

## 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 used in 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)

In matching individual student expectations for the side-by-side comparison, the TEKS format is used as the baseline. Due to slight differences between the states concerning the division and definition of strands, some Louisiana GLEs may match most closely with a TEKS student expectation in another area. Generally, however, the Texas strand of Patterns, Relationships, and Algebraic Thinking comprises GLEs in the two Louisiana strands of Algebra and Patterns, Relations, and Functions.

## Overview of the Side-by-Side Analysis

In some cases, there is no equivalent Louisiana GLE for a particular TEKS at this grade level. However, such expectations may be addressed at another grade level in Louisiana. In other cases, a Louisiana expectation actually goes beyond the Texas expectation with which it was paired. Teachers are encouraged to review source documents from each state to gain additional insight on what students should know and be able to do.

Examples of the TEKS mathematics content that do not appear to be covered by the GLEs at this grade level include:

- construct concrete models of equivalent fractions for fractional parts of whole objects;
- round whole numbers to the nearest ten or hundred to approximate reasonable results in problem situations;
- generate a table of paired numbers based on a real-life situation such as insects and legs;
- use concrete models that approximate cubic units to determine the volume of a given container or other three-dimensional geometric figure;
- tell and write time shown on analog and digital clocks; and
- use data to describe events as more likely than less likely than, or equally likely as.

Examples of GLEs that do not appear to be covered by the TEKS at this grade level include:

- use the concept of associative and

commutative properties of multiplication to simplify computations;

- recognize and model multiplication as a rectangular array or as repeated addition;
- use letters as variables in mathematical statements that represent real-life problems'
- recognize and execute specified flips, turns, and slides of geometric figures using manipulatives and correct terminology (including clockwise and counterclockwise);
- identify, describe, and draw intersecting, horizontal, vertical, parallel, diagonal, and perpendicular lines, rays, and right angles in the real world; and
- identify categories and sort objects based on qualitative (categorical) and quantitative (numerical) characteristics.

There are no GLEs for the TEKS Underlying Processes and Mathematical Tools sections. The pervasive mathematical themes such as problem solving, mathematics as communication, and mathematics as numerical intuition are included in the Louisiana Mathematics Framework for all grade levels.

### Assessment

Louisiana utilizes the Integrated Louisiana Educational Assessment Program (iLEAP), a norm-referenced testing program at Grades 3, 5, 6, 7, and 9. For grades 4 and 8, Louisiana employs the criterion-based Louisiana Educational Assessment Program for the 21st Century (LEAP 21). It is important to note that grade promotion criteria are part of LEAP 21 for grades 4 and 8. Texas uses the Texas Assessment of Knowledge and Skills (TAKS) to assess student performance in mathematics in Grades 3-11 with promotion and retention requirements in grades 3, 5 and 8.

### Coding in the Side-by-Side Analysis

The numbers in parentheses that follow the GLE statement refer to the Louisiana Mathematics Benchmark addressed. In the case of P-1-E, for example, "P" stands for Patterns, Relations, and Functions. The "1" indicates the first Benchmark for the Standard, and the "E" stands for Elementary School. Benchmarks are broader statements, somewhat analogous to the Texas Knowledge and Skill statements shaded in gray in the side-by-side analysis, which 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>.