

Section 1414: CALCULATOR APPLICATIONS

(a) REPRESENTATION.

- (1) *Contestants.* Students in the sixth, seventh and eighth grades who are eligible under Sections 1400 and 1405 may enter this contest. Only one test will be provided for all three grades.
- (2) *Divisions.* This contest will consist of one division unless the district executive committee approves separate divisions for each grade.
- (3) *Individual Competition.* For each division, each participant school may enter as many as three contestants in the district meet.
- (4) *Team Competition.* If the district has elected to include team competition, the combined scores of the three contestants in each division from a school shall constitute the school's team score. A team must have three contestants compete to participate in the team competition.

(b) NATURE OF CONTEST.

- (1) *Summary.* This contest is designed to stimulate the development of mathematical and calculator skills. Goals are both intellectual and practical: developing mathematical reasoning and knowledge and requiring the application of problem-solving skills toward realistic problems.
- (2) *Contest Format.* Students will take a test containing 80 problems in 30 minutes. The contest consists of problems which may include calculations involving addition, subtraction, multiplication, division, roots, and powers. It also includes straightforward calculation problems, and simple geometric and stated problems similar to those found in recently adopted textbooks.
- (3) *Tests.* One test will be provided for all three grades. The League will make available one test for invitational meets, one test for fall/winter district meets, and one test for spring district meets.

(c) CONTEST ADMINISTRATION.

- (1) *Personnel.* All personnel in this contest may be coaches of participating students.
 - (A) *Contest Director.* The contest director will be in charge of running the contest and resolving any problems that arise. The director may appoint an assistant director.
 - (B) *Monitor.* Two monitors make certain that contestants work quietly and independently.
 - (C) *Graders.* At least three graders should be familiar with the instructions for grading and the contest rules. The contest director may recruit more than three graders.
- (2) *Time Allotted for the Contest.* Thirty minutes will be allowed for the contest. A clock should be visible to all contestants.
- (3) *Materials.*
 - (A) *Provided by UIL.* The following materials will be provided to schools submitting the appropriate requisitions. See Section 1408 (c) for the dates when invitational materials will be available. See Section 1408 (e) for the dates when district materials will be available.
 - (i) Printed tests for 30 contestants in each packet.
 - (ii) Five copies of the answer key.
 - (iii) Two contest rosters.
 - (B) *Provided by the Student or School.*
 - (i) Only silent, commercially available calculators that do not require auxiliary power are permitted. Spare calculators or battery packs are also permitted.
 - (ii) Pens, pencils and/or erasers.
 - (C) *Other.* No other materials or notes may be used in the contest.

(d) CONDUCTING THE CONTEST.

- (1) *Check Tests.* In the presence of coaches, open the test envelope. Check tests for defects and omissions.
- (2) *Clear Calculators.* No pre-recorded programs may be used in the contest. Coaches may assist in

- clearing calculators of all data and program memory that can be cleared prior to the contest.
- (3) *Clear Room.* Contestants and coaches should be informed of the time and place of the verification period. Everyone other than the contest officials and contestants should leave the room. After tests have been distributed, no other contestants will be admitted into the contest room.
 - (4) *Number Contestants.* Instruct contestants to place their assigned contestant number in the upper right hand corner of the test.
 - (5) *Read Rules.* Read the following rules aloud:
 - (A) You may use any silent, hand-held calculator that does not require auxiliary electric power. Your calculator data and program memory should now be cleared. You may not use pre-recorded programs during the contest.
 - (B) You may write on the test paper, but only the answer should be written in the answer space. You may erase or mark out an answer previously written, provided you write the revised answer within the answer space and clearly indicate the answer you wish to be graded.
 - (C) Alarm watches that emit an audible signal are not allowed in the contest room.
 - (D) This is a 30-minute contest. No time warnings will be given. Remain in your seat throughout the contest period. No talking or distracting noises will be permitted.
 - (E) When the end of the contest period is indicated, you must cease calculator operations. After the stop signal is given you may, however, write down the number displayed on your calculator.
 - (F) Any answer may be written in decimal or in powers of 10 notation of the form, 1.23×10^{-6} ; but not in both. Except in the integer and dollar sign problems, answers should be written with three significant digits only, with plus or minus one unit error in the third significant digit permitted. Integer problems require answers written as an integer and no error is permitted. Dollar sign problems should be answered to the exact cent, but plus or minus one cent error is permitted. Answers should be given in the units specified on the answer blank, if a unit is required, and with the correct sign.
 - (G) All problems through the last problem completed or attempted will be graded. A problem is considered to have been attempted if any mark or erasure appears in the answer space for that problem. Scoring is plus five points for correct answers and minus four points for incorrect, skipped or illegible answers.
 - (6) *Stop Signal.* After the stop signal has been given, contestants may write one more answer on the answer sheet before they put their pencils down.
- (e) **JUDGING.**
- (1) *Criteria.* The 80-question test is graded objectively. Only problems through the last completed or attempted problem will be graded. Add five points for each correct answer. Deduct four points for each incorrect, skipped or illegible answer.
 - (2) *Briefing Graders.* Brief graders on the procedure to be used for grading, and go over the information about how answers are to be written.
 - (3) *Scoring.* Each test should be independently scored twice, and papers contending to place should be scored a third time. Draw a line after the last problem attempted. Any mark in the answer blank, including erased marks, constitutes an attempt. Erasing or marking through an answer is allowed as long as the correct answer is clearly placed in the answer blank.
 - (4) *Ranking.* Rank tests from highest to lowest scores. Individual places shall be determined and recognized through sixth place in each division. Team places may be determined and recognized through third place in each division.
 - (5) *Ties.* If two individual contestants' papers or two teams have the same score, then a tie exists. Should there be a tie for first place, there will be no second place. Should there be a tie for second place, there

will be no third place, etc.

- (6) *Points*. Points are awarded in individual competition through sixth place. Points are awarded in team competition through third place. See Section 1408 (i). Tied contestants or teams split the total points equally for the two or more places in which a tie exists.
- (f) **VERIFICATION PERIOD**. Contestants and coaches shall be given a period not to exceed 15 minutes to examine their test papers with official keys. Unofficial results should be posted. Questions should be directed to the contest director, whose decision will be final.
- (g) **OFFICIAL RESULTS**. After the verification period has ended and all test papers have been collected, the contest director shall announce the official results. Official results, once announced, are final.
- (h) **RETURNING MATERIALS**. No materials from the fall/winter district contest may be returned to contestants before January 31. No materials from the spring district contest may be returned to contestants before May 15.