

STANDARDS AND ASSESSMENT REVIEW COMMITTEE FOR MATHEMATICS

Assessment Review: Summary of Common Themes

May 2017

Overview

ORC 3301.079 (I)(1)(b) established the mathematics academic standards review committee to review academic content standards in the subject of mathematics. ORC 3301.079 (I)(2)(b) requires: Each committee shall determine whether the assessments submitted to that committee under division (I)(4) of this section are appropriate for the committee's respective subject area and meet the academic content standards adopted under this section and community expectations.

The Standards and Assessment Review Committee for mathematics was comprised of five members: a high school mathematics/university instructor, a curriculum director, a content expert and representatives from the Ohio Department of Higher Education and the Ohio Department of Education.

In fall 2016 the Standards and Assessment Review Committee for Mathematics was charged with reviewing testing items from the spring 2016 administration of Ohio's State Test (OST). The assessments for mathematics include a test at each grade 3 through 8 and the high school end-of-course test, (algebra I, integrated math I, geometry and integrated math II). The committee reviewed all 10 of the mathematics tests administered in spring 2016. The reviews took place during one week in June and one week in July. The committee reviewed online and paper versions of the test.

The review and comments from the Standard and Assessment Review Committee were shared with Ohio's State Test development teams in the continued effort to address any issues and recommendations provided by the review committee. This information provided additional guidance and informed the development and the review of items for each grade level.

General Comments

Overall the committee found that each test had many high quality items. The committee generally found that the test items in each of the reporting categories aligned to grade level standards. Committee members also felt that issues of complexity and difficulty were better balanced compared to the 2015 tests.

The items in each of the reporting categories met community expectations (fairness and sensitivity guidelines). Additional comments that were made about the technology and functionality of the tests focused on the items types, ease of use and continuity of items with multiple parts.

Assessment Review

1. The items in each of the reporting categories align to the standards.
 - Reviewers noted at some grades there were too many items of similar type used to address the same set of standards.
 - Reviewers noted there were a few items that seemed to be mismatched or aligned to another standard.
 - Reviewers questioned appropriateness and quality of how some items addressed the standard.
 - Reviewers questioned the strength of the items addressing the area of probability and statistics.
2. The items in each of the reporting categories are grade-level appropriate.
 - Reviewers questioned the level of precision, in some cases not enough precision, required or provided within the question.
 - Reviewers mentioned that overall the items addressed the different performance levels.
3. The items in each of the reporting categories meet community expectation (fairness and sensitivity guidelines).
 - At most grades there were no issues raised regarding community expectations.
 - Reviewer noted that graphics on a few items could have caused issues with student responses.
 - Reviewers questioned the level of precision of some language and wording of a few items across the grades.
4. Reviewers provided comments about the technology and functionality of the tests.
 - Reviewers noted that there were a few technology concerns with how students interact with the functionality of an item.
 - Reviewers noted that some of the tools are easy to use.