



## **New York State Testing Program**

### **Grade 3-8 Testing Program**

#### **Mathematics/Scoring Training FAQ**

*Q1: Why was the administration of the Mathematics Test moved up to March?*

A: The administration date was moved in order for schools to receive score reports before the beginning of the new school year.

*Q2: Were field tests given for the 3-8 Mathematics Test questions?*

A: Yes. Field tests were conducted in May 2005.

*Q3: For local (in-school) scoring, are there any specific guidelines which must be followed when training scorers?*

A: Training must follow the same guidelines as those used for all scoring models.

*Q4: For the operational scoring materials, will all test questions include an anchor paper for the top-score response?*

A: Yes. There will be at least one Scoring Guide anchor paper to illustrate the top-score response.

*Q5: Will there be a web site or phone number during testing administration and scoring to post errors, updates, etc.? What will be the process by which content or scoring concerns regarding test questions are publicly addressed?*

A: There will be a phone number to call for questions during test administration. During scoring, there will be a phone number, a fax number, and an email address to use for any questions that may arise. There will also be a Q & A document posted on the Department web site that will be updated daily during scoring.

*Q6: If the scoring helpline cannot provide an immediate response to a question, what is the policy on scoring the item while awaiting a decision?*

A: The question is immediately forwarded to SED. Scoring the item should be delayed until a response is received.

*Q7: Will the State ship districts paper copies of scoring materials for the March Operational Tests, as was done previously for the Grades 4 and 8 Tests?*

A: Yes. Both scoring training DVDs and hard copy of the scoring materials will be shipped.

*Q8: On the Operational Test, are the 2-point questions grouped together and the 3-point questions grouped together so that a scorer will be able to distinguish them from each other?*

A: No, the questions are not grouped according to point value. However, the scoring guides clearly indicate the point value of each test question.

*Q9: Can students with an IEP that allows them use of a calculator during testing use calculators on the 3-8 tests?*

A: No. Students with an IEP allowing calculator use may use calculators only for those sections of the test that allow calculator use for all students.

*Q10: Can parts of the Grade 7 and Grade 8 exams be administered on the same day (e.g., Grade 8 in the morning and Grade 7 in the afternoon)?*

A: The tests can be administered on any day during the administration window, provided that

- § no more than one section of the test is administered in a single day (except for Grade 8), and
- § all students are given the same section of the test at the same time.

*Q11: If work is erased but is still readable and is the only work on the page, can it be scored?*

A: If that work is still readable, and if there is no other work on the page, such work may be used to grant credit to the student.

*Q12: Will the cut scores be made available in March, prior to the official scores being released?*

A: No. Cut scores for the 2006 Operational Test will be established during standard setting, which will take place after data for the test have been received and processed.

*Q13: How many teachers should score each student's test?*

A: The responses in each student's test should be divided so that three scorers contribute to the scoring of the test.

*Q14: What constitutes an answer blank? Can a table that is to be filled in by the student be considered an answer blank? Can Scoring Policy #3 apply to tables?*

A: Scoring Policy #3 does not apply to tables.

*Q15: In responses in which students are required to provide a title for a graph, what are the criteria for judging whether the title of a graph is appropriate?*

A: The title must accurately and meaningfully depict the contents of the graph.

*Q16: Are the rubrics for the 3-8 testing program the same as those for the previous 4 and 8 testing program?*

A: With the exception of an expanded definition of the 0 score point, both the 2-point and the 3-point rubrics are the same as in the previous testing program.

*Q17: What constitutes a conceptual error?*

A: A conceptual error, as opposed to an arithmetic or computational error, is one in which the student demonstrates that he or she does not understand the mathematical concept or concepts embodied in the task.

*Q18: How much work needs to be shown in “Show Your Work”?*

A: The work shown must provide a sufficient, clear, and direct connection to the response provided on the answer line.

*Q19: Why do we not credit a student for knowledge if there is a final transcription error?*

A: Since it is difficult to determine whether the error is truly a transcription error or a reflection of the student’s decision to record a response different from the one shown elsewhere on the page, the scorer cannot make the assumption that it is a transcription error.

*Q20: Are the scoring policies final, or will they be changed?*

A: The scoring policies are final. They are based on scoring decisions that have been made over the years of scoring the Grades 4 and 8 tests and reflect careful consideration on the part of N.Y. State educators and the Department in achieving consistent and fair scoring of student papers throughout the state.

*Q21: What is the value of pi that should be taught? 3.14? 3.1416?*

A: Neither of these answers is an acceptable equivalent for pi. Since students do not have access to calculators on the test in sixth grade, students will be instructed to leave their answers in terms of pi. In Book 1 of the Grade 7 and Grade 8 tests, students will also be instructed to leave their answers in terms of pi.

*Q22: Can the directions for questions involving pi be more specific as to when the students are to use their calculators vs. estimating pi?*

A: In Grades 7 and 8, for constructed-response questions involving pi, students should always use the pi key. For Book 1 at Grades 7 and 8, and for all parts of the Grade 6 test, the questions will be structured to enable students to leave their answers in terms of pi.

*Q23: Why must the student provide evidence of three “guess-and-check” attempts if he or she has found the correct response on the first or second attempt (Scoring Policy #7)? Does this not contradict the fact that we accept a correct response with no work shown at all (Scoring Policy #11)?*

A: It is important to reinforce a systematic trial-and-error technique. The student would try reasonably closer and closer values to the correct value. After discovering the value that satisfies all of the conditions of the problem, the student would try one value immediately above and one below the correct value in order to eliminate other possibilities.

*Q24: Does Scoring Policy #10 contradict the fourth bullet on the 2-point description in the 3-point rubric?*

A: Scoring policy #10 refers to a conceptual **error**, whereas the fourth and seventh bullets of the rubrics refer to **partial or some understanding** of the concept(s). These bullets imply that the student is “on his/her way” to understanding the underlying concepts embodied in the task but is not quite there, unlike the student who actually makes a conceptual error demonstrating **no understanding**.

*Q25: For Scoring Policy #9, can a student write “see above” instead of using an arrow to indicate an explanation to be included for consideration?*

A: Such an indication would be acceptable if the intent is completely clear, i.e., if there is no ambiguity as to what is to be included, and if that work is in the form of an explanation.

*Q26: For a Show Your Work question, why can a student receive 1 point for providing a correct response but not showing work while a student who provides a correct response but includes an incorrect method for achieving that response gets a 0?*

A: A student who provides a correct answer and no work is demonstrating that he or she may have some understanding of the underlying concepts, whereas the student who provides a correct answer which was arrived at by an obviously incorrect and completely irrelevant procedure has demonstrated that he or she does not understand the underlying concepts.

*Q27: Into which languages will the sample and operational tests be translated?*

A: The tests will be translated into Chinese, Haitian Creole, Korean, Russian, and Spanish.

*Q28: Do the Consistency Assurance Sets need to be collected and turned in?*

A: No. The CAS sets are to be used during training to identify areas that need further training. They will not need to be turned in.

*Q29: In the third grade test, can the directions be read by the teacher?*

A: The only directions that may be read to the students are noted in the *Teacher’s Directions* and are related to either the sample questions in Book 1, or to preparing the students for taking the test. There are no directions associated with the test questions themselves that may be read to the students.

*Q30: If a response is supposed to be expressed as dollars and cents, can an answer be considered completely correct if the dollar sign is missing?*

A: In questions that ask for an answer to be given in dollars and cents, a dollar sign is generally provided, preceding the answer line, so this should not be an issue.

In questions that ask for a student to provide a missing table value in dollars and cents, the student may omit the dollar sign if dollar signs are already established within the table. A student may also express an answer in cents, if that answer is mathematically sound.

*Q31: Is there a contradiction between Scoring Policies #2 and #9? Why are students penalized for not writing an explanation on the lines but are not penalized for showing their work in places other than the allotted space?*

A: The lines are provided to prompt students to write their explanations in words. Process Strand CM4 states that students will provide reasoning both in written and verbal form. This often prompts scorers to credit an otherwise seemingly incoherent paper because the student was successful in explaining in words what his/her mathematical procedure was.

*Q32: Since students are taught and encouraged to work to two decimal places, why are they penalized for using pi as 3.14 when they clearly understand pi, its significance, and its application? (Grade 7 test)*

A: Since students in Grades 7 and 8 will have access to technology (i.e., scientific calculator), which

provides a more accurate approximation of pi, they are required to express pi using the full display of the calculator.

*Q33: Why are students not permitted to use mental math for the last step of a task?*

A: Unlike the intermediate steps in a problem, which may be omitted if done on a calculator or in some cases in one's head, the final step is critical in that it demonstrates whether or not the student has taken the reasoning in the correct direction, has made an appropriate "leap," and had finalized the process correctly.

*Q34: Why penalize a student for writing an equation instead of an expression (as called for in the task), since writing an equation demonstrates a higher level of understanding?*

A: It is also important for students to understand the difference between the two terms, since they are used for different purposes. By Grade 5, it is expected that the students understand that difference.

*Q35: How are foreign computational procedures scored?*

A: If a student uses foreign computational symbols or methods, but the work is clear and correct, the student may receive full credit.

*Q36: How do we score a response if all the work is crossed out? Do we ignore all the work?*

A: Per Scoring Policies #5 and #6, if only one response is provided and that response is crossed out, then it may still be scored. If, however, multiple responses are written and crossed out, then they may not be scored.

*Q37: Will the page numbers in the Scoring Leader materials match the page numbers in the Scorer materials?*

A: Yes. The materials the Scorer receives will mirror those the Scoring Leader has. The difference will be that the Scorer Practice and Consistency Assurance Sets will not be annotated.

*Q38: Where on the Department web site is the information on calculator use?*

A: Information on calculator use may be found at:

<http://www.emsc.nysed.gov/3-8/CalcChart.html>

*Q39: Where are the other Process Strands (e.g., problem solving) in the open-ended questions? The questions seem to stress application.*

A: All the Process Strands (although not all the Process Performance Indicators) are covered in each grade's test. Some questions cover multiple Process Performance Indicators.

*Q40: Will students in all grades be penalized for using strings in their responses?*

A: Yes. Strings, or run-ons, are mathematically unacceptable at any grade.

*Q41: Can multiplication be represented by a dot or parentheses as well as by an x in the student responses?*

A: Yes. All standard representations of the multiplication process are acceptable.

*Q42: What is the mathematical rationale for the ban on “touching bars” in a bar graph for Grades 6-8? (Many professionally produced bar graphs are shown with bars touching.)*

A: A bar graph is used to represent discrete qualitative data such as eye color and is therefore not placed on a continuum. A histogram, however, is used to represent quantitative data such as test scores and must, therefore, be placed on a continuum in order to display the data sequentially in intervals.

*Q43: Why do Grades 3 and 4 use the same ruler, since the Grade 3 Performance Indicators address only standard (and not metric) measurements to the nearest 1/2 inch?*

A: Two sets of punch-out tools were developed (one for grades 3 and 4 and the other for Grades 5 through 8). One common punch-out card is used in Grades 3 and 4 because all features on the card, including the ruler, can be used in both grades, even though metric measurement is also present on the ruler.

*Q44: Why are there 3-point questions on the Grade 3 test? There are only six constructed-response questions, and it takes more time to train scorers to effectively score using a 3-point rubric.*

A: Responses to extended-response questions often involve more complex processes and provide evidence of more in-depth thinking than do 2-point questions, thereby providing a fuller picture of the student’s abilities.

*Q45: Aren’t students whose math skills are strong but whose reading skills are weak disadvantaged when responding to questions involving reading? If they misinterpret a question because of weak reading skills, can scorers take this into consideration?*

A: As we move toward real-life situations and thus toward questions in context, reading and writing in mathematics become critical components in the problem-solving process. Process Strand 6R3 (read, interpret, and extend external models) is one example of the necessity for reading in mathematics.

*Q46: May students substitute another variable for a variable provided to them in a question?*

A: Yes, provided that the variable has been substituted appropriately.

*Q47: If, in the Show Your Work space, a student provides a written explanation rather than computational work, may he or she receive full credit?*

A: Yes, provided that the explanation provides as complete and clear a picture of the student’s process as would the complete and correct computational work.

*Q48: In estimation questions, why is the word “estimate” sometimes in boldface type and sometimes not?*

A: When the word “estimate” is being used as a verb (i.e., the student is asked to perform that task), the word is in boldface type to emphasize that the student is to use estimation.

*Q49: What is the difference between estimation and rounding? Will the State publish an approved estimation procedure?*

A: **Rounding** refers to a technique used to make a reasonable approximation of a

number. Rounding is done at the **end** of a process (for example, round your answer to the nearest tenth). Reasonableness is dictated by a variety of factors.

**Estimating** is a technique used to facilitate working with cumbersome or “awkward” numbers. The number or numbers are rounded **before** performing the specified operation. In order to arrive at an estimate as close to the actual answer as possible, with a series of numbers, it is not necessary to round all of the numbers (unless instructed to do so), only the cumbersome ones. The final answer in an estimate is not rounded - this would result in an answer even further from the actual answer.

*Q50: In estimation questions, should the Complete and Correct allow for a range of numbers?*

A: A range of answers is allowed, but, in some cases (for example, if the range is very broad), a specific range is not always provided in the Complete and Correct.

The scorer must determine if the estimates are reasonable and whether or not the procedure is sound.

*Q51: How is Condition Code A applied? What if a student writes “?” or “I don’t know”? How does Condition Code A factor into a student’s score?*

A: Condition Code A is applied when there is no response at all to the question even though the student was present for testing.

*Q52: On the operational test, will there be one or two CAS sets?*

A: One CAS set will be provided

*Q53: Are scorers required to score all items in each book, or can scorers be assigned to specific items?*

A: Scorers should be assigned to specific questions or sections of the test. A single scorer should **not** score any given student’s entire test.

*Q54: Will any responses need to be double-scored?*

A: No. If thorough scoring training takes place, double-scoring of student responses should not be necessary. There will, however, be read-behinds to ensure that scoring is consistent, and an audit of 10% of the responses will also be conducted.

*Q55: Suggestion: provide more space for computation*

A: If field testing shows that student need additional computational space for a test question, space will be added for the operational test. However, it is also important not to provide too much space in order to avoid misleading the student into believing more work is required than is actually the case.

*Q56: What is the recommended scoring ratio of teachers to papers?*

A: That depends on the number of scorers and the amount of time available for scoring. There should be three scorers per test.

*Q57: Can questions be designed that do not place students in double jeopardy?*

A: Every effort is made to avoid placing students in double jeopardy. If, in fact, a student answers the first part of a question incorrectly, and the response to that part of the question is necessary for answering the second part of the question, the student may still receive partial credit if the processes shown are accurate.

*Q58: If we are scoring a 3-point question that has 3 parts, how can we award a score of only 1 if Part 1 is correct and Parts 2 and 3 are partially correct?*

A: In holistic scoring, the different parts of the question are not considered or scored separately. The totality of the student's response is reviewed in order to determine the best score.

*Q59: Are we really identifying the students with math weaknesses when they lose credit for using mental math or transferring a number incorrectly?*

A: Only work that is not directly linked to the task being assessed (such as addition computations in Grade 8 that can be done mentally or by using a calculator) are not necessary to be shown.

*Q60: When is the Consistency Assurance Set administered?*

A: The CAS is administered as part of scoring training, after the trainer has reviewed the Scoring Guide and Practice Sets.

*Q61: Can school districts be provided with an informational sheet regarding issues such as pi and estimation?*

A: More information regarding pi and estimating will appear in the *Instructional Recommendations for Elementary and Intermediate Mathematics Instruction*.

*Q62: Will drawings be to scale unless otherwise indicated?*

A: Yes. All drawings that are not to scale will be noted as such directly beneath the drawing.

*Q63: Are the reference sheets on the NYSED web site accurate? Will they change before March?*

A: The reference sheets on the web site are the sheets that will be used in the operational tests. Please note that reference sheets are provided only with the constructed-response sections of the Grade 7 and Grade 8 tests. For Book 1 of Grades 7 and 8, and for the tests at all other grades, formulas will be embedded in the test questions.

*Q64: In grades for which reference sheets are provided to the students, will the formulas also be embedded in the questions?*

A: No. Formulas will either be included on the reference sheet or embedded in the question.

*Q65: How is the point value determined for each question? When a question asks a student to do two different things, shouldn't that question be worth 3 points instead of 2?*

A: The level of complexity as well as the number of steps required by the student contributes to the determination of the number of points the question should be worth. This determination is made when the question is written, but is either adjusted or confirmed during the item review process.

*Q66: Does each student need to have his or her own calculator? This is a problem in rural districts, where money is a problem.*



A: Yes. During test administration of Book 2 in Grade 7 and Books 2 and 3 in Grade 8, a calculator must be made available to each student.

*Q67: Will teachers be provided with calculators? If so, who provides them? If teachers are to provide their own calculators, who will notify them to do so?*

A: Schools are responsible for providing a calculator to each student during the Grades 7 and 8 tests.

*Q68: If a question has more than one part, will all the parts be visible to the student at the same time?*

A: Yes. If an item exceeds a single page, the item will be placed on facing pages so that the entire item is visible to the student.