command to Stand"
After 6 minutes, 45 seconds, announce "15 seconds."
After 7 minutes, announce "Third Command to Stand - STOP")
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(If the last member of a team begins to stand and raise their paper immediately as you call the time, they should be considered to have answered in that time period. At the end of each round, collect all unscored answer sheets and score them. You may then announce the correct answer for that round. Return answer sheets to the team for the next round.)

PREPARED STATEMENT FOR THE RELAY COMPETITION (pg 2) - STATE

Announce:

If there are any appeals, you must come forward now and file an appeal.

If any team wishes to substitute for a member, please do so now.

(If there are any appeals, submit the appeal to the appeals judge to rule on and move to the next question. If appeals are upheld, an additional round will be completed at the end of the competition.)

(After each round, when all team papers have been graded, the graders should place the papers in the envelope from that round and give the envelope to the student runner to return to the data entry room)

Repeat the process for the next round. When all three rounds are completed, announce:

Please do not leave the room until it has been determined whether any appeals are being upheld in this room or in other competition rooms.

(If an appeal is upheld in any room for your level and division, use an additional round. If multiple rooms are being used for the competition for your level and division, be sure to check with other rooms before determining if students may be dismissed. If an additional round is not necessary, students may be dismissed.)

PREPARED STATEMENT FOR THE <u>ORAL</u> COMPETITION - PREPARATION ROOM STATE

Proctor: Please read this statement aloud when students are seated at the beginning of the official starting time for the competition. You may admit latecomers, but each team must stop at the end of their preparation room time.

(There may be one student or two students in the room. They are allowed to have and use any materials in the room that they want to use, including notes and textbooks, but are not allowed to use cell phones, computers, or any other device with communication capabilities.)

(Give each team 3 pieces of colored paper. They may ask for additional pages if they need it during their preparation. They may also use other scratch paper for their preliminary work.)

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now. (Allow students time to be sure that these items are turned off and put away.)

You will have ten minutes to prepare your responses to the questions that I will give you. Any notes that you want to use in the Presentation Room must be made on either the question sheet or on the colored paper that I give you. These are the only papers you will be able to refer to during your presentation. If you need additional colored paper as you prepare your solutions, please let me know. You may use other paper for any preliminary work you wish to do. I will give you a one minute warning and a fifteen second warning. At the end of the ten minutes, I will say, "STOP" and you will need to stop working.

Do you have any questions?

(Hand each team a sheet with the questions on it.)

You have 10 minutes to work on the oral competition questions. BEGIN (start timing the event)

(After 9 minutes (when 1 minute is remaining) announce "1 minute.")

(After 9 minutes, 45 seconds (when 15 seconds are remaining) announce "15 seconds.")

After 10 minutes, announce "STOP. Put all pens and pencils down."

Proctors should then direct students to the presentation room.

PREPARED STATEMENT FOR THE <u>ORAL</u> COMPETITION – PRESENTATION ROOM STATE

The timer or a judge should read this statement when the contestants enter the room.

Please listen carefully. I am not permitted to answer any questions about the rules of this competition or about the interpretation of the questions.

Please turn off and put away all cell phones, pagers, PDAs, watches and other transmitting devices or items with audible tones now. (Allow students time to be sure that these items are turned off and put away.)

If you have filled out two copies of the judges' rating sheets, please give them to us. If not, please write your names and your school on the board.

(Judges: if necessary, write the information on blank rating sheets).

You will have a maximum of 7 minutes to answer the questions you received in the preparation room, using only the question sheet and the sheets of colored paper prepared in the preparation room. You may not use reference material or calculators during your presentation. You will get a warning at 6 minutes. If you finish your presentation in less than 7 minutes, say "I am finished with my presentation." Either student may present your solutions to these problems, or you may work on them together. You will then have a maximum TOTAL of 3 minutes to both answer and present your solutions to some extemporaneous questions. You may use a calculator during this time. Either of you may answer these extemporaneous questions, or you may work on them together. At the end of 3 minutes, I will say "STOP." You are then to stop and leave the room. Your question sheet and any notes will be collected and returned to your coach with the judges' rating sheets at the end of the contest.

You may begin your presentation now. (Begin timing)

After 6 minutes, the timer should announce: "1 minute"

After 7 minutes, the timer should announce: "STOP"

Hand the sheet with the extemporaneous questions to the presenter and assistant.

You will have a maximum of 3 minutes total to work on and present your solutions to the extemporaneous questions. A warning will be given at 2 minutes. You may begin now.

(Begin timing)

After 2 minutes, the timer should announce: "1 minute"

After 3 minutes, the timer should announce: "STOP"

Collect all notes and papers used during the presentation.

REGIONAL AWARDS

Tie-breaking procedures:

For Team Written Events: Ties are broken using the 5th place individual score, and, if necessary, the 6th place individual score.

For Overall Team Awards: Ties are broken using the sum of the 5th place individual scores in Written Events, and, if necessary, the sum of the 6th place individual scores.

In all other events, ties are NOT broken at the regional level, so duplicate awards will be given in the event of a tie.

If there is a tie, no award will be given for the following place(s).

Separate awards are given for each division, based on the number of registered schools within a division at a particular site.

Each school will receive EIGHT blue ribbons in their school envelope to distribute as they wish.

In the event that no team scores in a given event, no awards will be given for that event.

Regional Awards given based on the number of registered schools within a division at a particular site:

With 1 school competing in a division at a regional:

Written Competitions

Awards are given to the top individual scoring student in each written event.

With 2-3 schools competing in a division at a regional:

Written Competitions

An award is given to each school with the top team in each written event. Awards are given to all six team members of the top team in each written event. Awards are given to the top individual scoring student in each written event.

Calculator Team, Eight Person Team and Relay Team Competitions

An award is given to each school with the top team in each event. Awards are given to all team members of the top team in each event.

Two Person Team Competitions

Awards are given to both team members of the top team in each event.

Oral Competition

Awards are given to both team members of the top team in each event.

Overall Team Awards

An Award is given to each school with the top team.

With 4-7 schools competing in a division at a regional:

Written Competitions

An award is given to each school with the top two teams in each written event. Awards are given to all six team members of the top two teams in each written event. Awards are given to the top three individual scoring students in each written event.

Calculator Team, Eight Person Team and Relay Team Competitions

An award is given to each school with the top two teams in each event. Awards are given to all team members of the top two teams in each event.

Two Person Team Competitions

Awards are given to both team members of the top two teams in each event.

Oral Competition

Awards are given to both team members of the top two teams in each event.

Overall Team Awards

An Award is given to each school with the top two teams.

With 8+ schools competing in a division at a regional:

Written Competitions

An award is given to each school with the top three teams in each written event. Awards are given to all six team members of the top three teams in each written event. Awards are given to the top five individual scoring students in each written event.

Calculator Team, Eight Person Team and Relay Team Competitions

An award is given to each school with the top three teams in each event. Awards are given to all team members of the top three teams in each event.

Two Person Team Competitions

Awards are given to both team members of the top three teams in each event.

Oral Competition

Awards are given to both team members of the top three teams in each event.

Overall Team Awards

An Award is given to each school with the top three teams.

ADVANCEMENT TO STATE FINALS

Schools, event teams, and individuals will qualify for the state finals by meeting the criteria below. In addition, based on Regional results, additional finalists may be advanced. The Contest Committee Chair will notify schools with team and individual qualifiers for the State Finals.

- 1. A <u>school team</u> will qualify by taking first in a region with four or more schools competing.
- 2. An event team will qualify by meeting any of the following criteria:
 - A. taking first place in their event at a regional with four or more schools competing
 - B. being one of the top ten teams in the state in their area of competition, regardless of region.
 - C. scoring at or above the minimum qualifying score in Written, Calculator or Eight Person events. The minimum qualifying scores will be posted on the website and updated annually.
- 3. An <u>individual</u> will qualify in written competition by meeting any of the following criteria:
 - A. With **one** school competing, a first place individual
 - With 2-3 schools competing, a first or second place individual.
 - With 4-7 schools competing, a first, second or third place individual
 - With 8/9 or more schools competing, a first, second, third, fourth, or fifth place individual.
 - B. An individual who is one of the top 25 individual scorers in the state in their written competition category, as determined by raw score regardless of Region.
 - C. An individual student who scores at or above the minimum qualifying score in their competition. The minimum qualifying scores will be posted on the website and updated annually.

Additional qualifying full teams will be based on site space availability and the number of teams competing in a given division.

STATE AWARDS

Tie-breaking procedures:

For Individual Written Events and for Eight-Person, Calculator and Relay Teams: Ties are broken based on item analysis.

For Team Written Events: Ties are broken using the 5th place individual score, and, if necessary, the 6th place individual score.

For Two-Person Team Events: Ties are broken using additional questions.

For the Oral Team Event: Ties are broken by the judges.

For Overall Team Awards: Ties are broken using the sum of the 5th place individual scores in Written Events, and, if necessary, the sum of the 6th place individual scores.

Duplicate awards will be given in the event of a tie that cannot be broken.

If there is a tie, no award will be given for the following place(s).

Separate awards are given for each division.

Written Competition

An award is given to each school with one of the top ten teams in each written event. Awards are given to all six team members of the top ten teams in each written event. Awards are given to the top ten individual scoring students in each written event.

Calculator Team, Eight Person Team and Relay Team Competitions

An award is given to each school with one of the top ten teams in each event. Awards are given to all team members of the top ten teams in each event.

Two Person Team Competitions

Awards are given to both team members of the top ten teams in each event.

Oral Competition

Awards are given to both team members of the top ten teams.

Overall Team Awards

Awards are given to each school with one of the top ten teams.

Richard Rhoad Award

The Richard Rhoad Award is given to the school in each division with the most improvement in the State Finals competition. In order to be eligible for the award, the school must have participated in the State Finals in the same division the previous year.