Quick Guides
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Student Expectations

Both Texas and Louisiana modeled their state mathematics standards after the National Council of Teachers of Mathematics (NCTM) standards, and in Grades K-8 the strands and objectives of the Texas Essential Knowledge and Skills (TEKS) and the Louisiana Grade Level Expectations (GLEs) are more or less parallel as illustrated below:

Texas	Louisiana
Number, operation, and quantitative reasoning	Number and number relations (N)
Patterns, relationships, and algebraic thinking	Algebra (A)
	Patterns, relations, and functions (P)
Measurement	Measurement (M)
Geometry and spatial reasoning	Geometry (G)
Probability and statistics	Data analysis, probability, and discrete math (D)

After Grade 8, however, there are significant differences between the two states' with respect to the format and sequencing of the content expectations. Louisiana specifies expectations by grade level, as well as by course. Upon examination, the Louisiana expectations for Grade 9 are essentially those for Algebra 1 in a different format; the expectations for Grade 10 are the same as for Geometry, and those for Grade 11-12 are the same as for Algebra 2 and other advanced mathematics. In both the grade-level and course formats, Louisiana subdivides expectations into the same strands used for Grades K-8. In other words, the Louisiana Algebra 1 standards contains expectations for all six of the strands listed above.

Texas simply specifies expectations for each high school level mathematics course and discontinues grouping the expectations by the strands listed above. For example, the Algebra 1 TEKS contain neither a Measurement nor a Geometry strand. It could be assumed that many of the Louisiana Algebra I expectations specified in these "non-algebraic" strands are actually imbedded in the Algebra 1 TEKS through the presumed application of pre-requisite knowledge. Caution must be taken, however, to ensure those types of expectations or assumptions are clearly noted and explained when attempting to correlate the two states' standards.

Overview of Geometry Content Analysis

The major strands in the Geometry TEKS are: a) Geometric Structure, b) Geometric Patterns, c) Dimensionality and the Geometry of Location, d) Congruence and the Geometry of Size, and e) Similarity and the Geometry of Shape. To assist Texas teachers dealing with instruction of Louisiana students displaced by Katrina, the side-by-side analysis shows the TEKS as a baseline to which the Louisiana GLEs are matched. Some expectations are obviously very similar. Others are labeled as approximate matches, usually because one state's expectation is quite specific whereas the other's is more general. There are generally good or approximate matches but there was a tendency for items in the Texas Geometric Structure strand to have no matching Louisiana GLE or for the match to be approximate. It was difficult to find TEKS equivalents to many of the

Louisiana GLEs specified in the non-geometric strands, particularly in Number and Number Relations, Measurement, Algebra, and Data Analysis, Probability, and Discrete Math.

Assessment

The criterion-referenced Texas Assessment of Knowledge and Skills (TAKS) for Grade 10 includes ten mathematics objectives, three of which are aligned with TEKS Geometry and Measurement expectations. The Mathematics and Language Arts portions of Louisiana's criterion-referenced Graduation Exit Examination for the 21st Century (GEE 21) are administered in grade 10.

The Texas Exit Level TAKS exam, first given at Grade 11, is similar to Louisiana's GEE 21 in that satisfactory performance is a graduation requirement. The primary concern for Louisiana students that plan to stay and graduate from a Texas high school is the portion of the Texas Exit Level TAKS that contains quadratic equations and systems of equations. Quadratic equations are not covered in Algebra 1 or Geometry in Louisiana which may cause problems. Systems of equations are taught in Algebra 1 but not stressed in Geometry or Algebra 2, resulting in a time lapse for exposure to this topic. Detailed information on the Texas state tests in mathematics can be found at: http://www.tea.state.tx.us/student.assessment/taks/booklets/index.html.

Coding in the Side-by-Side Analysis

Note that the codes assigned to each expectation for this project are not exactly those used in the Texas and Louisiana coding systems. For Texas, the codes begin with "G" for Geometry. These are followed by a numeric digit that represents a content grouping and then by an alpha designation for the specific skill or expectation (e.g., G.6.b).

The 27 Louisiana GLEs for Grade 10/Geometry are similarly coded with "G" in front of a unique number. The numbers in parentheses that follow the GLE statement refer to the Louisiana Mathematics Benchmark addressed. Benchmarks are broader statements, in some ways analogous to the Texas Knowledge and Skill statements shown shaded in gray in the side-by-side analysis, that are specified in Louisiana for grade ranges K-4, 5-8, and 9-12. More about Louisiana Benchmarks can be found in the following document from the Louisiana State Department of Education: http://www.doe.state.la.us/lde/uploads/2910.pdf.

More information about the Louisiana Grade Level Expectations is available at http://www.doe.state.la.us/lde/ssa/1819.html.

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