

# 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 3 Snapshot



### Standards New to Grade 3

**NY-3.NBT.4a** Understand that the digits of a four-digit number represent amounts of thousands, hundreds, tens and ones.

(e.g., 3,245 equals 3 thousands, 2 hundreds, 4 tens and 5 ones or it could equal 32 hundreds, 4 tens and 5 ones)

**NY-3.NBT.4b** Read and write four-digit numbers using base-ten numerals, number names and expanded form.

(e.g., the number 3,245 in expanded form can be written as  $3,245=3,000+200+40+5$ ).

Both standards work with the place value progression from NY-2.NBT.1 and 3 to NY-4.NBT.2.

### Standards Moved from Grade 3

No standards moved.

### Highlights/Instructional Considerations

**NY-3.OA.5** A variety of representations (pictorial/model) can be used when applying the properties of operations to multiply and divide, does not need to be solely equation form.

For example, the area model (NY-3.MD.7c) is a multiplication/division strategy that students can utilize to apply the distributive property.

**NY-3.OA.7a** New wording, fluently solve single-digit multiplication and related divisions, still implies within 100. Fluency involves a mixture of just knowing some answers, knowing some answers from patterns, and knowing some answers from the use of strategies. By the end of grade 3, students have sufficient experience with these strategies to know from memory all single-digit products (NY-3.OA.7b).

**NY-3.OA.8a** Expressions, in addition to equations can be utilized for two-step word problems. These problems do not need to be represented by one equation or expression, but can be broken down into more than one. Order of operations is an expectation of grade 5 (NY-5.OA.1).

**NY-3.OA.9** Students will need to be able to identify arithmetic patterns and extend them.

**NY-3.NBT.2** Fluently add and subtract within 1,000. Students should be taught to use strategies and algorithms based on place value, properties of operations, and the relationship between addition and subtraction; however, when solving any problem, students can choose any strategy. A range of algorithms may be used.

**NY-3.NF (ALL)** Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.

**NY-3.NF.3** Took out “special cases”, using denominator limitations 2,3,4,6 and 8, students need to explain the equivalence of fractions and compare fractions by reasoning about their size.

**NY-3.MD.1** Other strategies can be utilized here besides the number line for one-step time word problems. One-step time word problems could involve crossing over into new hour.

**NY-3.MD.7d** Additive area problems involving finding the area of figures composed of non-overlapping rectangles could involve one unknown side length.

**NY-3.MD.8b** Changed wording of original standard from students “exhibiting” rectangles with perimeter/area relationships to students “identifying” rectangles with perimeter/area relationships.

**NY-3.G.1** Recognize and classify polygons based on the number of sides and vertices, not types of angles and parallel/perpendicular lines (grade 4 (NY-4.G.2)). No hierarchy of the parallelogram family. Students should be exposed to regular and irregular polygons, though they do not need to utilize those formal terms when classifying.