

New York State Next Generation Mathematics Learning Standards

This document is intended to help educators identify the key changes that have occurred to the content standards for this grade level/course and to assist with designing curriculum and lessons aligned to the NYS Next Generation Mathematics Learning Standards. This document does not contain the comprehensive list of learning standards for the grade level/course. The complete list of standards for the grade level/course can be found at [NYS Next Generation Mathematics Learning Standards](#).

Grade 5 Snapshot



Standards New to Grade 5

No new standards.

Standards Moved from Grade 5

No standards moved.

Highlights/Instructional Considerations

NY-5.OA.1 This is the first formal experience with order of operations (see modifications to standards NY-3.OA.8 and NY-4.OA.3) and links to work with writing simple expressions in standard NY-5.OA.2. There is no expectation of nested (use of brackets) order of operations problems or order of operations problems that involve exponents at this level.

NY-5.NBT.3a Introduction of the use of () when writing a number in its expanded form. Work is linked to standards NY-5.OA.1 and 2, and NY-5.NBT.2.

NY-5.NBT.5 Students may use any standard algorithm for the multiplication of multi-digit whole numbers.

NY-5.NBT.6 (and 7) Students can utilize any strategy (concrete model or drawing) based on place value, properties of operations, and/or the relationship between operations for finding whole-number quotients and performing operations with decimals. In 5th grade, problems should not be so complex as to require the use of an algorithm (e.g., $0.37 \div 0.05$). Use of a standard algorithm for both standards are an expectation for grade 6.

NY-5.NF.4b Students should be able to calculate the area of a rectangle with fractional side lengths by tiling it with rectangles with appropriate unit fraction side lengths. *See illustration in standards document for clarification.

NY-5.NF.7 Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement until grade 6 (NY-6.NS.1).

NY-5.MD.1 Students used conversion factors in grade four to convert measurements in a larger unit in terms of a smaller unit. **Known conversion factors from grade 4 (NY-4.MD.1 ft., in.; km, m, cm; hr., min., sec.) will not be given.** All other conversion factors will be given in grade 5, with the focus of the standard being on the process of converting units (large to small, and small to large). Decimal operations are limited to work with decimals to the hundredths.

NY-5.MD.5a Part of standard has been removed, “Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication”, however, still implied in new wording of standard.

NY-5.G.3 The inclusive definition of a trapezoid will be utilized which defines a trapezoid as “A quadrilateral with at least one pair of parallel sides.”

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