

2020-21

SUPPORT FOR INSTRUCTIONAL CONTENT PRIORITIZATION IN HIGH SCHOOL MATHEMATICS

STUDENT
ACHIEVEMENT
PARTNERS



Instructional Priorities will be used most powerfully by educators who know the standards well and can use existing resources such as those listed in the Appendix.

In constructing the recommendations for the High School Mathematics Instructional Priorities, several resources were consulted to gain an understanding of how the standards are typically organized into courses as well as to make determinations about which standards to prioritize, which standards to de-emphasize, and which standards could reasonably be eliminated under the current circumstances. In addition to the information obtained from the resources listed below, some decisions required professional judgment of the document’s lead writers, who also serve in district roles where such guidance for the upcoming school year will be greatly needed.

Resources consulted to inform the assignment of standards to courses:

- (1) Utah Core Standards: Major Works (Utah State Board of Education, n.d.)
- (2) Achieve the Core’s High School Coherence Map (Student Achievement Partners, n.d.)
- (3) *Common Core State Standards for Mathematics Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards* (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010b)

Resources consulted to inform the prioritization of standards for 2020–21 school year:

- (1) *Common Core State Standards for Mathematics* [for standards-designated modeling] (National Governors Association Center for Best Practices, Council of Chief State School Officers, 2010a)
- (2) Achieve the Core’s Widely Applicable Prerequisites (Student Achievement Partners, n.d.)
- (3) *Catalyzing Change in High School Mathematics: Initiating Critical Conversations* (NCTM, 2018)
- (4) High School Core Math Content (Oregon Department of Education, in press)

For the 2020–21 school year, prioritization of mathematical concepts and skills will be essential to support all students in meeting course-level expectations. Since the vast majority of high schools across the United States still use either an Algebra 1, Geometry, Algebra 2 sequence or some form of Integrated Mathematics I, II, and III sequence, the standards listed on the pages that follow have been coded in a way that corresponds to these courses. The tables use the following codes associated with each course: Algebra 1 (A1); Geometry (G); Algebra 2 (A2); Integrated Mathematics 1 (M1); Integrated Mathematics 2 (M2); and Integrated Mathematics 3 (M3).

How to Read the Content Prioritization Tables

The tables are first organized by conceptual category and cluster; then below each cluster heading, the associated standards each receive a designation to indicate the recommended level of emphasis within a particular course for the 2020–21 school year. The designations below represent the codes used to communicate this emphasis:

P - Prioritize the importance | R - Reduce the normal emphasis | E - Eliminate content to save time | -- Standard typically not taught

For standards coded with “P” for a particular course, users should interpret that to mean that no special considerations should be made for curricula well aligned to the particulars of that standard, or that the emphasis should be comparable to what it typically is for that course. Standards coded with “R” have suggestions for either reducing the emphasis on certain parts of the standard or for reducing the overall time and attention to the entire standard, or some combination of these adaptations. For these cases, there will be a note accompanying the standard to provide additional guidance related to the particular reduction in emphasis that is being suggested by the coding. Standards coded with “E” are eligible to be eliminated for the upcoming school year to make room for additional support that may be needed to ensure that students can engage successfully with the most important content of each course and to recognize that some of the modes of learning being discussed for the upcoming year simply require more time on fewer topics. The designation “--” indicates that the standard is typically taught in a different course.

One additional set of codes in the tables is designed to help users understand in part how levels of prioritization were determined. These codes are assigned to individual standards and carry the following meanings:

^ Widely Applicable Prerequisite | * Modeling Standard | ~ Essential Concepts from *Catalyzing Change*

Standards that are considered “widely applicable prerequisites” are those with relatively wide applicability across a wide range of postsecondary work and often not taught for course credit in postsecondary settings. Modeling standards are those that lend themselves to developing and analyzing mathematical models for real world phenomena and generally have greater overall importance in the high school sequence of courses. Finally, standards identified as essential in *Catalyzing Change in High School Mathematics: Initiating Critical Conversations* (NCTM, 2018), are also marked as indicated above.

As a final thought, it is important to understand that these tables will not provide a one-to-one correspondence between standards and any particular scope and sequence or set of instructional materials. Well-designed mathematics curricula are structured to communicate mathematical ideas in a coherent, logical manner and often integrate standards in ways that cannot be seen when standards are shown as a list. Professional judgment, local context considerations, and flexible decision-making throughout the 2020–21 school year will be essential to effectively using the information presented on the pages that follow.