

Section 944: HIGH SCHOOL NUMBER SENSE CONTEST

- (a) REPRESENTATION.
 - (1) *Individual Competition.* Each participant high school may enter as many as four individuals in the district meet, all of whom may place. In districts with more than eight schools, district executive committees may elect to limit entries to three.
 - (2) *Team Competition.* The individuals entered at district constitute the team. A team shall have a minimum of three contestants compete in order to participate in the team competition. All four members of the winning team will advance to the next higher level of competition.
- (b) ELIGIBILITY. Each student entered in the Number Sense Contest shall be eligible under Subchapter M.
- (c) QUALIFICATION; SUBSTITUTES; ALTERNATES.
 - (1) *Individual Competition.* The three top district winners in each conference qualify for regional meets and the top three regional winners for the State Meet in accordance with schedules in Section 903 of the Spring Meet Plan. If an individual qualifier cannot compete at the next higher meet, the alternate shall be notified and allowed to compete. In case of ties see subsection (g).
 - (2) *Team Competition.* The winning team will advance to the next higher level of competition. If a member of a school's team is unable to compete at the next higher level of competition, only one substitution may be made. The substitute shall give the contest director a letter certifying eligibility signed by a school administrator. (See Section 903 [b] [4].)
 - (3) *Wild Card.* Each region's highest-scoring second place team may advance to the regional academic meet. In case two or more teams tie for the wild card berth, the highest overall net score of the fourth place member of the team will be used to break the tie. Should two or more contestants who are the fourth place member of the team have the same overall net score, then a tie will be declared, and all involved in the tie shall advance. A team that does not contain a fourth member forfeits the right to participate in the tie breaker. If neither team has a fourth member, neither shall advance. In order to be eligible as a wild card representative, district results shall be certified online no later than 5 p.m. on the Monday following the final district academic week. Failure to meet the deadline or to submit correct scores 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.
- (d) NATURE OF THE CONTEST. The 10-minute contest shall include mental calculations of concepts from basic mathematics, algebra, geometry, trigonometry, analysis, number theory and calculus. Types of problems and concepts can be found on the Problem Sequencing Chart for the UIL High School Number Sense Test.
- (e) LATE ARRIVALS DISQUALIFIED. Qualified contestants not present when the tests are distributed will be disqualified.
- (f) CONDUCTING THE CONTEST.
 - (1) *Contest Room.* A suitable room equipped with tables or large desks should be selected as the contest site. Auditorium seating or fold-up desk tops are not acceptable. During the district and regional contests, only the director of number sense and an assistant are permitted to remain in the room.
 - (2) *Instructions to Contestants.*
 - (A) Whispering, talking, or other unnecessary noise of any kind by contestants or those in charge of the contest is not permitted.

- (B) Students may use a timing device during the contest. Cell phones, iPods, or other similar devices are not to be used as timers and are not to be visible during the contest. Announce to the contestants that the emission of any audio signals of any kind during the contest will result in disqualification.
 - (C) Remind contestants that this is a test in mental mathematics, and only the results of calculations arrived at without the use of pencil and paper should be accepted. The director of the contest should disqualify a contestant for violating this rule.
- (3) *Distribute Tests and Answer Sheets.* The contest problems shall be furnished by the League office. The contest director should use the contest roster to number the folded sheets and keep memoranda of the name and school of each contestant to correspond to the numbers respectively assigned, so that the papers at the close of the test can be readily identified. Instruct contestants not to unfold the test sheets until the signal to begin is given. Papers shall be lying flat on the desk and not touched by the contestants until the signal is given. Each contestant shall be instructed to write the answer in the blank immediately following the problem without attempting to solve the problem on paper, in accordance with instructions on the test.
- (4) *Stop Signal.* After exactly 10 minutes the signal to stop shall be given without warning, and each contestant shall immediately stop writing, even if the answer is incomplete. Contestants shall put their writing implement down and sit back while the tests are collected individually by the person(s) designated to collect the test papers.
- (g) **GRADING THE TESTS AND DETERMINING THE WINNER.** At the close of the 10-minute period, all of the papers shall be collected so that none are retained by the contestants, coaches or other interested parties, and immediately placed in the hands of the director, to be graded. Coaches working in concert make excellent graders and shall be included in the grading process, if they so desire. Each paper should be independently scored twice, and papers contending to place should be scored a third or fourth time as needed. Papers shall be carefully graded, awarding each contestant five points for each problem solved correctly. The sum of points thus awarded shall be considered the gross grade of the contestant. From the gross grades four points shall be deducted for each problem not solved correctly or skipped.
- (1) *Scoring Problems.* Those problems occurring after the last problem solved correctly or attempted are not considered skipped and hence no deduction for them is made. "Attempted problem" means having a mark in the answer blank. Only the answers to the problems should be written on the paper. No other writing is permitted. An answer once written shall be allowed to stand. Answers may not be crossed out. Erasures, mark-overs, and mark-outs are not permitted. Should there be an erasure mark-over, or a mark-out, that problem is to be counted incorrect. The contest director is empowered to determine if a number is legible.
 - (2) *Fractions.* All fractions in test papers shall be reduced to the lowest terms. Improper fractions are permitted. Decimal answers are permitted for those unstarred problems whose answers are exactly expressible as decimals. For example, $\frac{3}{2}$, $1\frac{1}{2}$ and 1.5 are all acceptable. Starred problems on test sheets require approximate integral answers, i.e., they permit five percent error; unstarred problems require exact answers.
 - (3) *Symbols.* Symbols such as $^{\circ}$, % and \$ are usually printed on the test. It is the responsibility of the test writer to print the appropriate symbols on the test. If not printed, the student does not include the symbol in their answer. Therefore, answers require only the writing of numerals. Marks other than the numeric answer and commas, if used, are considered extraneous marks and are counted incorrect. Commas are not required in the answer, however if the student writes the answer using commas they must be in the correct place or they will be considered as extraneous marks and will be counted incorrect.

- (4) *Dollars and Cents.* In the agreement with the philosophy that answers should be complete, all dollars and cents problems shall be written to the nearest cent. That is, twenty-three dollars shall be written as 23.00. Sixteen cents would be written as .16.
- (5) *Numerical Answers.* Numerical answers should be written so that the answers are complete as in the two examples above. However, the answer should be written in the most efficient form possible. For example, if the answer is 16, the written answer 16.000 is not acceptable for the purposes of the number sense competition. Extraneous zeros are not to be used. For example, if .16 is the answer, 0.16 is not an acceptable answer.
- (6) *Exponentials.* An answer such as 3×10^3 should be expressed as 3000 and not left in exponential form.
- (7) *Problems on the Test.* Problems should not be altered in any way or discarded without a ruling from the UIL State Office and/or the respective state contest director.
- (8) *Answer Key Errors.* 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. Mistakes in the answer key should be corrected, and papers should be judged on correctness rather than on an incorrect answer given in the key.
- (9) *Places and Ties.*
 - (A) *Individual Competition.* First place goes to the contestant making the highest net score, second place to the contestant with the next highest, third place to the next highest and so on. No ties are to be broken. Should there be a tie for first place, there is no second place. Should there be a tie for second place, there is no third. Should there be a tie for third place, there is no fourth place; and both third place winners advance to the next higher meet.
 - (B) *Team Competition.* The sum of the three highest scores from each school will determine the team score for that school. The team with the highest total will be declared the winner and all four members of the team will advance to the next higher level of competition. In the event of a team tie, the team score to be reported is the sum of the top three scores from each school. The team with the second highest total will be declared the alternate team. In case two or more teams tie for first or second place the highest overall net score of the fourth place member of the team will be used to break the tie. Should two or more contestants who are the fourth place member of their team have the same overall net score, then a tie will be declared and all involved in the tie shall advance. A team that does not contain a fourth member forfeits the right to participate in the tiebreaker. At the state meet, a tie or ties for first place overall team shall not be broken. Team members also qualify to compete for individual awards.
- (10) *Verification Period.* After the papers are graded, but before official results are announced, coaches and contestants shall be provided a time not to exceed 15 minutes to examine test papers. Except at State Meet, the names, contestant numbers and scores of the contestants who appear to have placed first through sixth should be announced and/or written on the board as unofficial results. Contestants and coaches not present at the verification period forfeit their opportunity to raise questions. Papers are to be kept in the room.
- (11) *Announcement of Results.*
 - (A) *Individual Competition.* Once the verification period has expired and all questions from the verification period have been settled, the contest director should announce results as official. These results will be final.
 - (B) *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. The name of the team's school, team members and total score shall be announced for the team winner and alternate team. The official results, once announced, shall be final.

- (12) *Returning Papers.* Before official results have been announced, gather all contest papers and answer keys so that on the day of the contest no papers are retained by the contestants, coaches or other interested parties. 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. See the *District Spring Meet Manual* for procedures for returning district meet test papers to schools. Provided there are no unresolved questions concerning any of the papers, and provided the regional test is held on a Saturday, the regional directors may return the respective papers to the contestants the day of the meet following the verification period and announcement of official results.
- (h) **GRADERS.** The contest director shall arrange for competent graders, which shall include coaches of contestants, if the coaches so desire. The contest director shall designate one of the graders as head grader. Contestants and coaches not assisting as graders are not allowed in the grading room.
- (i) **POINTS.** Points are assigned through sixth place and to first and second place team according to Section 902.
- (j) **UPDATES AND RULE INTERPRETATIONS.** Updates and further rule interpretations are published in the *Leaguer* on the UIL web site from time to time. It is the responsibility of participating schools to stay informed of new developments. Rule interpretations made in the *Leaguer* or posted on the UIL web site by the State Number Sense Director are considered binding for the administration of the UIL Number Sense Contest.