

**FLORIDA EDUCATION FUND
MATHEMATICS BRAIN BOWL RULES**
(Revised August 2011)

MISSION

The Florida Education Fund's (FEF) Mathematics Competition seeks to increase interest in mathematics and to develop problem solving ability through a series of challenging mathematics contests for students.

Each Center of Excellence will create a math team to correspond with each level of competition. The FEF will develop all rules and regulations pertaining to the competition and facilitate competition preparation.

A. GENERAL

1. Teams will consist of five (5) players. Four (4) members must compete at a time. Once a team has competed, new members may not be added at any level of competition. The fifth member will be used as the alternate/runner. As the runner, the alternate will be responsible for giving the team's answer sheet to the scorer and is not to participate in the problem solving process. The alternate also may replace team members if illness or other emergencies arise prior to or during competition. The alternate also may be substituted into the competition between rounds. Sudden death is considered a separate round.
2. Prior to competition, each team will designate a captain and a co-captain. The captain will introduce the members of the team, the coaches, and the sponsors before competition begins. Once a match has begun, only the captain may question the proctor regarding scores, sequence and general information.
3. There will be a proctor, two timekeepers, a scorer, a scorekeeper and an ombudsman utilized at every level of competition. During competition, the team's alternate will serve as the runner.
4. Teams competing at the State Competition, March 23, 2012, must submit pre-test scores to the Florida Education Fund in October 2011 and post-test scores in February 2012.
5. DURING COMPETITION, ALL PARTICIPANTS ARE RESPONSIBLE FOR RULES AS WRITTEN.
6. No recording, written, audio or visual, will be permitted by the audience or teams not competing in the rooms where Competitions are being held.
7. Regardless of placement in the State Competition, each team must attend the entire State Competition on March 23, and the entire NAS Pre-College Summit and Brain Bowl Awards Banquet on March 24. If a team fails to attend, the team will be assessed a \$50 per student and \$100 per coach fine, unless the team's absence has been pre-approved in the event of an emergency. To obtain such approval prior to the end of the Competition, the coach must submit an Early Release Request Form to the Proctor, whose decision regarding the Request will be final. To obtain approval once the Competition has concluded, the coach

must submit an Early Release Request Form to an FEF officer, whose decision regarding the Request will be final.

B. QUESTIONS AND COMPETITION

1. The Math Competition will be played at the state level on March 23, 2012.
2. Rounds to be played will minimally include quarterfinal(s), semi-final, and final. To determine the order of play, the team captains will draw numbers.
3. Byes may be given in the first round of play in order to pare down the teams. All rounds will be played in double elimination format.
4. The quarterfinal round is the preliminary round. The winners of the semi-final round will advance to the finals. The final round will determine the champion as well as the second place winning team.
5. Teams will be seated at round tables for solving questions. When a question is being read, team members are to sit at the tables with their hands to their sides. Team members will begin problem solving after the proctor says, "Go."
6. The alternate is not to have a calculator in his/her possession during the problem solving process. If, during competition, a team's alternate is found with a calculator, the team will be penalized 4 points.
7. During the quarterfinal, semi-final and final rounds, each match will consist of the same number of problem questions for each team to solve, up to ten (10) problem questions per match (Match Questions).
8. During the quarterfinal and semi-final rounds, teams will be given up to two minutes to compute and solve each problem. If a team gets an answer correct, the problem is scored based on the minute/point value. If the answer is incorrect, no points are awarded. The correct answer includes the calculation and the answer. Points will be awarded based on the time required to calculate and record the answer to the problem, as follows:

16 points	Answer within .5 minute (30 seconds)
12 points	Answer within 1 minute
8 points	Answer within 1.5 minutes
4 points	Answer within 2 minutes

During the final round, based on the level of difficulty, teams will be allotted different times to solve problems with the correct answers. If a team gets an answer correct, the problem is scored based on the level/point value. If the answer is incorrect, no points are awarded. The correct answer includes the calculation and the answer. Based on the level of the question, points will be awarded as follows:

Time:

- Level One Questions – .5 minute (30 seconds)
- Level Two Questions – 1 minute
- Level Three Questions – 1.5 minutes

Points:

Level One – 2 points

Level Two – 4 points

Level Three – 8 points

9. During the quarterfinals, semi-final and final rounds, if a two-point advantage is not established in a match after teams have had the opportunity to answer the Match Questions, there will be a sudden death playoff. When the proctor declares sudden death, teams may substitute alternates. In sudden death, a problem will be given and the team with the first correct answer wins. The correct answer includes the calculation and the answer. In the event no team has the correct answer, a different question will be given and a new sudden death playoff round will begin.

C. GRIEVANCE PROCEDURES

At the state level of competition, any protest must be submitted to the match's proctor immediately. The protest may be one of two types: (1) a claim that a rule violation occurred during the match or (2) a claim that a proctor misinterpreted a rule that would change the outcome of a match. The protest must be submitted by the team captain or coach and must specify which question or rule is being violated. The coach's protest must be in writing. A protest may be initiated by the team's captain orally or by the team's coach who will utilize the protest card. If the team does not protest, the team forfeits the right to protest and the match outcome will remain unchanged.

A coach initiates a protest by using the protest card. When the ombudsman informs the proctor of a protest, the clock will stop immediately.

The proctor will review the protest. If the proctor rules that the protest is valid and it changes the outcome of the match, then the revised outcome will be considered the official outcome. The proctor will be allocated five (5) minutes to make a decision regarding written protests, and oral protest decisions will be made immediately.

Should the proctor determine that the official outcome is revised by the protest, then the team not submitting the original protest will have (2) minutes from the time of the proctor's decision to file a counter-protest. The proctor will review the counter-protest and make a final ruling, which cannot be protested. All protests filed must be adjudicated before the competition can proceed. A team filing a protest or counter-protest not considered valid may be assessed a five-point penalty at the discretion of the proctor. For a second or third invalid protest or counter-protest by the same team, the sponsoring Center of Excellence will be assessed a \$100.00 fine.

D. SUGGESTED PLANNING STRATEGIES

Practice Materials to be used:

- 6-8 Grade Competition: 8th Grade AMSCO FCAT Workbook
 1. Chapter Reviews
 2. Assessment after each section
 3. Cumulative Review
 4. Diagnostic Tests
 5. Tests from pages 367-396 (8th Grade FCAT)

Make sure all five strands are covered equally (number sense, concepts and operations, measurement, geometry and spatial sense, algebraic thinking, and data analysis and probability).

- 9-10 Grade Competition: *Kaplan PSAT/NMSQT 2011 Premier*

1. Practice Questions
2. Diagnostic and Practice Tests

Make sure all four problem categories are covered equally (arithmetic, algebra, geometry, and miscellaneous [probability, data interpretation, counting and ordering problems, special symbols, logical analysis]).

- 11-12 Grade Competition: *Kaplan SAT Math Workbook*

1. Practice Questions
2. Practice Tests

Make sure all four problem categories are covered equally (arithmetic, algebra, geometry, and miscellaneous [probability, data interpretation, counting and ordering problems, special symbols, logical analysis]).

Please note that competition questions will NOT be limited to questions from the above-listed practice materials.

Provide snacks and refreshments for your team when they practice. Encourage them, challenge them and remind them often of what is at stake, i.e., awards, which may include college scholarships for high school students, possible trip to central Florida and two nights' accommodation at a central Florida hotel. In addition to the above-mentioned awards, the benefits of participating will increase students' study skills, sportsmanship, teamwork and knowledge of Mathematics.

Final Competition Calculators

Each Center will be responsible for providing the calculators for their team members. Only TI 30X calculators can be utilized during the competition.

E. PRE- AND POST-TESTS; TEAM REGISTRATION

The Team Coaches or the designee for each team will administer Pre- and Post-tests. The test scores must be submitted to the Florida Education Fund. Listed below are deadlines for submission:

Pre-tests by October 17, 2011

Post-tests by February 20, 2012

Centers that submit their team registration information after February 21, 2012, will be assessed a \$50 late fee.

F. STATE COMPETITION ATTENDANCE

Regardless of placement in the State Competition, each team must attend the entire State Competition on March 23, and the entire NAS Pre-College Summit and Brain Bowl Awards Banquet on March 24. If a team fails to attend, the team will be assessed a \$50 per student and \$100 per coach fine, unless the team's absence has been pre-approved in the event of an emergency. To obtain such approval prior to the end of the Competition, the coach must submit an Early Release Request Form to the Proctor, whose decision regarding the Request will be final. To obtain approval once the Competition has concluded, the coach must submit an Early Release Request Form to an FEF officer, whose decision regarding the Request will be final.

GLOSSARY

1. **Alternate/Runner** – The alternate may be substituted into the competition between rounds. As the runner, the alternate will be responsible for giving the team's answer sheet to the scorer.
2. **Coach** – The person(s) who prepares the 5 students for the Brain Bowl Competition.
3. **Counter Protest** – Protest filed against the outcome of an already filed protest. A team has 2 minutes to file a counter protest after the Proctor's decision.
4. **Early Release Request Form** – Instrument used by the coach in the event of an emergency to request approved absence from any portion of the State Competition, the NAS Pre-College Summit, or the Brain Bowl Awards Banquet.
5. **Invalid Protest** – a) a team files a protest or counter-protest that is not valid (team may be assessed a 5-point penalty); b) when the same team files more than one invalid protest or counter-protest during the competition (sponsoring COE will be assessed a \$100.00 fine).
6. **Match Questions** – During the quarterfinal, semi-final and final rounds, each match will consist of the same number of problem questions for each team to solve, up to ten (10) problem questions per match.
7. **Ombudsman** – The person who is responsible for monitoring team members when the necessity may arise for a team member to leave the area of competition (e.g., bathroom break) and monitors the room to insure that there is no in/out audience traffic or written/audio/video recording during the competition. S/he also acknowledges the protest card in order to notify the proctor of a possible protest.
8. **Penalty** – The loss of point(s) or monetary loss due to infraction of a rule stated in the Brain Bowl Rules document.
9. **Proctor** – The official authorized to make the final decision for any protest and who reads the math problems and answers for the match.
10. **Protest** - A claim that a rule violation occurred during the match or that a proctor misinterpreted a rule that would change the outcome of a match.

11. **Protest Card** – Instrument used by the coach to notify the ombudsman or proctor that s/he would like to file a protest.
12. **Round** – Rounds to be played will minimally include quarterfinal(s), semi-final, and final. Rounds are played in order to pare down the teams.
13. **Scorekeeper** – The person who records the official scores for each match during the competition.
14. **Scorer** – The person responsible for scoring answers to math problems.
15. **Sudden Death**- In sudden death, a problem will be given and the team with the first correct answer wins. The correct answer includes the calculation and the answer. In the event no team has the correct answer, a different question will be given and a new sudden death playoff round will begin.
16. **Team** – A group of 5 students competing in the competition
17. **Time Limit** – The time allotted to determine point value for answers to math problems.
18. **Timekeeper** – The person who keeps a team's official time for answering problems.