



May 15, 2005

### Q & A GRADE 8 – 2005

For help with questions not addressed below, please call the Toll Free Helpline: 877-516-2403, available weekdays May 16-27 from 8:00 a.m. - 5 p.m. Schools that have difficulty accessing the 877 area code should fax questions to the Helpline fax number, 919-425-7733.

**Q: 28c – Why is this response a 0? It is not “completely incorrect”.**

A: The students are not required to use a tree diagram to solve this problem. This student has chosen to attempt tree diagrams, but clearly does not know how to handle the fact that there are 2 belts. The fact that the student was able to indicate one blouse with 3 different skirts, or one skirt with 3 different blouses, is not sufficient to demonstrate a partial understanding of the concepts embodied in the task for an eighth grader on a 2 point rubric.

**Q: Item 32 – Is it acceptable for the explanation to be all in numbers with no words? In other words, use all equations?**

A: Yes, if, of course, the equations/numbers are clear and complete.

**Q: Item 35 – Part A. If a student writes  $5 \times 5 = 25$ , instead of only 25, in the box, is that acceptable? What if it runs over the line?**

A: It is acceptable for Part A. Running over the line in the case where the student has started to write within the box and runs out of space, is considered a continuation and not “noise.”

**Q: Item 35 – Practice Set # 16. The explanation in Part B contains the answer for Part A, but Part A is blank. Why can’t we use Part B to show understanding for Part A?**

A: The answers must be in the tables in Part A to count for Part A.

**Q: Item 35 – Can you compare student responses 35h and Practice Set # 17?**

A: 35h – Part A is completely correct. Shari’s pattern could have been better expressed if the student had used the word “adding” instead of “using”, but this was considered to be clear enough. Ethel’s pattern is correct. The response receives a score of 3.  
Practice Set # 17 – Part A is completely correct. Shari’s pattern is unclear; the only information given is “odd number”. Ethel’s pattern is incorrect. The response receives a score of 1.

**Note:** Since scorers score holistically within the context of each individual student’s work, scorers must be very careful when comparing different students’ work.

**Q: 37c – Part C seems consistent with the drawing. Why does it receive no credit?**

A: The drawing in Part A is not a square; one diagonal is indeed about 3.7 cm, but the other diagonal is about 8 cm.

**Q: In terms of “incorrect mathematical statements,” could you compare responses 39f and 40f?**

A: The fact that the work shown in **Item 40f** contains an incorrect mathematical statement,

i.e.  $54 \times 16 \times .5 = 432/27$  is blatant because the right side of the equation does not equal the left side, however, in

**Item 40g**, Part A, the work on the right hand side of the page, the vertical work is correct, because it is not a statement that each side is equal.

**Item 39f**, The line that the answer, .7142857 is on is being considered here as a division symbol rather than an equal symbol and also, although it is actually an equation, it is more like Item 40g, Part A than Item 40f where the entire equation is on one horizontal line as is the case in Item 40f. For example, if the student had written

$5/7 = .7142857 \times 100 = 71.4$ , this clearly would have been an incorrect mathematical statement.

**Note:** Since scorers score holistically, within the context of each individual student’s work, scorers must be very careful when comparing different students’ work across different score points ( a 2-point response vs. a 3-point response).

**Q: Item 40 – What if the only error is that the student uses 6 (inches) instead of .5 (feet), and then is completely correct and consistent, resulting in an answer of 192 for Part A, and 14,400 for Part B? Would this paper receive a 1 or a 2?**

A: Since there were no papers like this in rangefinding, please fax such a response to the Helpline, so that a decision can be made.

**Q: Item 43 – Part A – Is it acceptable to have  $\sqrt{64}$  instead of 8 in the answer blank?**

A: No, the student must give the positive square root of 64 as the answer.

**Q: Item 45 – Is it acceptable for the students to use  $\cos 80^\circ$  ?**

A: Yes, it is fine to use  $\cos 80^\circ$  as part of a completely described process.

**Q: How do we treat a response of “I don’t know?” or “?” or “d.k.” (don’t know)?**

A: These are treated as incorrect and receive a score of zero.

**Q: Where do the student responses that appear in the training materials come from?**

A: They are actual New York State student responses to the field tests that are given in New York State classrooms on a periodic basis.

**Q: How are the scores determined for these responses?**

A: After students have participated in the field test, the booklets are returned by the schools to NYSED or its contractor. At that point, representative responses for each item are selected and put in packets of approximately 20 responses. These packets are sent to a rangefinding committee meeting, which is comprised of New York State teachers. Attempts are made to have a representative group of teachers (geographical, urban/rural, etc) who are certified in the relevant subject/grade being examined. After an initial examination of the item (the teachers themselves solve the item, then discuss their responses and concerns/predictions of unique cases and most common student work). Teachers independently score the student responses that have been selected as representative of student work. Each response is discussed independently after teachers share their scores. After discussion, and consensus, a score is resolved for each response. Notes are taken by NYSED and/or its contractor, recording both the score decided upon and the rationale behind the decision.

These responses/scores are then used:

1. As anchors or models and as training papers to score the remainder of the field test responses and
2. As training papers for the Scoring Guide and Practice Sets, which are sent out across the state for the scoring of the Operational Test.

For further information regarding assessment issues please consult the **2005 School Administrator's Manual** at <http://www.emsc.nysed.gov/ciai/testing/elintgen.html>.

Updates on mathematics education in NYS are posted on the Office of Curriculum and Instruction's mathematics web site at <http://www.emsc.nysed.gov/ciai/mst/math.html>.