



Mathematics

These directions expand upon but do not replace the information in the UIL Constitution and Contest Rules. The contest director should read Section 942 of the Constitution, then read these guidelines for additional details.

Before the contest

ROOM

Secure a room adequate in size with quietness of location and excellent lighting as prime factors. The UIL recommends tables with accompanying chairs (without arms) or flat top desks.

MATERIALS AND EQUIPMENT

The contest director will provide the following.

- A copy of the rules from the *Constitution and Contest Rules*
- At least five blank sheets of paper for each contestant
- Pens for grading (Contestants provide their own pencils.)
- Accurate clock for timing and clock which contestants can see during the contest
- (DISTRICT) One 8 1/2 x 11 envelope per school (8-12) for use in sorting papers

CONTEST PACKET

The League office will provide the following.

- Instructions
- Sufficient copies of the tests and answer keys in a sealed envelope (Do not open the sealed district test packet until just prior to the beginning of the contest. The district director may schedule a specific time and place for contest directors to pick up these packets on the day of the event.)
- Answer sheets
- Contest Evaluation Form
- (REGION) Regional awards order form (green)
- (REGION) State Meet information cards for state meet qualifiers (11)

PERSONNEL

- Contest director. A coach may serve as a contest director. However, due to the nature of this contest, using a coach from another district to direct the first district week is not recommended. It is acceptable to use a District I coach to direct a District II contest.
- Assistant to the contest director. (REGION) The UIL staff may appoint an assistant to the contest director from one of the high school campuses in the region, if requested. This individual will serve as a support person for the contest director and may be on hand before, during and after the meet to answer questions which may arise concerning the contest. Coaches of competitors may serve as assistants to the director.

INVENTORY ALL materials except the sealed test packets well in advance. Notify UIL of shortages. If necessary, photocopy needed UIL forms.

TEAMS may enter four students in the district meet. All four may place as individuals.

NOTE: Students do not clear the calculator memory for the mathematics contest.

FOR MORE information on substitutions, see C&CR, Section 902 (g) (B).

THE TEAM competition will not affect nor change any part of the contest procedure until the grading period when team winners are determined.

- Head grader. The contest director shall designate a head grader who will assist the contest director. The final authority rests with the contest director.
- Graders. Select at least three competent graders. Coaches of the contestants may be used. Be sure each is familiar with the contest rules as stated in the C&CR.
- One Assistant. This person may be a coach of a contestant.

TIME

- Allot one hour for the contest: up to 20 minutes for roll call and opening remarks, and exactly 40 minutes for the test. It is critical to stay on schedule as some contestants may need to go to other events.
- Arrange for and announce during the opening remarks the time and place of a 15-minute verification period prior to the announcement of official results.

CONTEST ROSTER & RESULTS SHEET

(DISTRICT & REGION) Your meet director will provide to you a contest roster, generated from the UIL Spring Meet Online Entry System. It will list the contestants and alternates from each school. You will need to assign contestant numbers, and may use those next to each contestant's name on the roster. You will also record scores and/or results on the contest roster to give to the meet director, who will then enter the results/scores into the online system.

SUBSTITUTIONS

(DISTRICT) Schools may replace contestants on the official district meet roster with substitutes so long as the substitutes present the contest directors with the appropriate documentation.

- *Students whose names were never entered into the online entry system* may substitute so long as they provide the contest director before the contest begins with a substitute eligibility form (found online and in the appendix) or a letter signed by a designated school official certifying the student's eligibility.
- *Students whose names were entered into the online entry system and hence certified as eligible* are eligible to substitute for a contestant so long as they provide the contest director with written notification (either the substitute form or a letter) signed by the event coach or representative from the contestant's school. Eligibility is already certified. Therefore, written notification is for the convenience of the contest director who may not have a copy of the other contest rosters.

At the conclusion of the meet, submit the substitution forms/letters to the spring meet district director to be filed with the school's original entry (see C&CR, Section 902 (g) (B)).

(REGION) If a member of a school's team cannot compete, only one substitution may be made. If a team needs more than one substitution, the alternate team will compete. The substitute must submit to the contest director a letter or form (such as the sample form found in the appendix) signed by a designated administrator to certify eligibility. Submit substitution form to the regional director prior to the contest, or to the contest director during roll call. Do not make a substitution for an individual contestant who is not a member of a team.

ALTERNATES (REGION)

Alternates may compete only in the absence of an individual who won first, second or third place in the same district competition. Contest directors should delay calling for alternates until immediately prior to the beginning of the contest.

TEAM COMPETITION

(DISTRICT) Schools have the option of entering either three or four competitors at the district level. While all four competitors may compete for individual honors, only the top three scores for each school will count in team competition. A team must have three contestants compete in order to qualify for the team competition. Team members who qualify to regional will compete for both team and individual honors at that level. All four members of the winning team will advance to the next higher meet, and the top second place overall team (wild card) in the region will advance to regional competition. A team may advance only as many contestants as participated in the qualifying meet.

(REGION) A team must have three contestants to qualify for the team competition. A person who advances to this level of competition does qualify for individual ranking and medals. Do not exclude them.

SORTING ENVELOPES

(DISTRICT) Provide and label a large (8 1/2 x 11) envelope for each school entered in the district meet. Write the name of the school and contest on the top of the envelopes. After the verification period, place contestants' tests and keys in the appropriate envelope for return to the mathematics coach at each school no sooner than Saturday of the respective district week.

APPROVED CALCULATORS

Contestants will be allowed the use of any commercially available silent, hand-held calculators that do not require auxiliary electric power and as long as they are not modified. Each student may bring one spare calculator. Small, hand-held computers are not permitted. **DO NOT** request that contestants clear the memory.

During the contest

1. Seat the contestants sparsely around the room, separating contestants from the same school.
2. Advise the contestants and the coaches of the place and time of the verification period and announcement of winners. Announce that contestants and coaches not present at the verification period forfeit the right to raise questions.
3. Read aloud the following statements: "Coaches, contest directors and contestants are responsible for maintaining confidentiality of contest material. Transfer of information relative to the test shall be considered a violation of the academic spring meet code and subject to penalties as outlined in Section 700 of the C&CR. Any device that makes audible sound must be turned off."
4. Open the contest packet. Ask the contest personnel or coaches to help check every page of every test to make sure that no test is defective.
5. Call the roll and make sure that contestants from the same school are not sitting next to each other.
6. Excuse all coaches from the room, asking them to keep order and quiet in the hall.
7. After coaches leave the room, assign a number to each contestant using the contest roster. Mark contestant numbers on the tests, and distribute the tests. Give each contestant scratch paper, if requested.
8. Read the following instructions to all contestants:
 - a. Clear your desk except for two calculators and writing implements. Contestants **are not required** to clear calculator memory.
 - b. Indicate your answers in the appropriate blanks provided on the answer sheet in capital letters. You may place notations anywhere you desire on the test paper except the answer sheet, which is reserved for answers only. You may use additional scratch paper provided.
 - c. No oral time warnings shall be given; if you wish to see the amount of time remaining in the contest, you may refer to the clock or to your own watch. Contestants must turn off cell phones and any audible signals on any timing devices used during the contest.
 - d. If you finish the test before the end of the allotted time, you must remain in your seat and retain your paper until told to do otherwise. You may use this time to check your answers.
 - e. Keep your papers closed at all times except when told to do otherwise.
 - f. If you are in the process of actually writing an answer on the answer sheet when the signal to stop is given, you may finish writing that answer.
 - g. After exactly 40 minutes from the start signal, the director will, without warning, give the signal to stop. Contestants may finish recording an answer.
9. Collect and destroy all scratch sheets.

WILD CARD

Each region's highest scoring second place team may advance to the regional academic meet. In the event of a tie, all teams involved in the tie will advance.

IN ORDER to be eligible as a wild card representative, district results must be posted online no later than 5 p.m. on the Monday following the final district academic week. Failure to meet the deadline disqualifies the district from advancing teams as wild card representatives. The highest-scoring second place team from the regional meets may advance to the Academic State Meet.

Grading the papers

1. After the test, gather all used test papers so that none may be retained by the contestants, coaches or other interested parties.
2. Exclude contestants and coaches not involved in the grading process from the grading room when grading. Allow sufficient time for careful grading. Do not sacrifice accuracy for speed. Each paper should be independently scored twice, and papers contending to place should be scored a third or fourth time as needed. See the C&CR for grading guidelines.

SCORING

Award each contestant six points for all questions answered correctly, and do not give or subtract points for unanswered questions. Deduct two points for an incorrect answer.

ERRORS

The answer key should be checked before grading begins. In the case of an error on the answer key of an objectively-scored contest, graders should notify the UIL State Office of the nature of the error and/or contact the respective state contest director to seek clarification. Papers should be judged on correctness rather than on an incorrect answer given in the key.

DETERMINING PLACES

- Individual competition. First place goes to the contestant making the highest score, second place to the contestant making the next highest, third place to the next highest and so on. In the event of a tie, the formula for percent accuracy shall be used to break the tie. The formula is:

$$(\text{percent accuracy}) = (\# \text{ problems correct}) \div (\# \text{ problems attempted})$$

The contestant with the highest percent accuracy shall be awarded the higher place. If the percent accuracy scores are the same, then a tie exists. In determining third place, if more than one contestant has the same raw score, the same tie breaking procedure used for first and second place shall be used.
- Team competition.
 (DISTRICT) Schools must have at least three contestants in order to participate in the team event. For schools that enter four contestants, only the top three scores from among those contestants count toward the team score.
 (DISTRICT AND REGION) Team scores and ranks are calculated when results are entered into the online system from the Roster and Results Form. For schools that enter four contestants, only the top three scores from among those contestants count toward the team score. Declare the team with the highest total the winner of the team competition, and all members of the team will advance to the next level of competition. The team with the second highest total score is the alternate team.

If at the district or regional meet two or more teams vying for first place have the same team score, first place shall be awarded to the team with the highest score of the fourth-place team member. Should two or more contestants who are the fourth-place team member have the same score, then a team tie will be declared and all teams involved in the tie shall advance. A team without a fourth member forfeits the right to participate in the tiebreaker. At the State Meet, no tie breaking procedure will be used for teams in any place; if two first place awards are made based on a declared tie, there will be no second place, etc.

After the contest

VERIFICATION PERIOD

Ask contestants and coaches to refrain from using pens or pencils. Announce unofficial results including names and scores of those who appear to have placed first through sixth and the top two teams. Allow the contestant and coach a time period not to exceed 15 minutes to look at the contestant's test/answer sheet. No one may remove papers from the room. If errors in scoring are found, the contest director should make the correction. Resolve questions at this time. Interested parties may contact the state director at their own expense to inquire about a test item.

(DISTRICT) Ask coaches to place their contestants' papers in their school envelopes.

(DISTRICT AND REGION) Pick up all tests and answer sheets so that none remain with the contestant or coach. Contestants and coaches who are not at the verification period forfeit their opportunity to ask questions.

INDIVIDUAL POINTS

1st place.....	15
2nd place.....	12
3rd place.....	10
4th place.....	8
5th place.....	6
6th place.....	4

TEAM POINTS

1 ST Place.....	10
2 ND Place.....	5

Individual school maximum points = 37

MATHEMATICS TEAM members also qualify to compete for individual awards at all levels.



QUALIFICATIONS TO REGIONAL OR STATE

Contestants can qualify to the next level of competition as individual winners or members of the winning team or wild card team. All who qualify to regional will compete for individual honors.

ANNOUNCING OFFICIAL WINNERS

- Individual Competition. After resolving all questions, the contest director should announce, as official results, the name, the school and the score of each contestant who places first through sixth. These results, once announced as official, shall be final.
- Team Competition. After the interested parties have been gathered, team scores examined and individual winners have been announced, the winner and the alternate of the team competition shall be announced. Announce the name of the team's school, team members, and team score for the team winner and alternate team. The results, once announced as official, shall be final.

POSTING RESULTS DURING THE MEET

Announce or post the names, schools and scores of the persons placing first through sixth, and the names, school and scores of the winning and alternate team.

QUALIFICATIONS TO REGIONAL (DISTRICT)

Contestants can qualify to regional as first, second or third place individual winners or members of the winning team or wild card team. All who qualify to regional will compete for individual honors.

RETURNING PAPERS

(DISTRICT) If results are final and all test questions resolved, entries may be returned no sooner than the end of the contest on the Saturday of the respective district week.

(REGION) If all questions are resolved and if the meet is held on Saturday, the test, answer keys and answer sheets should be returned to the contestants the day of the meet.

REPORT TO DIRECTOR

(DISTRICT) Individual contest directors shall give the contest roster/results form and sorting envelopes to the district director immediately after the contest. The district meet director is responsible for entering results into the UIL Spring Meet Online Entry System. District results must be submitted into the UIL online system and made available for public review by 5 p.m. on Monday following the second district week.

(REGION) Individual contest directors shall give the contest roster/results form and sorting envelopes to the regional director immediately after the contest. The regional meet director is responsible for entering results into the UIL Spring Meet Entry Online System and making them available for public review by 5 p.m. of the Monday following the regional meet. Regional directors shall also provide a list of contestant absentees if alternates were not present to take these individuals' places.

MAILING RESULTS

Mailing full meet results to participating schools is optional since results will be posted online.

EXTRA CONTEST MATERIALS

(DISTRICT) Destroy all extra materials on the Monday following the second district week.

(REGION) Destroy all extra materials on the Monday following the regional meet.

**ENTER
ALL
SCORES
INTO ONLINE
SYSTEM!**
**Enter the scores
of all contestants
into the UIL Spring
Meet Online En-
try System — not
just the top six. All
scores are needed
to determine team
champions. The UIL
strongly urges meet
officials to enter un-
official results into
the online system
prior to verification.**