

**Side-by-Side Comparison of the Texas Educational Knowledge and Skills (TEKS)
and Louisiana Grade Level Expectations (GLEs)**

MATHEMATICS: Grade 5

TEKS	Comments	Louisiana GLE
(5.1) Number, Operation, and Quantitative Reasoning. The student uses place value to represent whole numbers and decimals.		Number and Number Relations
(5.1.A) use place value to read, write, compare, and order whole numbers through the billions place; and	<i>Not addressed in LA GLE</i>	
(5.1.B) use place value to read, write, compare, and order decimals through the thousandths place.	<i>Not addressed in LA GLE</i>	
(5.2) Number, Operation, and Quantitative Reasoning. The student uses fractions in problem-solving situations.		Number and Number Relations
(5.2.A) generate a fraction equivalent to a given fraction such as $\frac{1}{2}$ and $\frac{3}{6}$ or $\frac{4}{12}$ and $\frac{1}{3}$;		2. Recognize, explain, and compute equivalent fractions for common fractions (N-1-M) (N-3-M)
(5.2.B) generate a mixed number equivalent to a given improper fraction or generate an improper fraction equivalent to a given mixed number;	<i>Approximate, See TEKS 5.2D</i>	5. Read, explain, and write a numerical representation for positive improper fractions, mixed numbers, and decimals from a pictorial representation and vice versa (N-3-M)
(5.2.C) compare two fractional quantities in problem-solving situations using a variety of methods, including common denominators; and	<i>Approximate but TEKS does not specify use of terms or symbols.</i>	4. Compare positive fractions using number sense, symbols (i.e., $<$, $=$, $>$), and number lines (N-2-M).
	<i>Not addressed in TEKS</i>	6. Select and discuss the correct operation for a given problem involving positive fractions using appropriate language such as <i>sum</i> , <i>difference</i> , <i>numerator</i> , and <i>denominator</i> (N-4-M) (N-5-M)
(5.2.D) use models to relate decimals to fractions that name tenths, hundredths, and thousandths.	<i>Implied See TEKS 5.2B</i>	5. Read, explain, and write a numerical representation for positive improper fractions, mixed numbers, and decimals from a pictorial representation and vice versa (N-3-M)
(5.3) Number, Operation, and Quantitative Reasoning. The student adds, subtracts, multiplies, and divides to solve meaningful problems.		Number and Number Relations

TEKS	Comments	Louisiana GLE
(5.3.A) use addition and subtraction to solve problems involving whole numbers and decimals;	<i>Not addressed in LA</i>	
(5.3.B) use multiplication to solve problems involving whole numbers (no more than three digits times two digits without technology);	<i>Not addressed in LA GLEs. (There are limits on factors in grade 4)</i>	
(5.3.C) use division to solve problems involving whole numbers (no more than two-digit divisors and three-digit dividends without technology), including interpreting the remainder within a given context ;	<i>Not addressed in LA GLEs (There are limits on divisors in Grade 4 and Grade 6)</i>	
(5.3.D) identify common factors of a set of whole numbers; and	<i>Not addressed in LA GLEs at this grade level. This is GLE 2 in grade 6.</i>	
(5.3.E) model situations using addition and/or subtraction involving fractions with like denominators using concrete objects, pictures, words, and numbers		3. Add and subtract fractions with common denominators and use mental math to determine whether the answer is reasonable (N-2-M)
	<i>Not addressed in TEKS. TEKS is moving towards abstraction.</i>	8. Use the whole number system (e.g., computational fluency, place value, etc.) to solve problems in real-life and other content areas (N-5-M)
(5.4) Number, Operation, and Quantitative Reasoning. The student estimates to determine reasonable results.		Number and Number Relations
The student is expected to use strategies, including rounding and compatible numbers to estimate solutions to addition, subtraction, multiplication, and division problems.		9. Use mental math and estimation strategies to predict the results of computations (i.e., whole numbers, addition and subtraction of fractions) and to test the reasonableness of solutions (N-6-M) (N-2-M)
	<i>Not addressed in TEKS</i>	10. Determine when an estimate is sufficient and when an exact answer is needed in real-life problems using whole numbers (N-6-M) (N-5-M)
	<i>Not addressed in TEKS at this grade level</i>	11. Explain concepts of ratios and equivalent ratios using models and pictures in real-life problems (e.g., understand that $\frac{2}{3}$ means 2 divided by 3) (N-8-M) (N-5-M)

TEKS	Comments	Louisiana GLE
(5.5) Patterns, Relationships, and Algebraic Thinking. The student makes generalizations based on observed patterns and relationships.	<i>LA has separate strands for algebra and patterns, relations, and functions</i>	Algebra and Patterns, Relations and Functions
(5.5.A) describe the relationship between sets of data in graphic organizers such as lists, tables, charts, and diagrams; and	<i>Approximates This is also GLE 36 in Grade 4.</i>	31. Compare and contrast survey data from two groups relative to the same question (D-2-M)
(5.5.B) identify prime and composite numbers using concrete objects, pictorial models, and patterns in factor pairs.	<i>Approximates</i>	1. Differentiate between the terms <i>factor</i> and <i>multiple</i> , and <i>prime</i> and <i>composite</i> (N-1-M)
	<i>These processes are not reflected in TEKS.</i>	12. Find unknown quantities in number sentences by using mental math, backward reasoning, inverse operations (i.e., unwrapping), and manipulatives (e.g., tiles, balance scales)
	<i>Inequalities not addressed in TEKS at this grade level</i>	14. Find solutions to one-step inequalities and identify positive solutions on a number line (A-2-M) (A-3-M)
(5.6) Patterns, Relationships, and Algebraic Thinking. The student describes relationships mathematically.		Algebra and Patterns, Relationships, and Function
The student is expected to select from and use diagrams and equations such as $y = 5 + 3$ to represent meaningful problem situations.		13. Write a number sentence from a given physical model of an equation (e.g., balance scale) (A-2-M) (A-1-M) (A-2-M) (A-3-M)
(5.7) Geometry and Spatial Reasoning. The student generates geometric definitions using critical attributes.		Geometry
(5.7.A) identify critical attributes including parallel, perpendicular, and congruent parts of geometric shapes and solids; and	<i>Not addressed in LA GLEs</i>	
(5.7.B) use critical attributes to define geometric shapes or solids.		24. Use mathematical terms to classify and describe the properties of 2-dimensional shapes, including circles, triangles, and polygons (G-2-M)
(5.8) Geometry and Spatial Reasoning. The student models transformations.		Geometry
(5.8.A) sketch the results of translations, rotations, and reflections on a Quadrant I coordinate grid; and	<i>Approximates, but GLE is not necessarily intended for coordinate geometry.</i>	25. Identify and use appropriate terminology for transformations (e.g., <i>translation as slide</i> , <i>reflection as flip</i> , and <i>rotation as turn</i>) (G-3-M)
(5.8.B) identify the transformation that generates one figure from the other when given two congruent figures on a Quadrant I coordinate grid	<i>Not addressed in LA GLEs</i>	

TEKS	Comments	Louisiana GLE
	<i>Not addressed in TEKS</i>	26. Identify shapes that have rotational symmetry (G-3-M)
(5.9) Geometry and Spatial Reasoning. The student recognizes the connection between ordered pairs of numbers and locations of points on a plane.	<i>Approximates</i>	Geometry
The student is expected to locate and name points on a coordinate grid using ordered pairs of whole numbers.		27. Identify and plot points on a coordinate grid in the first quadrant (G-6-M)
(5.10) Measurement. The student applies measurement concepts involving length (including perimeter), area, capacity/volume, and weight/mass to solve problems.		Measurement
(5.10.A) perform simple conversions within the same measurement system (SI (metric) or customary);	<i>Approximates</i>	15. Model, measure, and use the names of all common units in the U.S. and metric systems (23. Convert between units of measurement for length, weight, and time, in U.S. and metric, within the same system (M-5-M)M-1-M)
(5.10.B) connect models for perimeter, area, and volume with their respective formulas; and	<i>Not addressed in LA GLE</i>	
(5.10.C) select and use appropriate units and formulas to measure length, perimeter, area, and volume.	<i>Use of formulas not reflected in GLE.</i>	20. Identify appropriate tools and units with which to measure time, mass, weight, temperature, and length (M-3-M)
	<i>Not addressed in TEKS</i>	17. Distinguish among the processes of counting, calculating, and measuring and determine which is the most appropriate strategy for a given situation (M-2-M)
	<i>Not addressed in TEKS</i>	18. Estimate time, temperature, weight/mass, and length in familiar situations and explain the reasonableness of answers (M-2-M)
	<i>Not addressed in TEKS</i>	19. Compare the relative sizes of common units for time, temperature, weight, mass, and length in real-life situations (M-2-M) (M-4-M)
	<i>Not addressed in TEKS</i>	21. Measure angles to the nearest degree (M-3-M)
(5.11) Measurement. The student applies measurement concepts. The student measures time and temperature (in degrees Fahrenheit and Celsius).	<i>Not addressed in TEKS</i>	22. Compare and estimate measurements between the U.S. and metric systems in terms of common reference points (e.g., l vs. qt., m vs. yd.) (M-4-M)
(5.11.A) solve problems involving changes in temperature; and	<i>Not addressed in LA GLE</i>	
(5.11.B) solve problems involving elapsed time.	<i>Equivalent times</i>	16. Apply the concepts of elapsed time in real-life situations and

TEKS	Comments	Louisiana GLE
	<i>across time zones not included in TEKS.</i>	calculate equivalent times across time zones in real-life problems (M-1-M) (M-6-M)
(5.11) Probability and Statistics. The student describes and predicts the results of a probability experiment.		Data Analysis, Probability, and Discrete Math
(5.11.A) use fractions to describe the results of an experiment;	<i>Approximates</i>	32. Represent probabilities as common fractions and recognize that probabilities fall between 0 and 1, inclusive (D-5-M)
(5.11.B) use experimental results to make predictions ; and	<i>Not addressed in LA GLE.</i>	
(5.11.C) list all possible outcomes of a probability experiment such as tossing a coin.	<i>Not addressed in LA GLE at this grade level. This is GLE 39 and GLE 40 in grade 4.</i>	
(5.12) Probability and Statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data.	<i>Not addressed in LA GLE</i>	Data Analysis, Probability, and Discrete Math
(5.12.A) use tables of related number pairs to make line graphs;	<i>Not addressed in LA GLE</i>	
(5.12.B) describe characteristics of data presented in tables and graphs including median, mode, and range ; and	<i>Not addressed in LA GLE at this grade level. Approximates GLE 35 in grade 4.</i>	
(5.12.C) graph a given set of data using an appropriate graphical representation such as a picture or line graph .	<i>Approximates</i>	28. Use various types of charts and graphs, including double bar graphs, to organize, display, and interpret data and discuss patterns verbally and in writing (D-1-M) (D-2-M) (P-3-M) (A-4-M)
	<i>Not addressed in TEKS</i>	29. Compare and contrast different scales and labels for bar and line graphs (D-1-M)
	<i>Not addressed in TEKS</i>	30. Organize and display data using spreadsheets, with technology (D-1-M)
(5.13) Probability and statistics. The student solves problems by collecting, organizing, displaying, and interpreting sets of data. The student is expected to:		
(5.13.A) use tables of related number pairs to make line graphs;	<i>Not addressed in LA GLEs</i>	

TEKS	Comments	Louisiana GLE
(5.13.B) describe characteristics of data presented in tables and graphs including the shape and spread of the data and the middle number; and	<i>Not addressed in LA GLEs</i>	
(5.13.C) graph a given set of data using an appropriate graphical representation such as a picture or line.	<i>Not addressed in LA GLEs</i>	
(5.14) Underlying processes and mathematical tools. The student applies Grade 5 mathematics to solve problems connected to everyday experiences and activities in and outside of school. The student is expected to:	<i>There are no GLEs, except for one that is implied. But this is a pervasive theme of the Louisiana Mathematics Framework:: mathematics as problem solving., the use of technology, and symbolic manipulators.</i>	
(5.14.A) identify the mathematics in everyday situations;		
(5.14.B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness		
(5.14.C) select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem; and	<i>Implied</i>	7. Select, sequence, and use appropriate operations to solve multi-step word problems with whole numbers (N-5-M) (N-4-M)5-M)
(5.14.D) use tools such as real objects, manipulatives, and technology to solve problems.		
(5.15) Underlying processes and mathematical tools. The student communicates about Grade 5 mathematics using informal language. The student is expected to:	<i>There are no GLEs, for this TEKS. But this is a pervasive theme of the Louisiana Mathematics Framework:: mathematics as communication.</i>	
(5.15.A) explain and record observations using objects, words,		

TEKS	Comments	Louisiana GLE
pictures, numbers, and technology; and		
(5.15.B) relate informal language to mathematical language and symbols.		
(5.16) Underlying processes and mathematical tools. The student uses logical reasoning to make sense of his or her world. The student is expected to:	<i>There are no GLEs, except for one that approximates. But this is a pervasive theme of the Louisiana Mathematics Framework:: mathematics as numerical intuition.</i>	
(5.16.A) make generalizations from patterns or sets of examples and non-examples; and	<i>Approximates</i>	33. Fill in missing elements in sequences of designs, number patterns, positioned figures, and quantities of objects (P-1-M)
(5.16.B) justify why an answer is reasonable and explain the solution process.		