

Scoring Guidelines For Problems of the Month

Rubrics

The criteria for scoring problems or tasks are called “rubrics.” The rubrics are designed for use in a professional collaborative setting: teachers scoring together around a table with discussion. This type of scoring has proved to be a powerful tool when used by teachers and students in self-assessment. The rubrics are designed to be easily adaptable to classrooms.

The Problem of the Month rubric focuses on the performance rather than on the performer. Scorers are directed by the rubric to the evidence in the response. To help make distinctions, scorers are asked to consider what feedback to the student would be appropriate based on the evidence in the response. The formulation of scoring decisions based, in part, on the feedback idea, has proven helpful to teachers and scorers who seek reliable scores based on sound classroom practice.

A rubric is based on the core elements of performance of the problem or task. The core elements of performance include both the essential mathematics assessed and the process at which the students solve and communicate their results. The core elements of performance are stated in the rubric.

Generic Holistic Rubric

5: Accomplishes the Task with Distinction

The response completely accomplishes the core performance of the task and goes beyond the task requirements. A distinguished performance is exciting – a gem. It excels and merits nomination for distinction by meeting the standards for a “4” and demonstrating special insights or powerful generalizations or eloquence or other exceptional qualities.

4: Accomplishes the Task

The response accomplishes the prompted purpose. The student’s strategy and execution are at a level consistent with the core elements of performance including math standards and qualitative demands of the task. Communication is judged by its effectiveness, not by grammatical correctness or length. Although a “4” need not be perfect, any defects must be minor and very likely to be repaired by the student’s own editing, without benefit of a note from a reader.

3: Ready for Revision

Evidence in the response convinces you that the student can revise the work to a “4” with help of written feedback. The student does not need a dialog or additional teaching. Any overlooked issues, misleading assumptions, or errors in execution – to be addressed in the revision – do not subvert the scorer’s confidence that the student’s mathematical power is ample to accomplish the task.

2: Partial Success with More Instruction Needed

Part of the core elements of performance is accomplished, but there is a lack of evidence – or evidence of lack – in some areas needed to accomplish the whole task. It is not clear that the student is ready to revise the work without a conversation or more teaching.

1: Engaged Task with Little Success

The response may have fragments of appropriate material from the core elements of performance and may show effort to accomplish the task, but with little or no success. The task may be misconceived, or the approach may be incoherent, or the response might lack any correct results. Nonetheless, it is evident that the respondent tackled the task and put some math knowledge and tools to work.

0: No Response or Off Task

There is no evidence that the task was engaged. The response is blank or there are marks, words, or drawings unrelated to the task.