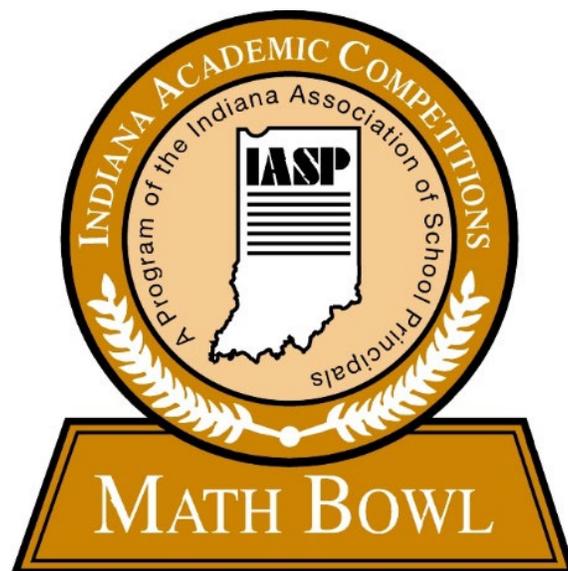


M.A.T.H. Bowl



COACHES HANDBOOK 2023-2024

A program of the
Indiana Association of School Principals

in partnership with



Math Bowl Sponsor



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CHANGES AND UPDATES FOR 2024

Reading of the Answer Choices

The recording provided to all host sites will no longer have the emcee reading the answer choices for each question. This is because at times the amount of time needed to reach each answer choice completely results in almost double the time determined by the question writers as appropriate to successfully answer the question. Some time limits have been adjusted to accommodate for this change. The answer choices will still be displayed on the screen in the same multiple-choice format, but they will no longer be read out loud prior to the emcee saying “begin”.

Elementary Division Classes

These changes have been made to eliminate the burden on coaches and hosts of determining class and making changes to class based on the current make-up of their teams. This will allow coaches to make changes to their rosters up until the day of the contest without having to notify anyone.

CLASSES WILL BE DETERMINED BY THE GRADE LEVELS HOUSED IN THE SCHOOL, NOT THE MEMBERSHIP ON THE TEAMS.

Five classes are available for Elementary Level Competitions.

Two classes are open to buildings that house **up to and including 6th grade**.

Blue Class – 187 students and up in gr. 4, 5, & 6 only

Green Class – up to 186 students in gr. 4, 5, & 6 only

Two classes are open to buildings that house **up to and including 5th grade**.

Orange Class – 163 students and up in gr. 4 & 5 only

Red Class – up to 162 students in gr. 4 & 5 only

One class is open to buildings that house **up to and including 4th grade**.

Yellow Class (enrollment number is not required)

Updated Roster Submission Process

a) SCHOOLS WILL NO LONGER BE REQUIRED TO SUBMIT A ROSTER TO IASP BEFORE THE DAY OF THE CONTEST.

One week before the Area contest, area hosts will share their site’s Google Roster form with the coaches. The coaches will enter their team names on the Google Roster form and be able to make any modifications to their rosters necessary up until the start of the contest without having to notify either their host or IASP. Once the Area contest begins, their roster will be considered official.

IASP GENERAL POLICIES

Extracurricular Expectations

The IASP Board of Directors believes that academic competition is an extracurricular activity. Therefore, organized team practices for academic competitions shall not take place during any instructional part of the school day. In addition, special courses should not be designed or implemented for the primary purpose of preparing teams for academic competition.

All building principals are encouraged to review this position statement with academic coordinators and coaches to clarify that all organized team practices occur as an extracurricular activity. However, non-instructional time such as lunch and recess could be used for organized team practices.

It is permissible for students to read and do online research during the school day, as long as there is not any organized practice, and research does not occur during school instructional time.

Code of Conduct

The Indiana Association of School Principals (IASP) sponsors various programs that benefit all students in Indiana. The Department of Student Programs (DSP) organizes academic competitions for elementary, junior high/middle, and high school students. Due to the nature of academic competitions, the atmosphere at each competition should be challenging and intense, but sportsmanship, common sense, decency, fairness, and respect should prevail at all times. These virtues should be taught to students by adults, then adhered to by students and coaches at all competition sites.

The majority of coaches and students conduct themselves in an exemplary manner and are commended for displaying positive attitudes and behavior.

The IASP Board of Directors reminds principals of their responsibility to make certain all personnel and students conduct themselves in the proper manner at all school functions. Therefore, the board expects all principals to require coaches and students to display appropriate behavior and sportsmanship at all academic competitions. The board strongly suggests that principals share the DSP Position Statement, Philosophy, Objectives, and Potential Outcomes of the Program with academic coaches and, in turn, the students.

If inappropriate conduct occurs at academic competitions, an explanation will be submitted to the Program Director within 48 hours of the competition. Then, the Program Director will contact the principal with a warning (unless the situation is serious, then step two will be followed immediately). If inappropriate behavior occurs a second time, then the principal and coach(es) will be expected to appear before a panel of IASP Board of Directors members to explain the reason for the continued inappropriate behavior. Depending on circumstances, the school and/or involved parties could be placed on probation or even lose the privilege of participating in further academic competition(s).

Dress Code

Academic competitions are not forums for personal statements, but rather are gatherings of talented students all with the primary objective of academic excellence. Principals and academic coaches have a shared responsibility to require and enforce standards of apparel deemed acceptable to represent their school and community to a statewide audience. We encourage clothing of a 'dressed-up' nature and/or matching team attire to enhance team spirit. NOTE: If you wish to include the IASP or M.A.T.H. Bowl logos on your team t-shirts, please submit a sample design to Chris at chammer@iasp.org.

The following are considered unacceptable or inappropriate attire:

- Clothing that is overly revealing or advertises drugs, alcohol, tobacco, or contains explicit, suggestive, and/or offensive language or graphics.
- Shirts or adornment that contain potentially pertinent information to the contest.

IASP reserves the right to disqualify a student or team for unacceptable or inappropriate attire.

Supervision of Teams

a) The host site will have an administrator present during the competition to handle any situations which may develop. The Procedural Committee may bring disruptive or questionable behavior on the part of coaches, competitors, or spectators to the host administrator's attention so the situation may be addressed.

b) Each team is to be supervised by a coach designated by their school principal. This coach will be responsible for seeing that all team members follow all rules and behave in an appropriate manner. A high level of sportsmanship will be expected of competitors, coaches, and fans. Failure of a coach to adequately supervise the team may result in the disqualification of the whole team.

ENTERING THE CONTEST

DSP Membership Form and Contest Entry Form

All schools participating in this contest must be members of the Department of Student Programs. To complete the combined membership form and contest entry forms, go to our website <https://iasp.org/students/join-dsp/>. You may wish to consult with the coaches of all our programs before submitting your form in order to avoid filling out multiple forms for multiple contests. Contest entry deadline: January 31, 2023.

Eligibility

Any student enrolled full-time in grades 4-6 is eligible to compete on that school's team. Schools may select their teams in any manner and with any additional criteria they choose. For example, homeschooled students may participate on an IASP sponsored academic team if school policy allows participation.

Enrollment Classifications

Elementary Division

CLASSES WILL BE DETERMINED BY THE GRADE LEVELS HOUSED IN THE SCHOOL, NOT THE MEMBERSHIP ON THE TEAMS.

Five classes are available for Elementary Level Competitions.

Two classes are open to buildings that house **up to and including 6th grade**.

Blue Class – 187 students and up in gr. 4, 5, & 6 only

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Red Class – up to 162 students in gr. 4 & 5 only

One class is open to buildings that house **up to and including 4th grade**.

Yellow Class (enrollment number is not required)

Expenses

a) An entry fee will be charged to participate in the M.A.T.H. Bowl. The entry fee must be received by the close of the school year. This fee will help to defray the costs of writing and disseminating the questions, purchasing awards, and other expenses associated with the competition. Each school will be responsible for its own expenses, including any incurred while attending competitions.

b) All schools choosing to participate in the Elementary M.A.T.H. competition must be Department of Student Programs member schools. Please check with your administrator to ensure your school's membership is current.

FORMING A TEAM

Elementary teams are composed of twelve (12) members, plus up to eight (8) others who may be used as alternates. There is no limit of how many students may come from any one grade level. A student may participate in only one of the 4 rounds.

PREPARING FOR THE CONTEST

Rosters/Team Information Form

a) **SCHOOLS WILL NO LONGER BE REQUIRED TO SUBMIT A ROSTER TO IASP BEFORE THE DAY OF THE CONTEST.**

One week before the Area contest, area hosts will share their site's Google Roster form with the coaches. The coaches will enter their team names on the Google Roster form and be able to make any modifications to their rosters necessary up until the start of the contest without having to notify either their host or IASP. Once the Area contest begins, their roster will be considered official.

b) Each school may include a maximum of twenty (20) students on a team during the contest. Students may be from grades 4, 5, or 6. If a school wishes to have more than 20 team members compete, they must register an additional team, or teams, and pay the entry fee for the additional teams.

c) Competing team members will be identified by the coach at the time of check-in at the competition site, and will be verified by proctors at the beginning of each round.

Host Site Assignments

Every attempt will be made to have schools, regardless of size, compete at the geographically closest Area Host Site. Occasionally, to balance total competitors among sites, a school may be asked to travel to a more distant site.

Study Guidelines

The 2023 M.A.T.H. Bowl competition is based on the 2020 Indiana Academic Standards for Mathematics. For additional information about the Indiana Standards see <https://www.in.gov/doe/students/indiana-academic-standards/mathematics/>. The National Council of Teachers of Mathematics also provides resources for each standard.

IASP sponsors contests to improve teaching and learning. The Indiana Academic Standards are minimum competencies. Contestants are generally advanced students. Thus, M.A.T.H. Bowl uses an expanded range of Standards.

All Standards in grades K-4 are assumed mastered by contestants in grades 4-6 and thus those topics are eligible every year. Standards in grades 5-6 are grade level minimums. Grade 7 Standards are used to challenge contestants and provide differentiation in scores at the top level for awarding prizes.

The IDOE 2020 Standards include:

*Process Standards	*Number Sense	*Computation
Algebraic Thinking		
Geometry and Measurement		
Data Analysis, Statistics and Probability		

*The Process Standards with Number Sense and Computation will be used every year. The other standards rotate on a 3-year cycle to provide a sharper focus each year.

THE STANDARDS TO BE UTILIZED IN 2024 WILL be Algebraic Thinking as well as the Process Standards with Number Sense and Computation. In 2025, the focus will be on Geometry and Measurement, and in 2026, the focus will be on Data Analysis, Statistics and Probability. In 2027, the focus will return to Algebraic Thinking.

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Available Resources

- a) A video recording will be posted on the M.A.T.H. Bowl page of www.iasp.org each year and will explain the various forms, rules/regulations, Indiana Standards, and addenda. The M.A.T.H. Bowl Question Writing Coordinator will lead the discussion on the particular year's topic(s).
- b) Question writers may provide resource items related to possible specific narrower topics. That information will also be posted on www.iasp.org with the video recording if it is made available.

CONTEST FORMAT

- a) The competition will consist of four (4) rounds.
- b) A squad may consist of no more than three (3) students competing at a time. A maximum of eight (8) alternates will be available for substitution. A squad may participate with fewer than three (3) students.
- c) All students competing must be listed on the team roster form that has been given to the proctor to verify at the beginning of the round when the students sign in.
- d) The competing team members will be seated at the desk/table facing the projection screen. Tables will be arranged with the students' backs to the audience so that each table has an unobstructed view of the screen.
- e) Each round shall consist of eight (8) multiple-choice questions which will be read to the students and projected on the screen simultaneously. The contest will be recorded and delivered to the host sites electronically. If there are any discrepancies between what is read and what you see on the screen, the screen supersedes what is spoken. After consulting with the other team members at the table, the team captain will answer each question by circling the chosen response on the answer sheet. At the conclusion of the allotted time, the proctor will mark a "+" to the left of each question number that is correctly answered and draw a line through the entire line of the response for each incorrect answer. The proctor will then transfer the written answer to the electronic sheet, and the answer key operator will enter the correct score on the answer key electronically. All team scores will be calculated after each question, based on their responses. Questions involving graphs, diagrams, etc. may have hard copies (paper copies) given to each squad for better viewing. This will be determined by the IASP office.
- f) Requests to repeat any question during the contest may only be made by the Procedural Committee Chairperson. Students are not able to request that a question be repeated. This is similar to other IASP competitions.

The Procedural Chairperson will be charged with monitoring for any issues that could lead to a repeat being necessary. The Procedural Chairperson monitors all aspects of the contest to be sure procedures and rules are followed consistently at all sites. Sound and projection systems are tested prior to the arrival of teams and again during the practice round. During the competition, the Procedural Chairperson will be positioned where they can be easily seen by the recording operator, and monitor for any issues that could cause a question to be repeated.

If the Chairperson indicates a repeat IS necessary, the recording operator should rewind the recording, so the entire question and all answer choices are read again. Students will not confer verbally until after the repeat is completed and they are told to “begin”. No more than one repeat per question will be allowed.

If the Chairperson does NOT raise their hand to indicate a repeat is necessary, the recording will continue without delay. No repeats will be allowed after the word "begin."

NOTE: Beginning in 2023, the recording provided to all host sites no longer had the emcee reading the answer choices for each question. This is because at times the amount of time needed to reach each answer choice completely resulted in almost double the time determined by the question writers as appropriate to successfully answer the question. Some time limits were adjusted to accommodate for this change. The answer choices will still be displayed on the screen in the same multiple-choice format, but they will no longer be read out loud prior to the emcee saying “begin”.

Procedural Committee

- a) A Procedural Committee of 4 site representatives will be appointed by the host coordinator. At the Area level of competition, this committee will be composed of at least one representative from each of the class colors competing at the site. Each member of the Procedural Committee must have been appointed and in receipt of the M.A.T.H. rules and guidelines at least one week prior to the competition. One of the members of this committee will be designated the chairperson and will be responsible for calling the committee together to decide questions involving procedure, rules, and violations.

- b) When a proctor indicates by standing that there is a concern or question, the Procedural Chairperson will approach the table to determine the nature of the challenge. Based on the nature of the question, the Procedural Chairperson either settles the matter or convenes the whole Committee. If the question is raised by more than one class, then the entire committee will make the decision. The committee member whose class is raising the question is not included in the final decision-making. The Procedural Chairperson will explain the nature of the challenge and the resulting decision to the emcee, who will inform the competitors and spectators.

- c) Examples of situations that would be handled by the Procedural Committee include but are not limited to:
 - How long to wait for a late arriving school.
 - Determination of what to do if a competitor becomes ill while at the competition table.
 - Deciding when alternate questions should be used.
 - Problems arising between proctors and team members.
 - Awareness of problems with sound systems, projectors, screen visibility, etc.
 - Awareness of teams consistently asking for question repeats.
 - Awareness of "obnoxious" coaches or team members.
 - What to do if answers are repeatedly marked on the wrong line of the answer sheet.

- d) The Procedural Committee at its discretion may disqualify a question, team member, and/or team.

Time Limits

- a) After the question is read, each squad will have between 30 to 60 seconds to determine an answer and mark it on the answer sheet. A bell (or other warning) will ring to indicate that five seconds remain to write down a final answer. A buzzer (or other predetermined signal) will indicate that time is up for that question. The answer should be marked, and the pencil raised from the paper when the buzzer sounds. The captain is permitted to change an answer on the answer sheet if it is completed within the time limit.
- b) The question writers will determine the time limit for each question. The time limit for each question will be announced after the question is read. A longer time period will be assigned for questions that require mathematical calculation.
- c) Students are encouraged to wait until the emcee says "begin" before writing. However, there is no penalty for beginning early.

Consultation

- a) Competing students may not orally confer with other squad members until the reader says "begin." Only oral communication is prohibited before the word "begin". Students may do calculations on paper or point to answers before the word "begin". If an infraction of this rule occurs, the proctor will warn the squad captain and remind the squad of the rule. If the squad continues to confer vocally before the word "begin", the proctor shall notify the Procedural Committee which may disqualify the squad's answer for that question.
- b) No notes, formulas, etc. may be written by any member of the squad until the reader begins the first question.
- c) No written material, mascots, stuffed animals, balloons, etc. of any kind may be brought to the competition table. Additionally, smart phones and watches must be left in the seating areas and not be brought to the table. Any such material will be removed from the table. No clothing may be worn which has any information on it that could be of assistance in answering the questions. Any team or member wearing such apparel should be brought to the attention of the Procedural Committee which will disqualify the offending party or parties. Pencils and scratch paper will be provided by the host school, but graph paper will not be allowed. Efforts to hide written material, notes, electronic devices, etc. will be construed as being a conscious attempt to cheat and the squad will be disqualified from the round.

Substitutions

- a) At the end of the fourth question in each round, one (1) or two (2) members of the squad may be substituted for students at the table. These substitutes must be listed on the team roster form and certified for this squad. The captain must remain at the table for the whole round. The substitutes may replace any other squad member and may not be used in any subsequent round.
- b) Squads that begin the round with fewer than three (3) members may add additional registered members of that squad during the round between questions until the squad is complete with three (3) members. This is only possible for squads that begin the round with fewer than three (3) members present at the table (for

instance, because of a late arrival or illness.) Substitutes may replace another squad member at the table only between question 4 and 5 of each round.

Calculators

Students may use almost any algebraic functioning calculator except the following: "hand-held" minicomputers, cell phones, tablets, or laptop computers; pocket organizers; calculators with typewriter-style keypads; calculators with paper tape or printers; calculators that talk or make other noise; any device with internet access, or calculators that require an external power source, such as an electrical outlet. Any calculator with a memory must have the memory cleared before the competition. Solar-powered calculators with a battery back-up will be acceptable. Solar-powered calculators without battery back-up may be used at the student's own risk since lighting may be dim to allow better visibility of the screens. Students are expected to bring their own calculators. Fraction capable calculators are recommended. Unacceptable calculators will be held by an official until the end of the competition.

Scoring

- a) Every question a contestant answers correctly will be worth one point. There will be a potential of 32 points (4 rounds of 8 questions), with four (4) tiebreakers (question #8 in each round will be a regular and a tie-breaker question). The rounds are scored cumulatively.
- b) At the Area and Invitational competitions, scores will be displayed electronically. The electronic system used will automatically calculate and display scores with tiebreakers live.

Breaking Ties

- a) In the event there is a tie score at the end of the competition, the first tiebreaker (TB-1) will be the cumulative team score of the four tie-breaker questions. The maximum score will be four (4).
- b) If a tie remains after utilizing the first tie-breaker method, the second tie-breaking procedure (TB-2) will be the number of rounds of questions with a perfect score. The maximum score will be four (4).
- c) If a tie still exists after using the first two tie-breaker methods, the third tiebreaker (TB-3) will be the number of rounds of questions with only one (1) miss. (Perfect scores are not to be used in TB-3).
- d) If the tie for all rounds is not broken after using the three tie-breaker methods, the fourth tiebreaker (TB-4) will be the greatest number of all team questions, 1 through 32, answered correctly in succession. (Example: Question #3 is missed in the first round, but students in rounds #2-4 answer all questions correctly "in succession." Score=29.)
- e) If the tie for all rounds is not broken after using the four tie-breaker methods, the score will stand. Alphabetic order will decide who gets the awards at this time and duplicate awards will be ordered for the other squad(s). There is no "sudden death" elimination. The schools who rank below the tie will move up in rank: e.g., schools A and B tie for first, school C finishes with the second highest score, school C would move up to second.

f) Because of the importance of question #8 in the tie-breaker process, every effort will be made to ensure these are the most challenging. A perfect score would be 32-4-4-0-32.

Challenges

a) Specific questions or answers may not be challenged during the competition. All questions and answers are official as presented and will stand. If a coach believes a question or answer was incorrect, the IASP office should be notified of a challenge to a question or answer in writing, via email, before 9:00 am EST the day after the competition for an investigation and a response from the IASP office. Challenges will NOT be accepted after 9:00 am EST the day after the competition. This written challenge should contain documentation proving the answer or question is wrong. If a challenge is made, IASP may delay posting of the statewide scores for that round. If the challenge is upheld, no adjustment to Area Competition placement results will be made, however the IASP staff may adjust scores before posting statewide results.

b) Procedural questions and challenges may be raised during the competition to correct a procedural error for the balance of the competition, or to make a correction on the previous question. Such a challenge must be made by the squad captain participating in the competition at that time and must be made before the next question is asked. Coaches, spectators, or nonparticipating team members may not make a challenge. To make a challenge, the captain should bring the question to the attention of the proctor at that table and the proctor will immediately stand to gain the attention of the recording operator and Procedural Chairperson before the next question is asked.

c) Any challenge of the Procedural Chairperson and/or Committee's decision, or of the final score or placement, must be made to the IASP office by the end of the night on the same day as the competition. A determination of the validity of the challenge and of the proper response will then be made.

Alternate Questions

a) Alternate questions will be provided. They are to be used when a question's validity is destroyed. The Procedural Chairperson/Committee will make all decisions concerning when to use an alternate question. Examples of situations when an alternate question is needed would be: if a member of the audience shouts out an answer before the buzzer sounds or if the video operator shows the question early (for example, during substitution period). The use of the alternate questions will be left up to the Procedural Chairperson and/or Committee.

b) If the Question Reader inadvertently calls time at the warning bell instead of the buzzer and gives the answer to a question before all squads have had the opportunity to mark their response, the Procedural Chairperson and/or Committee will make a ruling. Those squads that marked the correct answer before the error was made should be credited. All other squads will be given an alternate question and have it scored accordingly.

c) If the Procedural Chairperson and/or Committee rules that an alternate question should be substituted for a previously read and answered question, only the team(s) that missed the question will answer the new question.

d) An alternate question cannot be used for what is perceived to be a "bad" question or a question with a wrong answer. All questions will stand as written and challenges should be sent directly to the state director.

Decorum

a) Every effort will be made during the competition to allow the contestants to concentrate. No unnecessary talking or gestures should be made to, or around, the contestants in the competition. This is particularly important for judges, proctors, scorekeepers, timers, emcees, and coaches to note.

b) See Code of Conduct under IASP General Policies.

Proctors

a) Each school competing will be responsible for furnishing an adult proctor. Proctor assignments will be made by the host coordinator. Proctors will be assigned to proctor a school not in the proctor's school size classification if possible. This is to avoid a charge that a proctor tried to benefit their own school's position by their conduct with a competing school.

b) Each school must provide a student assistant at host sites who wishes to display scores via flip charts, who will work as a team with the proctor and will be assigned to the same school as the proctor.

c) The proctor will sit at the end of the squad's table. Before the round begins, the proctor will fill in the school's name and then have the squad members fill in their names on the lines provided at the top of the answer sheet. The proctor will cross-check the names on the answer sheet with the names on the team roster form, and report discrepancies to the Procedural Committee immediately. If all are correct, the proctor will initial the names on the team roster form.

d) If the squad captain inadvertently marks the answer on the wrong line, the proctor will warn the captain of the error and allow the same answer to be placed on the correct line. Similar subsequent errors should be referred to the Procedural Committee who will on the second offense warn the captain and allow the same answer to be placed on the correct line, and on the third and any subsequent offenses disqualify the squad's answer.

e) After a correct response is given by the question reader, the proctor will mark a "+" to the left of each question number that is correctly answered and draw a line through the entire line of the response for each incorrect answer. The proctor will then transfer the written answer to the electronic sheet, and the answer key operator will enter the correct score on the answer key electronically. All team scores will be calculated after each question, based on their responses.

f) At the end of each round, the proctor will total the score for the round by adding the number of pluses, record the squad's regular score in the appropriate box on the bottom of the answer sheet, and record the squad's tiebreaker scores in the appropriate boxes. The proctor will have the squad captain validate the accuracy of the score for the round against the electronic scoring document by signing his/her name on the designated line. The proctor should then sign the answer sheet to make it official.

AWARDS

Area

- a) Certificates will be awarded to all team members.
- b) Ribbons (blue, red & white) will be awarded to members of the top three teams in each enrollment classification.
- c) Participant ribbons will be awarded to the members of each team that finishes in fourth place and below in each enrollment classification.

Statewide Results

- a) Medals will be awarded to members of the top three (3) teams in each enrollment classification. Medals are available for each team member up to 20 and one coach (or two if the team has two coaches). There will be no distinction for enrollment classification printed on the medals. (The first-place winner in Blue Class will receive an identical medal to the first-place team in each of the other four classes).
- b) State Top 10 Certificates will be awarded to each school that finishes in 4th through 10th place in each enrollment classification.
- c) Plaques will be awarded to the top three teams in each enrollment classification, i.e., State Champion, State Runner-Up, and State Third Place.