New York State Testing Program

Mathematics Test

Grade 4

2009 Scoring Guide Part 1

2-Point Holistic Rubric

Score Points:

2 Points	A two-point response is complete and correct. This response • demonstrates a thorough understanding of the mathematical concepts and/or procedures embodied in the task • indicates that the student has completed the task correctly, using mathematically sound procedures • contains clear, complete explanations and/or adequate work when required
1 Point	A one-point response is only partially correct. This response • indicates that the student has demonstrated only a partial understanding of the mathematical concepts and/or procedures embodied in the task • addresses some elements of the task correctly but may be incomplete or contain some procedural or conceptual flaws • may contain an incorrect solution but applies a mathematically appropriate process • may contain a correct numerical answer but required work is not provided
0 Points	A zero-point response is incorrect, irrelevant, incoherent, or contains a correct response arrived at using an obviously incorrect procedure. Although some parts may contain correct mathematical procedures, holistically they are not sufficient to demonstrate even a limited understanding of the mathematical concepts embodied in the task.

Condition Code A

Condition Code A is applied whenever a student who is present for a test session leaves an entire open-ended item in that session blank (no response).

3-Point Holistic Rubric

Score Points:

3 Points	A three-point response is complete and correct. This response • demonstrates a thorough understanding of the mathematical concepts and/or procedures embodied in the task • indicates that the student has completed the task correctly, using mathematically sound procedures • contains clear, complete explanations and/or adequate work when required
2 Points	A two-point response is partially correct. This response • demonstrates partial understanding of the mathematical concepts and/or procedures embodied in the task • addresses most aspects of the task, using mathematically sound procedures • may contain an incorrect solution but provides complete procedures, reasoning, and/or explanations • may reflect some misunderstanding of the underlying mathematical concepts and/or procedures
1 Point	A one-point response is incomplete and exhibits many flaws but is not completely incorrect. This response • demonstrates only a limited understanding of the mathematical concepts and/or procedures embodied in the task • may address some elements of the task correctly but reaches an inadequate solution and/or provides reasoning that is faulty or incomplete • exhibits multiple flaws related to a misunderstanding of important aspects of the task, misuse of mathematical procedures, or faulty mathematical reasoning • reflects a lack of essential understanding of the underlying mathematical concepts • may contain a correct numerical answer but required work is not provided
0 Points	A zero-point response is incorrect, irrelevant, incoherent, or contains a correct response arrived at using an obviously incorrect procedure. Although some parts may contain correct mathematical procedures, holistically they are not sufficient to demonstrate even a limited understanding of the mathematical concepts embodied in the task.

Mathematics Scoring Policies

Listed below are the policies to be followed while scoring the Mathematics Tests for all grades.

1. If the question does not specifically direct students to show their work, teachers may **not** score any work that the student shows.
2. If a student does the work in other than a designated "Show your work" area, that work may still be scored. (Additional paper is an allowable accommodation for a student with disabilities if indicated on the student's IEP or 504 Plan.)
3. If the question requires students to show their work, and the student shows appropriate work and clearly identifies a correct answer but fails to write that answer in the answer blank, the student should still receive full credit.
4. If the question requires students to show their work, and the student shows appropriate work and arrives at the correct answer but writes an incorrect answer in the answer blank, the student may **not** receive full credit.
5. If the student provides one legible response (and one response only), teachers should score the response, even if it has been crossed out.
6. If the student has written more than one response but has crossed some out, teachers should score only the response that has **not** been crossed out.
7. Trial-and-error items are **not** subject to Scoring Policy #6 above, since crossing out is part of the trial-and-error process.
8. If a response shows repeated occurrences of the same conceptual error within a question, the student should **not** be penalized more than once.
9. In questions that provide ruled lines for students to write an explanation of their work, mathematical work shown elsewhere on the page may be considered and scored if, and only if, the student explicitly indicates the work as part of the answer.
10. Responses containing a conceptual error may **not** receive more than fifty percent of the maximum score.
11. In all questions that provide a response space for one numerical answer and require work to be shown, if the correct numerical answer is provided but no work is shown, the score is 1.
12. In all questions that provide response spaces for two numerical answers and require work to be shown for both parts, if one correct numerical answer is provided but no work is shown in either part, the score is 0. If two correct numerical answers are provided but no work is shown in either part, the score is 1.
13. In all 3-point questions that provide response spaces for two numerical answers and require work to be shown in one part, if two correct numerical answers are provided but no work is shown, the score is 2.
14. For work shown to be considered complete, the final step of the work (bridging the work to the answer) needs to be shown. Exceptions to the rule are

    - a simple subtraction procedure that results in an answer of 10 or less, involving whole numbers only
    - a simple addition procedure in which the value of 10 or less is added to an existing value, involving whole numbers only
    - the procedure for finding the absolute value of a number
    - the procedure for converting a decimal value to a percent

Content-Specific Scoring Clarifications for Mathematics Tests

1. All necessary signs of operation should be present for work to be considered mathematically complete and correct. If signs of operation in the work shown are missing but it is absolutely clear and apparent in the student's work which operation is being used, and if all other work required is correct, the student should receive full credit.
2. In questions that require students to provide bar graphs,
   - in Grades 3 and 4 only, touching bars are acceptable
   - in Grades 3 and 4 only, space between bars does **not** need to be uniform
   - in all grades, widths of the bars must be consistent
   - in all grades, bars must be aligned with their labels
   - in all grades, scales must begin at 0, but the 0 does **not** need to be written
3. If the question asks the student to provide an expression and the student provides an equation, this is an acceptable response in Grades 3 and 4 only.
4. In questions requiring number sentences, the number sentences must be written horizontally.
5. Column subtraction of more than two numbers, while not a preferred procedure, is acceptable, provided that the complete process is shown in the student's work.
6. Column multiplication of more than two numbers is acceptable beginning in Grade 5, provided that any computation that is not shown falls within the 12×12 multiplication table.
7. In pictographs, the student is permitted to use a symbol other than the one in the key, provided that the symbol is used consistently in the pictograph; the student does not need to change the symbol in the key. The student may **not**, however, use multiple symbols within the chart, nor may the student change the value of the symbol in the key.
8. In estimation items, the estimation must be performed at the beginning of the process; performing exact calculations and then rounding the result of the calculation is **not** acceptable.
9. The trial-and-error policy applies to Grades 7 and 8 only (and is particularly relevant to algebraic items which require a graphical procedure or in which a variable is to be found). In order for a response to receive full credit, evidence of three trials must be present. A correct answer accompanied by an incomplete trial-and-error procedure can receive only partial credit.

For additional clarification, more information can be found on the Department's web site at http://www.emsc.nysed.gov/ciai/mst/instructrec.doc.